

### **AGENDA NOTES**

64<sup>th</sup> Meeting of the Board of Governors of National Institute of Technology Durgapur



TO BE HELD IN THE HYBRID MODE ON JANUARY 23, 2024 FROM 04:00 P.M. VENUE: NIT DURGAPUR CAMPUS



## 64th Meeting of the Board of Governors

Date: January 23, 2024; Time: 04.00 P.M.

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### 64th Meeting of the Board of Governors

Date: January 23, 2024; Time: 04.00 P.M.

#### **Agenda Notes**

# 64.01 To confirm the Minutes of the 63<sup>rd</sup> Meeting of the Board of Governors held in the hybrid mode on February 08, 2023.

The 63<sup>rd</sup> Meeting of the Board of Governors of NIT Durgapur held in the hybrid mode on February 08, 2023.

The Minutes of the said meeting was circulated amongst the Board members for their comments. However, no comments were received from the members. The final Minutes is now being placed as **Annexure – A**; (Pages: A.1-A.7).

The Board is requested to consider and approve the same.

Decision of the Board:

# To note the Actions Taken on the Minutes of the 63<sup>rd</sup> Meeting of the Board of Governors held in the hybrid mode on February 08, 2023.

The detailed report on the Actions Taken on the Minutes of the 63<sup>rd</sup> Meeting of the Board of Governors held on February 08, 2023 is presented below.

Item No.	Agenda Item	Decision taken on the	Action Taken
63.01	To confirm the Minutes of the 62 <sup>nd</sup> Meeting of the Board of Governors held in the online mode in MS-Team Platform on October 10, 2022.	The Board confirmed the Minutes of the 62 <sup>nd</sup> Meeting of the Board of Governors of the Institute, held in the online mode in MS-Team Platform on October 10, 2022.	_
63.02	To note the Actions Taken on the Minutes of the 62 <sup>nd</sup> Meeting of the Board of Governors held in the online mode in MS-Team Platform on October 10, 2022.	The Board noted the Actions Taken on the	Noted
63.03	To consider the Minutes of the 57 <sup>th</sup> Meeting of the Finance Committee held on February 8, 2023 at 04:30 p.m. in the online	The Board of Governors approved the Minutes of the 57 <sup>th</sup> Meeting of the Finance Committee held on February 8, 2023 at 04:30 p.m.in	Uploaded on the Institute Website.



## 64th Meeting of the Board of Governors

Date: January 23, 2024; Time: 04.00 P.M.

### **Agenda Notes**

	mode over Google Meet platform.	the online mode over Google Meet platform.	
63.04	To note the Director's Report on the initiatives undertaken since the last meeting of the Board of Governors.	The Board of Governors noted the Director's Report on the initiatives and programmes undertaken since the last meeting of the Board of Governors.	Noted
63.05	To consider the minutes of the 68th (Extraordinary) Senate meeting held on 29th November 2022.  (i) To consider the Guidelines for Technology Transfer by NIT Durgapur as recommended by the Senate.  (ii) To ratify the MoU with Technology Information, Forecasting and Assessment Council (TIFAC) for IP management at NIT Durgapur as recommended by the Senate and approved by the Chairperson, BoG	The Board of Governors ratified the decision taken by the Senate in its 68th (Extraordinary) Senate meeting vide agenda item no. 1 & Item No. 2 held on 29th November 2022.	i. Technology Transfer Guidelines as recommended by the Senate have been adopted. ii. MoU with Technology Information, Forecasting and Assessment Council (TIFAC) for IP management at NIT Durgapur has been executed.
63.06	To consider the minutes of the 69th Senate Meeting held on 23rd January 2023:  (i) To approve the award of PhD degrees as recommended by the Senate  (ii) To consider signing MoUs with institutions and universities in India as recommended by the Senate  To consider 2 (two) additional seats for the M. Tech. programme for the 2023 admission session.	It was resolved that the M.Tech. Seat issue to be sent to MoE, GoI for approval, otherwise the seat matrix as approved by the Senate to be followed.  The Board of Governors ratified all other decisions taken by the Senate in its 69th Senate Meeting vide Item No. 69.5 (Item – #9) and Item No.69.6 held on 23rd January 2023.  Observing the not so satisfactory admission pattern in some of the Post- Graduate (PG)	(i) Resolutions duly implemented. (ii) Being worked upon. (iii) Seat matrix as approved by Senate is being followed.



### 64th Meeting of the Board of Governors

Date: January 23, 2024; Time: 04.00 P.M.

#### **Agenda Notes**

63.07	To consider the application for recognition of the NIT Durgapur Faculty Association and grant permission to use "NIT Durgapur, Mahatma Gandhi Avenue, Durgapur 713209" as its official contact address.	programmes, Hon'ble Chairperson, BoG advised that the Senate should analyze the admission pattern of all the PG programmes for suitable readjustment of seats in future in order to improve the reflection in NBA and NIRF parameters.  Faculty Association is an important channel of communication between the faculty members and the administration. The Board resolved that necessary documentation along with reference to similar associations established elsewhere in HE Institute — pertaining to the agenda item - would be forwarded to the	Matter communicated to the Ministry of Education for further course of action in this regard.
63.08	To report to the Board the	Ministry for perusal.  The Board noted the	Presented as separate Agenda
	status of legal matters.	status of legal matters.	Note.
63.09	To ratify the Annual Report 2021-22 of the Institute	The Board approved the Annual Report 2021-22 of the Institute. The Board also desired that an executive summery be appended to the Annual Report 2021-22 and also in the future keeping with the suggestion of the Hon'ble Chairperson.	Annual Report 2021-2022 was prepared incorporating the suggestion of the Hon'ble Chairperson and being forwarded to the MoE.
63.10	Any other matter with the Chair.	kind permission of the	
	The meeting ended with a vo	ote of thanks to the chair.	

The Board is requested to note the action taken report.

Decision of the Board:



### 64th Meeting of the Board of Governors

Date: January 23, 2024; Time: 04.00 P.M.

#### **Agenda Notes**

64.03 To consider and approve the Minutes of the 58th. Meeting of the Finance Committee held on 23rd January, 2024.

The Minutes of the 58<sup>th</sup> Meeting of the Finance Committee held on 23<sup>rd</sup> January, 2024 at 03:30 P.M. shall be placed on the table.

The Board is requested to consider and approve the same.

Decision of the Board:

64.04 Director's Report on the initiatives undertaken since the last meeting of the Board of Governors.

To be placed on the table.

The Board is requested to note the report presented by the Director.

Decision of the Board:

64.05 To consider and approve the minutes of the 70th Senate meeting held on 02nd August 2023 & 71st Senate meeting held on 18th December, 2023.

The minutes of the 70<sup>th</sup> Senate meeting held on 02<sup>nd</sup> August 2023 is in **Annexure - B (Pages: B.1 - B.17)** & 71<sup>st</sup> Senate meeting held on 18<sup>th</sup> December, 2023 is in **Annexure - C; (Pages: C.1 - C.11)** 

The BoG is requested to consider and approve the minutes of both the Senate meetings.

Decision of the Board:

64.06 To consider and approve two members of the BoG as recommended by the Senate.

As per "The National Institute of Technology Act 2007", vide Section 11 (f), "One professor and one assistant professor or a lecturer of the institute to be nominated by the Senate", the Senate in its meeting held on December 18, 2023 recommended following two members in the BoG of the Institute.

- (i) Prof. Gautam Kumar Mahanti, Professor (HAG), Dept. of Electronics and Communication Engineering
- (ii) Dr. Aashish Kumar Bohre, Assistant Professor, Dept. of Electrical Engineering

The BoG is requested to consider and approve.

Decision of the Board:



### 64th Meeting of the Board of Governors

Date: January 23, 2024; Time: 04.00 P.M.

#### **Agenda Notes**

# 64.07 To consider the nomination of one person for the Finance Committee amongst BoG members.

As per "The National Institute of Technology Act 2007", vide Section 10.1 (iv). "two persons of the BoG amongst its members" to be nominated as members in the Finance Committee. The Chairperson, BoG recommends Prof. Gautam Kumar Mahanti, Professor (HAG), Dept. of Electronics and Communication Engineering, as a member in the Finance Committee (FC) of the Institute.

The BoG may consider the nomination and approve.

Decision of the Board:

# 64.08 To consider and approve the nomination of three persons as external members of the Senate.

As per Section 14(d) of NIT Act, "three persons, one of whom shall be a woman, not being employees of the Institute, to be nominated by the Chairperson in consultation with the Director, from amongst educationalists of repute, one each from the field of science, engineering and humanities; ...".

Honorable Chairperson – in-charge, BoG and the Director is nominating following three persons as external members of the Senate.

- (1) Prof. Sukumar Mishra, Professor (HAG), Dept. of Electrical Engineering, IIT Delhi
- (2) Prof. Bhartendu Kumar Singh, Professor (HAG), Dept. of Physics, Banaras Hindu University and Director, IIITDM, Jabalpur
- (3) Prof. Geetika, Professor (HAG), School of Management Studies, MNNIT Allahabad

The BoG is requested to consider and approve.

#### Decision of the Board:

# 64.09 To consider and approve the list of recipients of UG, PG and PhD degrees, Institute Gold Medals; Endowment Gold Medals and best project certificates in the 19th Convocation of the Institute.

As recommended by the Senate in its 71st meeting held on 18/12/2023, the Board may consider and approve

(a) Awarding the degree certificate to 1201 candidates as mentioned in the table below [the list of degree recipients is being appended as Annexure.

**Annexure - D**; (Pages: D.1 - D.36)



### 64th Meeting of the Board of Governors

Date: January 23, 2024; Time: 04.00 P.M.

#### **Agenda Notes**

Sl.	Name of the Program	No. of students graduating			
No.	Name of the Flogram	Boys	Girls	Total	
1	Bachelor of Technology	626	150	776	
2	Dual Degree Program	6	2	8	
3	Integrated Master of Science in Chemistry	6	6	12	
4	Master of Technology	174	69	243	
5	Master of Science	53	33	86	
6	Master of Business Administration	7	10	17	
7	Master of Social Work	1	5	6	
8	Doctor of Philosophy till 08/12/2023	35	18	53	
	Grand Total	908	293	1201	

(b) Award of 36 institutional gold medals, 4 endowment gold medals and 2 certificates for best projects, list of which is presented in Annexure.

#### Annexure - E; (Pages: E.1 - E.6)

The Board is requested to consider and approve the list of recipients of UG, PG and PhD degrees, Institute Gold Medals; Endowment Gold Medals and best project certificates in the 19th Convocation of the Institute.

#### Decision of the Board:

	consider and	approve	discontinuation	of	existing	four	М.	Tech.
Programs	rams.							

As recommended by the Senate in its 71st meeting held on 18/12/2023, the Board may consider and approve discontinuation of the following four existing M. Tech. programs from the AY 2024-25 due to low admission rate over the last five years.

- (a) M. Tech. Program in Chemical Engineering offered by the Dept. of Chemical Engg.
- (b) M. Tech. Program in Energy Resources and Sustainable Environmental Engg. offered by the Dept. of Chemical Engg.
- (c) M. Tech. Program in Metallurgy and Materials Technology offered by the Dept. of Metallurgical and Materials Engineering
- (d) M. Tech. Program in Advanced Materials Science and Technology offered by the Dept. of Physics



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Academic		M. Tech. Program in						
Year	Chemical		Metallurgy		Advanced		Energy	
	Engg.	Engg.		and Materials		als	Resources and	
	 		Techno	ology	Science	e and	Sustai	nable
					Techno	ology	Environmenta	
							1 Engg	
	Intak	Admitte	Intak	Admitte	Intak	Admitte	Intak	Admitte
	e	d	e	d	e	d	e	d
2023-24	15	0	16	2	15	0	15	1
2022-23	15	2	20	2	20	2	20	3
2021-22	15	7	20	7	20	5	20	6
2020-21	20	13	20	11	20	6		
2019-20	18	4	18	4	18	5		
Avg.			·					
Admissio	31.33		27.66		19.35		18.18	
n %	n %							

The Board is requested to consider and approve the discontinuation of four existing M. Tech. programs as mentioned above.

#### Decision of the Board:

64.11	To consider and approve opening of a B. Tech. Program in "Mathematics
	and Computing" from AY 2024-25.

As recommended by the Senate in its 71st meeting held on 18/12/2023, the Board may consider and approve opening of a B. Tech. program in Mathematics and Computing with intake as 60 including all reservations as per GoI from the AY 2024-25 offered by the Department of Computer Science and Engineering.

The Board is requested to consider and approve the same.

Decision of the Board:

# 64.12 To consider and approve opening of an M. Tech. Program in "AI and Data Sciences" from AY 2024-25.

As recommended by the Senate in its 71st meeting held on 18/12/2023, the Board may consider and approve starting of an M. Tech. program in "AI and Data Sciences" with intake as 20 including all reservations as per GoI from the AY 2024-25 offered by the Department of Computer Science and Engineering.

The Board is requested to consider and approve the same.

Decision of the Board:



### 64th Meeting of the Board of Governors

Date: January 23, 2024; Time: 04.00 P.M.

#### **Agenda Notes**

# 64.13 To consider and approve existing Post Based Reservation Roster for Faculty members of NIT Durgapur.

The existing Post Based Reservation Roster for Faculty members of the Institute was maintained by the roster committee in its meeting held on 19.12.2023 and minutes of the meeting of the said committee is presented in **Annexure F (Pages: F.1 – F.29)**. As per the report of the committee, as on 31.12.2023, a total of **43** Cadre-wise faculty positions are found to be vacant and tabulated below.

Post	Sancti oned	Existing	Vacant	Category-wise reservations
Professor	285	63	1	UR: 1
Associate Professor		70	5	UR: 4, OBC: 1
Assistant Professor, Grade-I & II		109	37	UR: 12; SC: 5; ST: 3; OBC: 10; EWS: 7
Total	285	242	43	UR: 17; SC: 5; ST: 3; OBC: 11; EWS: 7

The Board is requested to consider and approve the same.

Decision of the Board:

# 64.14 To consider and approve the proposal for appointment of an Officer on Special Duty (OSD) on deputation / contract basis.

Since, the post of permanent registrar is lying vacant, Officer on Special Duty (OSD) to deal with matters related to overall administration of the Institute shall be very useful.

It is to be noted that there is a provision for the post of OSD vide Letter No. F.5-16/2008-TS.III, dated 12<sup>th</sup> June 2012.

Annexure G (Pages: G.1 - G.13).

The Board is requested to deliberate on this matter and approve the recruitment of one OSD till the recruitment of permanent registrar or one year on deputation / contract basis with remuneration in the scale of Deputy Registrar [PB 3 (Rs. 15600-39100/-) with Grade Pay of Rs. 7600/-].

Decision of the Board:



### 64th Meeting of the Board of Governors

Date: January 23, 2024; Time: 04.00 P.M.

#### **Agenda Notes**

# 64.15 To consider and approve the proposal for installation of Solar Roof Top power plant.

In the recent times, electricity consumption charge of the Institute is approximately ₹54 Lakhs per month. The Institute has taken number of energy efficient measures for the reduction of the Electricity consumption charges and it has reduced electricity charges to ₹32 Lakhs per month. To promote the renewable energy for the reduction of carbon and Green House Gases (GHG) emission, the Institute is proposing to install a 1MW solar roof top power plant. **Annexure H (Pages: H.1 – H.6)**.

The Board is requested to consider and approve in-principle.

Decision of the Board:

# 64.16 To consider and approve the 63<sup>rd</sup> Annual Report and Annual Accounts of NIT Durgapur (2022-23).

The 63<sup>rd</sup> Annual Report and Annual Accounts of NIT Durgapur for the financial year 2022-23 has been prepared both in English and Hindi languages and presented in **Annexure I (Pages: I.1 – I.484)**.

The Board is requested to consider and approve the same.

Decision of the Board:

#### 64.17 To report to the Board of Governors regarding the status of recruitment.

The roster for faculty positions have been finalized and placed for approval in the BoG (vide Agenda Item No. 64.13).

Regarding the non-teaching posts of the Institute, one meeting of the roster committee has been convened on 19.12.2023 and finalization of roster is under process. The position of the vacancies of teaching and non-teaching posts are appended below.

(i) Teaching Posts

reacting roots			
Post	Sanctioned	Existing	Vacant
Professor	285	63	1
Associate Professor		70	5
Assistant Professor, Grade-I & II		109	37
Total	285	242	43



### 64th Meeting of the Board of Governors

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(ii) Non-teaching Posts

Non- teaching Post	Sanctioned	Existing	Vacant (Direct and Promotional)
Total	314	109	205

The Institute will make advertisement as per the vacancy shortly.

This is placed before the BoG for kind information.

#### Decision of the Board:

64.18 To report to the Board of Governors regarding two members of Building and Works Committee.

As per Section 12.1(vi) of NIT Act, "one expert each from Civil and Electrical Engineering wing of Central or State Government or any autonomous body of repute".

Honorable Chairperson – in-charge, BoG and the Director is nominating the following two persons as members of the Building and Works Committee.

- (i) Expert from Civil Engineering: Mr. Surendra Singh, Retired Additional Director General, CPWD, GoI
- (ii) Expert from Electrical Engineering: Mr. Shashi Kant, Retired special DG cum Engineering in Chief of Delhi in PWD.

This is placed before the BoG for kind information.

Decision of the Board:

# 64.19 To consider the matter regarding Deputation period of Dr. Vijay Kumar Dwivedi, Professor, Department of Civil Engineering.

- a) Dr. Vijay Kumar Dwivedi joined the Institute as Professor in the Department of Civil Engineering on 03.12.2007 (F/N)
- b) Prof. Dwivedi joined the Mahanadi Water Disputes Tribunal (MWDT), under the Ministry of Jal Shakti, Govt. of India as Assessor on deputation
  - (i) From 03.12.2019 to 02.12.2020 (1st term)
  - (ii) From 03.12.2020 to 02.12.2021 (2<sup>nd</sup> term)
  - (iii) From 03.12.2021 to 02.12.2022 (3<sup>rd</sup> term)

With the approval of competent authority of NIT Durgapur.

Annexure J (Pages: J.1 - J.4).



### 64th Meeting of the Board of Governors

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c) Subsequently, MWD Tribunal requested for further extension of deputation period from 03.12.2022 to 02.12.2023 (4th term) of Prof. Dwivedi. The request was placed before the then Hon'ble Chairperson of and he has accorded approval with remarks **approved with reservation**, "Since Prof. V. K Dwivedi is on deputation for the past three years, it is necessary to have a realistic assessment about requirement of further extensions and his duties and responsibilities towards his parent organization viz. NIT Durgapur. I have some concerns about NITD student interests vis-à-vis teaching, research, guidance of PG/PhD scholars etc. Some clarity about the type of leave, salary, PF etc. should also be added in the note sheet. A statement from Prof. V. K. Dwivedi is desirable". The said matter has been communicated to Prof. Dwivedi on 21.12.2022.

Annexure J (Pages: J.5 - J.10).

d) In response to the above matter, an email addressing to the Director, NIT Durgapur was received on 17.02.2023 from Prof. Dwivedi seeking approval of his deputation beyond 02.12.2022 "I request you to kindly approve my deputation as Assessor at Mahanadi Water Dispute Tribunal, New Delhi beyond 2<sup>nd</sup> Dec. 2022 and (ii) up to date CPF statement in respect of the undersigned so as to get any deposit due from the Mahanadi Water Dispute Tribunal, New Delhi".

Annexure J (Pages: J.10 - J.12).

e) In response to the request of Prof. Dwivedi mentioned above, the then Director (In-charge), NIT Durgapur sent a letter dated 12.04.2023 to the Registrar, MWD Tribunal and requested Prof. V. K. Dwivedi to return to his parent Institute. Reminders were also sent on 14.09.2023 and 14.01.2024 in this regard. However, Prof. Dwivedi has not joined to NIT Durgapur till-date.

Annexure J (Pages: J.13 - J.18).

f) It is assumed that present period is considered as 'overstayal' since 02.12.2022.

This is placed before the BoG for kind information and guidance for further course of action.

Decision of the Board:

#### 64.20 To consider and ratify the list of Tier-I level conferences for CPDA purpose.

Departmental Academic Committee of all the academic departments have identified the Tier-I level conferences for CPDA purpose. The department-wise list was discussed in a meeting in the presence of all Heads of the departments, Deans, Registrar and Director.

The list as presented in **Annexure K (Pages: K.1 – K.4)** is approved by the Honorable Chairperson – in-charge, BoG and the Director.

The Board is requested to consider and ratify the same. Decision of the Board:



### 64th Meeting of the Board of Governors

Date: January 23, 2024; Time: 04.00 P.M.

Agenda Notes

64.21 To consider and ratify the change of Deans.

The names of Professors those are nominated by the Honorable Chairperson – in-charge, BoG and the Director for the following Deans positions (placed on the table).

- (i) **Dean (Academic):** Prof Nirmal Baran Hui, Department of Mechanical Engineering
- (ii) Dean (Planning & Development): Prof (HAG) Nirmal Kumar Roy, Department of Electrical Engineering
- (iii) Dean(Student Welfare): Prof Rajat Mahapatra, Department of Electronics & Communication Engineering
- (iv) Dean (Faculty Welfare): Prof (HAG) Gautam Kumar Mahanti, Department of Electronics & Communication Engineering
- (v) Dean (Research & Consultancy): Prof Kartik Chandra Ghanta, Department of Chemical Engineering
- (vi) Dean (Alumni affairs & Outreach): Prof Parimal Acharjee, Department of Electrical Engineering

This is placed before the BoG for kind information.

Decision of the Board:

64.22 To report to the Board of Governors regarding the status of legal matters.

The status of legal cases pending since the last Board meeting is presented in **Annexure L** (Pages: L.1 – L.5)

Court Cases		No. of Cases Disposed in favour of NIT Durgapur
High Court Calcutta	08	05
Durgapur Court	04	01

This is placed before the BoG for kind information.

Decision of the Board:

64.23 Any other matter with the kind permission of the Chair.

Registrar (I/C) & Secretary Board of Governors NIT Durgapur-713209

# NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR MAHATMA GANDHI AVENUE, DURGAPUR-713209, WEST BENGAL, INDIA

Minutes for the meeting of 63<sup>rd</sup>Meeting of the Board of Governors of National Institute of Technology Durgapur held on Wednesday, February 08<sup>th</sup>, 2023 in the online mode (Google meet) from 05:00 p.m.

The following members attended the Meeting:

1.	Prof. (Retd.) Sadanand Sadashiv Gokhale	Chairperson
	Chairperson	-
	National Institute of Technology Durgapur.	
2.	Prof. Indrajit Basak	Member
	Director(Officiating)	
	National Institute of Technology Durgapur.	
3.	Ms. Veena Dunga	Member
	Deputy Secretary (NITs)	
	Department of Higher Education, Ministry of Education	
	ShastriBhawan , New Delhi: 110015.	
4.	Prof. Amlan Chakraborty	Member
	Professor& Director, A.K.Choudhury School of Information	
	Technology, University of Calcutta,	
	Room No. 412, Technology Campus, University of Calcutta,	
	JD-II, Sector – III Salk Lake Kolkata – 700106.	
5.	Prof. Apurba Kumar Patra	Member
	Professor	
	Department of Chemistry,	1
	National Institute of Technology Durgapur.	
6.	Dr. Jayati Dey	Member
	Associate Professor	
	Department of Electrical Engineering	
2000	National Institute of Technology Durgapur.	
7.	Shri Soumya Sen Sharma	Secretary
	Registrar	
	National institute of Technology Durgapur.	

Prof. V.K. Tewari, Director, Indian Institute of Technology, Kharagpur and Prof. Chiranjib Bhattacharya, Pro Vice-Chancellor, Jadavpur University could not attend the meeting and were granted leave of absence by the Hon'ble Chairperson, Board of Governors.

At the outset of the meeting, the Hon'ble Chairperson, Board of Governors NIT Durgapur, extended a warm welcome to all members of the Board. The Chairperson introduced the new Board members Prof. Amlan Chakraborty and Prof. Chiranjib Bhattacharya to the other Board members. Thereafter, the following Agenda Items were taken up by the Board and the decisions of the Committee were noted against each individual item taking cognizance the comments received from the IFD, MoE vide email dated February 7, 2023, on the 63rd BoG Agenda items.

Agenda #	Agenda Item	Comments of the MoE		
63.01	To confirm the Minutes of the 62 <sup>nd</sup> Meeting of the Board of Governors held in the online mode in MS-Team Platform on October 10, 2022.	Minutes may be confirmed.		
	The Board confirmed the Minutes of the 62 Governors of the Institute held in online mod on October 10, 2022.			
63.02	To note the Actions Taken on the Minutes of the 62 <sup>nd</sup> Meeting of the Board of Governors held in the online mode in MS-Team Platform on October 10, 2022.	ATR may be noted.		
	The Board noted the Actions Taken on the M of the Board of Governors held in online mod on October 10, 2022.	생활 것이다. 하는 사람이 하는 하는 이 사람들은 그 그 사람들이 했어? 그 그 아들은 하는 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그		
63.03	To consider the Minutes of the 57 <sup>th</sup> Meeting of the Finance Committee held on February 8, 2023 at 04:30 p.m. in the online mode over Google Meet platform.			
	The Board of Governors approved the Minute Finance Committee held on February 8, 2023 mode over Google Meet platform.			
63.04	To note the Director's Report on the initiatives undertaken since the last meeting of the Board of Governors.			
	The Board of Governors noted the Director's Report on the initiatives and programmes undertaken since the last meeting of the Board of Governors.			
63.05	To consider the minutes of the 68th (Extraordinary) Senate meeting held on 29th November 2022.  (i) To consider the Guidelines for Technology Transfer by NIT Durgapur as recommended by the Senate.  (ii) To ratify the MoU with Technology Information, Forecasting and Assessment Council (TIFAC) for IP management at NIT Durgapur as recommended by the Senate and approved by the Chairperson, BoG.	per the recommendations of the Senate.		
63.06	The Board of Governors ratified the decision 68th (Extraordinary) Senate meeting held on To consider the minutes of the 69th Senate Meeting held on 23rd January 2023:	29th November 2022.  May be considered as		

	(i) To approve the award of PhD degrees as recommended by the Senate (ii) To consider signing MoUs with institutions and universities in India as recommended by the Senate (iii) To consider 2 (two) additional seats for the M. Tech. programme for the 2023 admission session.
8	It was resolved that the proposal for increase of two additional seats in the M.Tech. programme for the 2023 admission session be sent to MoE, GoI for approval. However, if no increment is permitted by the MoE, GoI, the seat matrix as approved by the Senate is to be followed.
	The Board of Governors ratified all other decisions taken by the Senate in its $69^{th}$ Meeting held on $23^{rd}$ January 2023.
	Observing the not so satisfactory admission pattern in some of the Post-Graduate (PG) programmes, Hon'ble Chairperson, BoG advised that the Senate should analyze the admission pattern of all the PG programmes for suitable readjustment of seats in future in order to improve the reflection in NBA and NIRF parameters.
63.07	To consider the application for recognition of the NIT Durgapur Faculty Association and grant permission to use "NIT Durgapur, Mahatma Gandhi Avenue, Durgapur 713209" as its official contact address.
	Faculty Association is an important channel of communication between the faculty members and the administration. The Board resolved that the necessary documentation along with reference to similar associations established elsewhere in HE Institutes - pertaining to the agenda item - would be forwarded to the Ministry for perusal.
63.08	To report to the Board the status of legal Status may be noted. matters.
	The Board noted the status of legal matters.
63.09	To ratify the Annual Report 2021-22 of Status may be noted the Institute
	The Board approved the Annual Report 2021-22 of the Institute. The Board also desired that an <b>executive summery</b> be appended to the Annual Report 2021-22 and also in the future keeping with the suggestion of the Hon'ble Chairperson.
	Any other matter with the kind -
63.10	permission of the Chair.

The Hon'ble Chairperson, BoG reported to the Board that, in response to formal request by NITD dated January 12, 2023, the MoE has kindly allowed to issue advertisement for the faculty and non-faculty positions, vide letter dated 24th January 2023.

In the concluding part of the meeting the Hon'ble Chairperson, BoG suggested the following:

- 1) There should not be any changes in any administrative functionaries such as, HODs, Deans of Chairpersons of any committee until Regular Director assumes charge. Otherwise, the Regular Director may face difficulties to run the Institute.
- 2) In the forthcoming advertisement for the post of Registrar, the experience in academic administration should be included as desirable qualification as NIRF, NBA, UGC are becoming essential features of HE.

The meeting ended with vote of thanks to the Chair.

Loungasen sharing.
Registrar &

Secretary, Board of Governors NIT Durgapur-713209

Item No.	Agenda Item	Decision taken on the item	Action Taken
63.01	To confirm the Minutes of the 62 <sup>nd</sup> Meeting of the Board of Governors held in the online mode in MS-Team Platform on October 10, 2022.	The Board confirmed the Minutes of the 62 <sup>nd</sup> Meeting of the Board of Governors of the Institute, held in the online mode in MS-Team Platform on October 10, 2022.	Uploaded on the Institute Website.
63.02	To note the Actions Taken on the Minutes of the 62 <sup>nd</sup> Meeting of the Board of Governors held in the online mode in MS-Team Platform on October 10, 2022.	The Board noted the Actions Taken on the Minutes of the 62 <sup>nd</sup> Meeting of the Board of Governors held in the online mode over MS-Team Platform on October 10, 2022.	Noted
63.03	To consider the Minutes of the 57 <sup>th</sup> Meeting of the Finance Committee held on February 8, 2023 at 04:30 p.m. in the online mode over Google Meet platform.	The Board of Governors approved the Minutes of the 57th Meeting of the Finance Committee held on February 8, 2023 at 04:30 p.m.in the online mode over Google Meet platform.	Uploaded on the Institute Website.
63.04	To note the Director's Report on the initiatives undertaken since the last meeting of the Board of Governors.	The Board of Governors noted the Director's Report on the initiatives and programmes undertaken since the last meeting of the Board of Governors.	Noted
63.05	To consider the minutes of the 68th (Extraordinary) Senate meeting held on 29th November 2022.  (i) To consider the Guidelines for Technology Transfer by NIT Durgapur as recommended by the Senate.	The Board of Governors ratified the decision taken by the Senate in its 68th (Extraordinary) Senate meeting vide agenda item no. 1 & Item No. 2 held on 29th November 2022.	i. Technology Transfer Guidelines as recommended by the Senate have been adopted.

	(ii) To ratify the MoU with Technology Information, Forecasting and Assessment Council (TIFAC) for IP management at NIT Durgapur as recommended by the Senate and approved by the Chairperson, BoG		ii. MoU with Technology Information, Forecasting and Assessment Council (TIFAC) for IP management at NIT Durgapur has been executed. (Annexure - B.1)
63.06	To consider the minutes of the 69th Senate Meeting held on 23rd January 2023:  (i) To approve the award of PhD degrees as recommended by the Senate  (ii) To consider signing MoUs with institutions and universities in India as recommended by the Senate  (iii) To consider 2 (two) additional seats for the M. Tech. programme for the 2023 admission session.	It was resolved that the M.Tech. Seat issue to be sent to MoE, GoI for approval, otherwise the seat matrix as approved by the Senate to be followed. The Board of Governors ratified all other decisions taken by the Senate in its 69th Senate Meeting vide Item No. 69.5 (Item – #9) and Item No.69.6 held on 23rd January 2023.  Observing the not so satisfactory admission pattern in some of the Post- Graduate (PG) programmes, Hon'ble Chairperson, BoG advised that the Senate should analyze the admission pattern of all the PG programmes for suitable readjustment of seats in future in order to improve the reflection in NBA and NIRF parameters.	i. Resolutions duly implemented.  ii. Being worked upon.  iii. Seat matrix as approved by Senate is being followed.

63.07	To consider the application for recognition of the NIT Durgapur Faculty Association and grant permission to use "NIT Durgapur, Mahatma Gandhi Avenue, Durgapur 713209" as its official contact address.	necessary documentation along with reference to similar associations established elsewhere in HE	Matter communicated to the Ministry of Education for further course of action in this regard.
63.08	To report to the Board the status of legal matters.	The Board noted the status of legal matters.	Noted
63.09	To ratify the Annual Report 2021-22 of the Institute	The Board approved the Annual Report 2021-22 of the Institute. The Board also desired that an executive summery be appended to the Annual Report 2021-22 and also in the future keeping with the suggestion of the Hon'ble Chairperson.	Annual Report 2021-2022 was prepared incorporating the suggestion of the Hon'ble Chairperson and being forwarded to the MoE.
63.10	Any other matter with the kind permis  The meeting ended with a vote of than		

#### NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

### 70th MEETING OF THE SENATE

# HELD ON WEDNESDAY, AUGUST 2, 2023 FROM 5.00 PM ONWARD

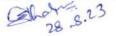
AT THE SENATE ROOM, S.N. RAY MEMORIAL BUILDING NIT DURGAPUR



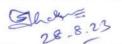
MINUTES

The details of the attendees of the  $70^{th}$  senate meeting held on August 02, 2023 in the Senate Room of S. N. Roy Memorial Building are as follows:

Sl. No.	Name	Designation	Remarks
1	Prof. Arvind Choubey	Director & Chairman-Senate	Present
2	Prof. Ajitava Roychaudhuri	External Member	Absent
3	Prof. Siddhartha Sen	External Member	Absent
4	Prof. Swagata Dasgupta	External Member	Absent
5	Prof. S. Chattopadhyay	Member	Present
6	Prof. K. Aikat	Member	Present
7	Prof. S. S. Mukhopadhyay	Member	Present
8	Prof. Dalia Dasgupta Mandal	Member	Present
9	Prof. A. Dey	Member	Present
10	Prof. Surabhi Chaudhuri	Member	Present
11	Prof. Apurba Kumar Patra	Member	Present
12	Prof. Rajnarayan Saha	Member	Present
13	Prof. Sankar Ch. Moi	Member	Present
14	Prof. Dipankar Sukul	Member	Present
15	Prof. Milan Maji	Member	Present
16	Prof. Parimal Pal	Member	Present
17	Prof. Kartick Chandra Ghanta	Member	Present
18	Prof. Tamal Mandal	Member	Present
19	Prof. Anup Kumar Sadhukhan	Member	Present
20	Prof. Gopinath Halder	Member	Present
21	Prof. Susmita Dutta	Member	Absent
22	Prof. Purnendy Ray	Member	Present
23	Prof. Dilip Kumar Singha Roy	Member	Present
24	Prof. Kamal Bhattacharya	Member	Present
25	Prof. Showmen Saha	Member	Present
26	Prof. Amlan Das	Member	Present



27	Prof. Soumya Bhattacharyya	Member	Present
28	Prof. Atul Krishna Banik	Member	Present
29	Prof. Amiya Kumar Samanta	Member	Present
30	Prof. Tandra Pal	Member	Present
31	Prof. Suchismita Roy	Member	Present
32	Prof. Subrata Nandi	Member	Present
33	Prof. Debasish Nandi	Member	Present
34	Prof. Subhrabrata Choudhury	Member	Absent
35	Prof. Tanmay Dey	Member	Present
36	Prof. Mousumi Roy	Member	Present
37	Prof. Avijan Dutta	Member	Present
38	Prof. Gautam Bandopadhyay	Member	Present
39	Prof. Banshibadan Maji	Member	Present
40	Prof. Anup Kumar Bhattacharjee	Member	Present
41	Prof. Sumit Kundu	Member	Present
42	Prof. Rowdra Ghatak	Member	Present
43	Prof. Gautam Kumar Mahanti	Member	Present
44	Prof. Ashis Kumar Mal	Member	Present
45	Prof. Rajat Mahapatra	Member	Present
46	Prof. Nirmal Kumar Roy	Member	Present
47	Prof. Subrata Banerjee	Member	Present
48	Prof. Parimal Acharjee	Member	Present
49	Prof. Chiranjib Koley	Member	Absent
50	Prof. Sankar Narayan Mahato	Member	Present
51	Prof. Tapas Kumar Saha	Member	Present
52	Prof. Seema Sarkar (Mondal)	Member	Present
53	Prof. Samarjit Kar	Member	Present
54	Prof. Kalyan Adhikari	Member	Present
55	Prof. Indrajit Basak	Member	Present



56	Prof. Biswajit Halder	Member	Present
57	Prof. Nilotpal Banerjee	Member	Present
58	Prof. Apurba Layek	Member	Present
59	Prof. Asit Baran Puri	Member	Present
60	Prof. Shibendu Shekhar Roy	Member	Present
61	Prof. Nirmal Baran Hui	Member	Present
62	Prof. Karuna Sindhu Ghosh	Member	Absent
63	Prof. Joydeep Maity	Member	Absent
64	Prof. Ajit Kumar Meikap	Member	Absent
65	Prof. Pathik Kumbhakar	Member	Absent
66	Prof. Amit Kumar Chakraborty	Member	Present
67	Prof. Siddhratha Shankar Thakur	Member-Secretary	Present

#### **Invited Members:**

S1. No.	Name	Designation	Remarks
1	Dr. Debjani Dutta	HoD, BT	Present
2	Dr. Jaya Sikder	HoD, CH	Present
3	Dr. Diptesh Das	HoD, CE	Present
4	Dr. Kaushik Mandal	HoD, DMS	Present
5	Dr. Durbadal Mondal	HoD, ECE	Present
6	Dr. Arindam Modak	HoD, HSS	Present
7	Dr. Lakshmi Kanta Dey	HoD, MATHS	Present
8	Dr. Supriya Bera	HoD, MME	Present
9	Dr. Mrinal Kanti Mandal	HoD, PHYS	Present
10	Dr. Bibhash Sen	Head, CC	Present

Out of 67 Senate members, 58 members were present in the Senate Room of S. N. Roy memorial building and attended the meeting.

The Chairman, Senate extended a hearty welcome to all the members for taking their time and attending the meeting.



Prof. S. S. Thakur, Member-Secretary of the Senate, on approval of the Chairman, Senate, placed the agenda items in the meeting for discussion and the following resolutions were taken:

#### Item No. 70.1

# Confirmation of the Minutes of the 69th. Senate Meeting held on January 23, 2023.

Since, no comments have been received from the members of the Senate, minutes of the 69th Senate meeting were confirmed by the Senate with following riders

- (a) Decision of Lodging an FIR against Shivam Ladia (vide Senate Item No. 69.3 and Item No. 6 of UGAC meeting held on 19/01/2023) is withdrawn, based on the appeal submitted by Krishna Kant Ladia, father of Shivam Ladia.
- (b) A competition shall be organized among the students and alumna of NIT Durgapur regarding the Institute Flag (vide Item No. 69.9) and winner of the competition shall be given an award / certificate of appreciation. The best designed Institute Flag shall be presented to the Senate for approval.

#### Item No. 70.2

# Action Taken Reports on the decisions of 69th Senate Meeting

The Senate perused the action taken by the Institute on the decisions of the 69<sup>th</sup> meeting of the Senate held on January 23, 2023 and noted the Action Taken Reports with satisfaction as circulated with the agenda papers of the 70<sup>th</sup> Senate meeting.

#### PART A: MATTERS RELATED TO UG STUDIES

#### Item No. 70.3

#### To consider the resolutions of UGAC meetings.

In between the 69<sup>th</sup> Senate meeting held on January 23, 2023 and 70<sup>th</sup> meeting held on August 02, 2023, five UGAC meeting were held on 31.01.2023, 28.03.2023, 17.05.2023, 30.05.2023 and 27.06.2023 and Dean (Academic Courses) with the permission of Chairman, Senate presented the minutes of those meetings one after another and following resolutions taken.

The Senate considered and ratified the approval accorded to publish the results.

(a) Supplementary Results (other than first year UG) of Odd Semester 2022-23, vide Item No. 2 of UGAC meeting held on 31/01/2023



- (b) First Semester UG results of 2022-23, vide Item No. 2 of UGAC meeting held on 28/03/2023
- (c) Even Semester UG results (Other than first year UG) and some corrigendum results of first year UG of 2022-23, vide Item Nos. 2 and 3 of UGAC meeting held on 30/05/2023
- (d) Supplementary Results of 8th Semester UG and Second Semester UG results of 2022-23, vide Item Nos. 2 and 3 of UGAC meeting held on 27/06/2023

The Senate considered and ratified the approval accorded by the Chairman, Senate regarding the Academic Calendar, vide Item No. 5 of UGAC meeting held on 17/05/2023 and Item No. 9 of UGAC meeting held on 27/06/2023.

The senate approved the following resolutions of UGAC meetings with some riders as mentioned below.

**Item No. # 6 of UGAC meeting held on 28/03/2023**: The senate observed that presently there is no requirement of a separate departmental academic committee for monitoring the courses offered by the Sports Activity Centre. The SAS officer is permitted to enter the marks in ERP module of the Institute.

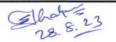
Item No. # 7 of UGAC meeting held on 30/05/2023 and subsequently ratified on 27/06/2023: Following change in the UG regulations is approved.

Clause No.	Existing Clause	Revised Clause	
Appendix -	Conversion from marks to	Conversion from marks to	
III, point	grade shall be done using the	grade shall be done using the	
nos. 2 (refer	table given below. However,	table given below. However, the	
to UG	the teacher may on his / her	teacher may on his / her	
Regulations,	perception of difficulty level of	perception of difficulty level of	
page no. 28)	assessment process	assessment process	
	undertaken, alter the	undertaken, alter the	
	boundary / cut off marks by ±	boundary / cut off marks by ±	
	2 marks.	2 marks.	
Appendix	There is no provision for	There is no provision for	
III, point no.	supplementary	supplementary examination in	
6 (refer to	examination/backlog in the	the sessional courses. If the	
UG	sessional courses. If the	student cannot clear one	
Regulations,	student cannot clear the	sessional course in a	
page no. 28)	sessional courses, he/she will	semester, s/he will be	
	be declared 'Failed' and has to	awarded 'Failed' grade in	
	repeat the semester.	that subject and has to re-	
		register the subject as a	
		backlog sessional subject	
		with the next batch of	
		students. However, if s/he	
		cannot clear more than one	
		sessional subject, s/he will	
		be declared "Failed" and has	

		to repeat the semester taking
		re-admission with the next
Clause 12.2 (refer to UG Regulations, page no. 16)	A student will be allowed for appearing in an end- term examination only if he/she has:  a) Passed in the sessional/ laboratory course(s) b) Paid all Institute dues of the semester c) Paid all Hall dues of the semester. Warden, Hall of Residences shall forward the list of defaulters at least one week before the commencement of examination. d) Not been debarred from appearing the examination due to the result of any	laboratory / sessional) only if he/she has:  a) Passed in the sessional/laboratory course(s) b) Paid all Institute dues of the semester c) Paid all Hall dues of the semester. Warden, Hall of Residences shall forward the list of defaulters at least one week before the commencement of examination. d) Not been debarred from appearing the examination due
Clause 12.3 (c) (referring to UG Regulations, page no. 17)	disciplinary proceeding.  "If a student fails"	roceeding.  Following two lines are appended in addition to what is existing Students shall be permitted to appear in alternate mid-term / supplementary examinations with full credit after recommendation by the medical board of the Institute  If s/he suddenly fall sick during examination.
Clause 12.5 (refer to UG Regulations, page nos. 17 & 18)	For the course(s) having 2 Lecture hours per week, the end-term examination will be of 2 hours duration; while course(s) having more than 2 Lecture and Tutorial contact hours per week, the end-term examination will be of 3 hours duration.	For all the theory course(s), the end-term examination will be of 3 hours duration.

The Senate considered and accorded approval against the rest of the items of UGAC meetings as resolved by the UGAC and as presented with agenda notes of 70th Senate meeting.

PART B: MATTERS RELATED TO PG STUDIES



#### Item No. 69.4 To consider the resolutions of PGAC meetings.

In between the 69<sup>th</sup> Senate meeting held on January 23, 2023 and 70<sup>th</sup> meeting held on August 02, 2023, five PGAC meeting were held on 31.01.2023, 28.03.2023, 17.05.2023, 30.05.2023 and 27.06.2023 and Dean (Academic Courses) with the permission of Chairman, Senate presented the minutes of those meetings one after another and following resolutions taken.

The Senate considered and ratified the approval accorded to publish the results.

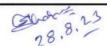
- (a) Supplementary Results of Odd Semester 2022-23, vide Item No. 2 of UGAC meeting held on 31/01/2023
- (b) Even Semester PG results of 2022-23, vide Item No. 3 of UGAC meeting held on 30/05/2023

The Senate considered and ratified the approval accorded by the Chairman, Senate regarding the Academic Calendar, vide Item No. 5 of PGAC meeting held on 17/05/2023 and Item No. 9 of PGAC meeting held on 27/06/2023.

The senate approved the following resolutions of PGAC meetings with some riders as mentioned below.

Item No. # 7 of PGAC meeting held on 30/05/2023 and subsequently ratified on 27/06/2023: Following change in the PG regulations is approved.

Clause No.	Existing Clause	Revised Clause
Appendix – II, point nos. 2 (c) (refer to PG Regulations, page no. 25)	Conversion from marks to grade shall be done using the table given below. However, the teacher may on his / her perception of difficulty level of assessment process undertaken, alter the boundary / cut off marks by ± 2 marks.	Conversion from marks to grade shall be done using the table given below. However, the teacher may on his / her perception of difficulty level of assessment process undertaken, alter the boundary / cut off marks by ± 2 marks.
Appendix II, point no. 6 (refer to PG Regulations, page no. 26)	There is no provision for supplementary examination / backlog in the sessional courses. If the student cannot clear the sessional courses, he/she will be declared 'Failed' and has to repeat the semester.	There is no provision for supplementary examination in the sessional courses. If the student cannot clear one sessional course in a semester, s/he will be awarded 'Failed' grade in that subject and has to re-register the subject as a backlog sessional subject with the next batch of students. However, if s/he cannot clear more than one sessional



		subject, s/he will be declared		
	"Failed" and has to repeat			
		the semester taking re-		
	μ	admission with the next		
		batch of students.		
Clause 12.2	A student will be allowed for	A student will be allowed for		
(refer to PG	appearing in an end- term	appearing in an end- term		
Regulations,	examination only if he/she	examination only if he/she		
page no. 15)	has:	has:		
	a) Passed in the sessional/	a) Passed in the sessional/		
	laboratory course(s)	laboratory course(s)		
	b) Paid all Institute dues of the	b) Paid all Institute dues of		
	semester	the semester		
	c) Paid all Hall dues of the	c) Paid all Hall dues of the		
	semester. Warden, Hall of	semester. Warden, Hall of		
	Residences shall forward the	Residences shall forward the		
	list of defaulters at least one	list of defaulters at least one		
	week before the	week before the		
	commencement of	commencement of		
	examination.	examination.		
- 1	d) Not been debarred from	d) Not been debarred from		
	appearing the examination	appearing the examination due		
	due to the result of any	to the result of any disciplinary		
	disciplinary proceeding.	proceeding.		
Clause 12.3	"If a student fails"	Following two lines are		
(c) (refer to		appended in addition to what is		
PG		existing		
Regulations,				
page no. 15)		appear in alternate mid-term /		
		supplementary examinations		
		with full credit after		
		recommendation by the		
		medical board of the Institute		
		If s/he suddenly fall sick		
	The state of the s	during examination.		

The Senate also considered and accorded approval against the rest of the items of PGAC meetings as presented with agenda notes of 70<sup>th</sup> Senate meeting.

# Item No. 70.5 To consider the rationalization of the Post Graduate Seat Matrix

Dean (Academic Courses) with the permission of Chairman, Senate presented the agenda. After deliberations, the Senate resolved that this agenda item is deferred for discussion in the next Senate meeting, since the counselling and admission for the AY 2023-24 is not yet completed.

Q1204 8.23

#### PART C: MATTERS RELATED TO PhD STUDIES

#### Item No. 70.6 To consider the resolutions of RAC meetings.

In absence of Dean (Academic Research), Dean (Academic Courses) with the permission of Chairman, Senate presented the minutes of four RAC meetings held on 17.04.2023, 19.05.2023, 13.06.2023 and 11.07.2023 one after another.

Since, most of the points were of routine matter and RAC recommended following PhD regulations, the Senate considered and approved/ratified the resolutions including the registration of 45 candidates (Annexure 70.I) for the PhD program, and recommended the award of PhD degrees to 33 candidates (Annexure 70.II) with riders on following points.

#### RAC meeting held on 17.04.2023

Item # 4: To consider the appeal for an Extension of period of Registration of the following scholars: (i) Oliva Roy (Roll No.: 15HS1106, Reg. No. NITD/PhD/HS/2016/00724), & (ii) Arpan Dasgupta (Roll. No. 15BT1110, Reg. No. NITD/PhD/BT/2016/00740) -

**One year of extension** of period of registration is granted for both the scholars as a special case and shall not be considered as a matter of precedence.

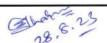
Item # 8: To consider an appeal from Dept. of Mathematics regarding reallocation of supervisor for the PhD scholars of Late Prof. K. Basu and request for a special consideration in counting number of scholars per capita: The Senate approved the recommendation made by RAC as a onetime measure and shall not be considered as a matter of precedence.

#### PART D: OTHER MATTERS

Item No. 70.7 Reporting of the NBA visit to NIT Durgapur for accreditation in respect of the Department of Electrical Engineering, Department of Mechanical Engineering, Department of Chemical Engineering, Department of Civil Engineering and the Department of Metallurgical & Materials Engineering.

Dean (Academic Courses) with the permission of Chairman, Senate presented the observations made by the visiting team of NBA for accreditation of six UG programs, BTECH-CE, BTECH-CH, BTECH-EE, BTECH-ME, BTECH-MM during March 24-26, 2023 and BTECH-EC on May 06, 2023.

The Senate noted the approval of accreditation of five UG programs, BTECH-CE, BTECH-CH, BTECH-EE, BTECH-ME, BTECH-MM for 3 academic years (2022-23 to 2024-25) and also noted all the observations made by the visiting team.



Item No. 70.8 Opening of DBT-Sponsored MSC Program on Life Sciences with specialization in Microbial Biotechnology / Plant & Animal Biotechnology from AY2023-24

With the permission of Chairman, Senate, Dean (Academic Courses) presented the details of opening a new MSC program on Life Sciences with specialization as mentioned. The Senate was informed that the matter is already approved by the Chairman, Senate and an agreement has already been signed by the Coordinator of the Program (Prof. Sudit Shekhar Mukhopadhyay) and Chairman, Senate related to mandatory terms and conditions to be followed.

The Senate considered and ratified all the points including the matter of fee waiver to be given to the students belonging to SC, ST, EWS, and DA as presented in Annexure 70.8 of the Agenda note of 70th Senate meeting.

Any other matter with the permission of the Chair. Item No. 70.9

No additional Agenda items were placed in the meeting.

The meeting ended with a vote of thanks to the Chair.

Registrar & Secretary, Senate

**NIT Durgapur** 

Date: 28-08-2023

Director & Chairman, Senate
NIT Durgapur

Date: 28-08-2023

Annexure-70.I

On the recommendation of RAC, registration of 45 Candidates for Ph.D. Programme (RAC Meetings held on 17.04.2023, 19.05.2023, 13.06.2023 and 11.07.2023) is approved by the Senate and shall be reported to BOG.

Item # 2 RAC meeting held on 17.04.2023

S1. No.	Roll No.	Name of the Scholar	Dept.	Name of the Supervisor(s)	Date of Registration
1	20MM1503	KashiNath Malik	MM	Dr. A. K. Mandal,	27.12.2022
				Dr. S. Ghorai	
2	20BT1108	Sandip Mahato	BT	Dr. K. Aikat	16.01.2023
3	21CY1501	Pradeep Kumar Rout	CY	Dr. S. Ghosal	16.01.2023
4	21CY1104	Sayon Satpati	CY	Dr. S. Ghosal	16.01.2023
5	21CE1104	Nisheeth Shekhar	CE	Dr. S. Pal	17.01.2023
6	20MS1102	Vikash Mandal	MS	Dr. D. Pal	19.01.2023
7	21EC1103	Satish Kumar	EC	Dr. D. Mandal, Dr. R. Kar & Dr. G. Ram, NIT Warangal	27.01.2023
8	20BT1112	SouravSaha	BT	Dr. S. Chaudhuri	30.01.2023
9	21EE1102	Ankur Yadav	EE	Dr. T. K. Bera	03.02.2023
10	21ME1104	Geeta Verma	ME	Dr. R. N. Barman	06.02.2023
11	21CH1102	Nabanita Ghosh	CH	Dr. G. Halder	10.02.2023
12	21EE1101	Ananthammagari Bharathsimha Reddy	EE	Dr. S. N. Mahato	14.02.2023
13	20MM1502	Arijit Banerjee	MM	Dr. M. M. Ghosh, Dr. K. S. Ghosh	17.02.2023
14	21ME1108	Meghnath Sen	ME	Dr. A. B. Puri	23.02.2023
15	21MM1103	Mohammad Hamza	MM	Dr. S. Pramanik, Dr. K. P. Yagati	24.02.2023
16	21MM1102	Avash Kumar Saha	MM	Dr. A. K. Mandal	28.02.2023
17	21HS1104	Tanushree Mitra	HS	Dr. A. Modak, Dr. S. Banerjee	02.03.2023
18	20EC1103	Rajeev Shukla	EC	Dr. A. Chandra	02.03.2023
19	21MS1101	InduNath Jha	MS	Dr. S. Sarkar, Dr. D. Pal	14.03.2023
20	20MS1101	Anwesha Mazumder	MS	Dr. K. Mandal	28.03.2023
21	20CS1101	Banashree Mandal	CS	Dr. D. Das	06.04.2023
Item	# 2 RAC mee	ting held on 19.05.202	23		
22	21MA1102	Anirban Sen	MA	Dr. S. Sarkar (Mondal)	10.04.2023
23	21MA1104	Parikshit Das	MA	Dr. A. Pal	10.04.2023
24	21MA1108	Supriya Mondal	MA	Dr. S. Maitra	10.04.2023
25	20BT1106	Chandrima Roy	BT	Dr. S. Roy Barman	18.04.2023
26	21PH1104	Mansi Mandal	PH	Dr. S. Sahoo	21.04.2023
27	20CE1501	Pranoy Roy	CE	Dr. A. K. Samanta	03.05.2023
28	20MM1104	Satadipa Banerjee	MM	Dr. M. M. Ghosh, Dr. B. Maji	08.05.2023
Item	# 4 RAC mee	ting held on 13.06.202	23		
29	21CS1109	Durgesh Lohar	CS	Dr. B. Sen	23.05.2023
30	21CS1101	Arnab Chatterjee	CS	Dr. S. Changder	05.06.2023
31	21PH1102	Iman Biswas	PH	Dr. A. Mondal	06.06.2023

Item	Item # 2 RAC meeting held on 11.07.2023				
S1.	Roll No.	Name of the	Dept.	Name of the	Date of
No.		Scholar		Supervisor(s)	Registration
32	20BT1102	Subhadip Saha	BT	Dr. M. Ghosh	10.03.2023
33	21CH1103	Saheli Kar	CH	Dr. T. Mandal	12.05.2023
34	20CS1106	Ashwin CS	CS	Dr. S. Roy	19.06.2023
35	20EC1106	Satyam Shivam	EC	Dr. A. K. Mal & Dr. R.	21.06.2023
		Sundram		Todani	
36	21CE1102	Apurba Pal	CE	Dr. A. K. Datta	22.06.2023
37	21MA1107	Lokenath Thakur	MA	Dr. Md Firoz Ali	23.06.2023
38	22CH1105	Rhithuparna D	CH	Dr. G. Halder &Dr. S. L.	27.06.2023
				Rokhum	
39	21MA1501	Ratnabali Pal	MA	Dr. S. Kar	28.06.2023
40	21EE1505	Sumit Kumar	EE	Dr. S. Banerjee	30.06.2023
41	21CY1105	Jharna Mahato	CY	Dr. T. K. Saha	03.07.2023
42	21PH1107	Mita Karmakar	PH	Dr. S. Basu	03.07.2023
43	21PH1101	Anurup Chakraborty	PH	Dr. A. K. Chakraborty	04.07.2023
44	22EC1103	Arun Raj	EC	Dr. D. Mandal	04.07.2023
45	21CH1108	Iman Ghosh	CH	Dr. P. Pal & Dr. M. Roy	06.07.2023
		Dastidar			The second secon

#### Minutes: 70<sup>th</sup> Meeting of the Senate National Institute of Technology Durgapur

Annexure-70.II

As reported by RAC (refer to MOM of RAC Meetings held on 17.04.2023, 19.05.2023, 13.06.2023 and 11.07.2023), 33 PhD students completed all requirements for the award of Ph.D. Degree and recommended by 70th SENATE dated 02.08.2023 for approval of the BOG.

Item # 3 RAC meeting held on 17.04.2023

S1. No	Registration No.	Dept.	Name of the Scholar	Title of the Thesis	Name of the Supervisor(s)	Date of Defence
1	NITD/PhD/BT/2 018/01031	BT	Priyanka Sarkar	Studies on biodegradation of 4-Nitrophenol by a bacterial consortium isolated from a pesticide contaminated agricultural soil	Dr. A. Dey	17.01.2023
2	20REE006	EE	Pullabhatla Srikanth	Integrated Intelligent System for Recognition and Location of Power Quality Problems in an Interconnected Power Systems	Dr. C. Koley	17.01.2023
3	NITD/PhD/HS/ 2016/00832	HS	Gautam Mazumdar	Impact Assessment of Community Institution Model for promotion of Rural Micro Enterprises under NRLM Pilot Scheme- Start-Up Village Entrepreneurship Program (SVEP), India	Dr. P. P. Sengupta	20.01.2023
4	NITD/PhD/CY/2 018/01068	CY	Saikat Mishra	Biological Relevance and Reactivity of Cu(II/I) Complexes Supported by N,S Donor Ligands	Dr. A. K. Patra	27.01.2023
5	NITD/PhD/CS/ 2017/00969	CS	Pijush Kanti Dutta Pramanik	Sustainable Computing with Mobile Crowd Computing	Dr. P. Choudhury	30.01.2023
6	NITD/PhD/PH/ 2017/00844	PH	Mahadeb Pal	Theoretical study of some properties of finite nuclei and core-crust transition density of neutron stars with finite range effective interaction	Dr. S. Sahoo, Dr. B. Sahoo, TDB College, Raniganj, Dr. S. Chakraborty, M.M.M College, Durgapur	08.02.2023
7	20REE0016	EE	Mehebub Alam	Novel Algorithms of Line Outage Detection Using Synchrophasor Measurements	Dr. S. S. Thakur, Dr. Sumit Banerjee,	13.02.2023

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					BCREC Durgapur	
S1. No	Registration No.	Dept.	Name of the Scholar	Title of the Thesis	Name of the Supervisor(s)	Date of Defence
8	NITD/PhD/CE/ 2017/00887	CE	Shyamal Kumar Dutta Mazumdar	Performance Evaluation of the CompactedLateri tic Soil Amended with Bentonite and Fly Ash used as Composite Liner Material for Ash Pond Sites of Thermal Power Plant	Dr. S. Pal	13.02.2023
9	NITD/PhD/EC/ 2018/00998	EC	Partha Das	Dielectric Engineering on GaN for High Electron Mobility Transistors	Dr. R. Mahapatra, Dr. A. K. Chakraborty	15.02.2023
10	NITD/PhD/BT/2 018/01032	BT	Subhasree Majumdar	Studies on Bacterial Secondary Metabolites: Low-cost Production, Applications and Toxicity in Animal System	Dr. D. Dasgupta Mandal	17.02.2023
11	NITD/PhD/EC/ 2018/01069	EC	Anjan Bandyopadhy ay	Studies on Reconfigurable Multiband and Wideband Microwave Bandpass Filters	Dr. R. Ghatak, Dr.T. Mondal, BCREC, Durgapur	20.02.2023
12	20RCH004	СН	Sumona Show	Comparative Assessment of Ibuprofen Removal through Biosorption and Bioremediation Technique	Dr. G. Halder	20.02.2023
13	20REC013	EC	Argha Deep Paul	Resistive Memory Devices based on Al doped HfO <sub>x</sub> for Flexible Electronics Applications	Dr. R. Mahapatra	21.02.2023
14	NITD/PhD/EC/ 2016/00745	EC	Himangshu Pal	Natural Cellulosic Graphene: Synthesis, Characterization and Electro Chemistry Application	Dr. R. Mahapatra, Dr. S. Chatterjee, SMIT, Sikkim	01.03.2023
15	NITD/PhD/PH/ 2018/01072	PH	Tuli Chatterjee	Structural, microstructural and electrical characterizations of some metal-hydroxyapatite nanocomposites based bioceramics developed by chemical and green synthesis routes	Dr. A. K. Meikap, Dr. S. K. Pradhan, B.U., Burdwan	29.03.2023
16	NITD/PhD/CH/ 2018/01009	СН	Anjali. K. P	Seaweed Mediated Synthesis of Nanoparticles: Its Characterization and Application	Dr. S. Dutta, Dr. G. Devi, NUST Oman	29.03.2023
17	NITD/PhD/CS/ 2015/00672	CS	Deepa Naik	Studies in optical and wireless networks	Dr. T. De	06.04.2023

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Iten	n # 3 RAC meeting	held on	19.05.2023			
S1. No	Registration No.	Dept.	Name of the Scholar	Title of the Thesis	Name of the Supervisor(s)	Date of Defence
18	NITD/PhD/HSS/ 2017/00855	HS	Asoke Howlader	The Spectrum of Global Concerns in the Light of Glocalization: A Study in the Select Plays of Mahesh Dattani	Dr. A. Modak	11.04.2023
19	NITD/PhD/ME/ 2018/01029	ME	Aman Arora	Development and Modelling of Low Pressure Actuated Pneumatic Artificial Muscle for Assistive Applications	Dr. S. S. Roy	12.04.2023
20	NITD/PhD/CH/2 015/00649	СН	M. J. Varghese	Removal of Organic Pollutants from Seawater using Solar Nano Photocatalysts	Dr. S. Dutta, Dr. S. Feroz, PMBF University, Saudi Arabia	13.04.2023
21	20RCE057	CE	Sudha Das Khan	Fuzzy Logic-based Condition Assessment and Ranking of Reinforced Concrete Bridges: A Study	Dr. P.Topdar, Dr. A. K. Datta	19.04.2023
22	20RMA044	MA	Prasanta Kumar Ghosh	Modelling of Some Green and Sustainable Supply Chain Problems under Different Payment Strategies	Dr. S. Kar, Dr. J. K. Dey, Mahishadal Raj College, Purba Medinipur	20.04.2023
23	NITD/PhD/EE/ 2016/00781	EE	Kingsuk Majumdar	Enhancement of ATC for Integrated Power System Incorporating UPFC and Renewable Energy Sources	Dr. S. Banerjee, Dr. P. K. Roy, Kalyani Govt. Engg. College	20.04.2023
24	20RPH0024	PH	Sanjib Mondal	Studies on metal nanoparticles covered Erbium doped TiO <sub>2</sub> thin film based plasmonic Photodetectors	Dr. A. Mondal	26.04.2023
25	NITD/PhD/ChE/ 2015/00591	СН	Sabyasachi Pramanik	Adsorptive Removal of Cyanide and Phenol from Wastewater	Dr. K. C. Ghanta, Dr. S. Dutta	26.04.2023

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26	19RMS016	MS	Sayan Gupta	A Comprehensive Soft-Computing Approach for Construction of Conservative Portfolio in Indian Equity Market	Dr. G. Bandyopadhyay	16.05.2023
Iten	# 5 RAC meeting	held on	13.06.2023		I.	20
S1. No	Registration No.	Dept.	Name of the Scholar	Title of the Thesis	Name of the Supervisor(s)	Date of Defence
27	NITD/PhD/MS/ 2017/00914	MS	Sanjib Biswas	Empirical Inference of Investment Decision Making from Operations Research Context: An Insight of FMCG and Consumer Durable Sectors in India	Dr. G. Bandyopadhyay	24.05.2023
28	NITD/PhD/MS/ 2017/00966	MS	Dipanita Deb	The Impact of Corporate Social Responsibility on the Financial Performance of Corporates: An International Evidence	Dr. A. De, Dr. P. Gillet, RITM, Universite Paris-Saclay, France	24.05.2023
Item	# 3 RAC meeting	held on	11.07.2023			
29	NITD/PhD/EC /2018/01011	EC	Sanjukta Mandal	Studies on Designing On-chip Antennas in Silicon IC for Short Range Communication	Dr. S. K. Mandal, Dr. R. Mahapatra, Dr. A. K. Mal	12.06.2023
30	NITD/PhD/ME /2018/01085	ME	Bishwajit Sharma	Fluid Flow and Convective Heat Transfer past a Slotted Circular Cylinder	Dr. R. N. Barman	13.06.2023
31	NITD/PhD/EC /2018/01058	EC	Sujoy Mandal	Studies on Sideband Radiation Characteristics towards Improving Time-Modulated Antenna Array Performances	Dr. S. K. Mandal	21.06.2023
32	NITD/PhD/CH /2018/01055	СН	Meenakshi Malhotra	Development of Sustainable Membrane-Based Technologies for Selenium Abatement Towards Reutilization from Aqueous System	Dr. P. Pal	23.06.2023
33	20RCY039	CY	Aditya Suhasaria	Corrosion inhibition of mild steel in aqueous HCI medium by benzothiazole derivatives: structure reactivity correlation study	Dr. D. Sukul	28.06.2023

#### Annexure-C

# NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

#### 71st MEETING OF THE SENATE

#### HELD ON

## MONDAY, DECEMBER 18, 2023

### FROM 04.00 P.M. ONWARD

AT THE SENATE ROOM, S.N. RAY MEMORIAL BUILDING
NIT DURGAPUR





71st Meeting of the Senate, Date: December 18, 2023

The details of the attendees of the  $71^{\rm st}$  Senate meeting held on December 18, 2023 in the Senate Room of S. N. Roy Memorial Building are as follows:

S1.	Name	Designation	Remarks
1	Prof. Arvind Choubey	Director & Chairman-Senate	Present
2	Prof. Ajitava Roychaudhuri	External Member	Absent
3	Prof. Siddhartha Sen	External Member	Absent
4	Prof. Swagata Dasgupta	External Member	Absent
5	Prof. S. Chattopadhyay	Member	Absent
6	Prof. A. Dey	Member	Present
7	Prof. Dalia Dasgupta Mandal	Member	Present
8	Prof. K. Aikat	Member	Present
9	Prof. Surabhi Chaudhuri	Member	Present
10	Prof. S. S. Mukhopadhyay	Member	Present
11	Prof. Apurba Kumar Patra	Member	Present
12	Prof. Rajnarayan Saha	Member	Absent
13	Prof. Sankar Ch. Moi	Member	Absent
14	Prof. Dipankar Sukul	Member	Present
15	Prof. Milan Maji	Member	Present
16	Prof. Parimal Pal	Member	Absent
17	Prof. Kartick Chandra Ghanta	Member	Present
18	Prof. Tamal Mandal	Member	Present
19	Prof. Anup Kumar Sadhukhan	Member	Absent
20	Prof. Gopinath Halder	Member	Present
21	Prof. Susmita Dutta	Member	Present
22	Prof. Dilip Kumar Singha Roy	Member	Absent
23	Prof. Kamal Bhattacharya	Member	Present
24	Prof. Showmen Saha	Member	Present



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25	Prof. Amlan Das	Member	Present
26	Prof. Soumya Bhattacharyya	Member	Present
27	Prof. Atul Krishna Banik	Member	Present
28	Prof. Amiya Kumar Samanta	Member	Present
29	Prof. Tandra Pal	Member	Present
30	Prof. Suchismita Roy	Member	Present
31	Prof. Subrata Nandi	Member	Present
32	Prof. Debasish Nandi	Member	Present
33	Prof. Subhrabrata Choudhury	Member	Present
34	Prof. Tanmay Dey	Member	Present
35	Prof. Mousumi Roy	Member	Absent
36	Prof. Avijan Dutta	Member	Present
37	Prof. Gautam Bandopadhyay	Member	Present
38	Prof. Banshibadan Maji	Member	Present
39	Prof. Anup Kumar Bhattacharjee	Member	Present
40	Prof. Sumit Kundu	Member	Present
41	Prof. Rowdra Ghatak	Member	Present
42	Prof. Gautam Kumar Mahanti	Member	Present
43	Prof. Ashis Kumar Mal	Member	Present
44	Prof. Rajat Mahapatra	Member	Present
45	Prof. Siddhratha Shankar Thakur	Member	Present
46	Prof. Subrata Banerjee	Member	Present
47	Prof. Parimal Acharjee	Member	Present
48	Prof. Chiranjib Koley	Member	Present
49	Prof. Sankar Narayan Mahato	Member	Present
50	Prof. Tapas Kumar Saha	Member	Present
51	Prof. Seema Sarkar (Mondal)	Member	Present
52	Prof. Samarjit Kar	Member	Absent



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MINUTES

53	Prof. Kalyan Adhikari	Member	Present
54	Prof. Indrajit Basak	Member	Present
55	Prof. Biswajit Halder	Member	Absent
56	Prof. Nilotpal Banerjee	Member	Present
57	Prof. Apurba Layek	Member	Present
58	Prof. Asit Baran Puri	Member	Present
59	Prof. Shibendu Shekhar Roy	Member	Present
60	Prof. Nirmal Baran Hui	Member	Present
61	Prof. Karuna Sindhu Ghosh	Member	Present
62	Prof. Joydeep Maity	Member	Present
63	Prof. Ajit Kumar Meikap	Member	Present
64	Prof. Pathik Kumbhakar	Member	Present
65	Prof. Amit Kumar Chakraborty	Member	Present
66	Prof. Nirmal Kumar Roy	Member-Secretary	Present

S1. No.	Name	Designation	Remarks
1	Dr. Debjani Dutta	Invited Member	Present
2	Dr. Jaya Sikder	Invited Member	Present
3	Dr. Diptesh Das	Invited Member	Present
4	Dr. Kaushik Mandal	Invited Member	Present
5	Dr. Durbadal Mondal	Invited Member	Present
б	Dr. Arindam Modak	Invited Member	Present
7	Dr. Lakshmi Kanta Dey	Invited Member	Present
8	Dr. Supriya Bera	Invited Member	Present
9	Dr. Mrinal Kanti Mandal	Invited Member	Present
10	Dr. Bibhash Sen	Invited Member	Present



71st Meeting of the Senate, Date: December 18, 2023

Out of 66 Senate members, 54 members were present in the Senate Room of S. N. Roy memorial building and attended the meeting.

At the outset the Chairman, Senate extended a hearty welcome to all the members for taking their time and attending the meeting. Then two minutes of silence was observed in the memory of the departed souls of Prof. Bikash Sinha, former Chairperson, BoG, Prof. B. T. Ghoshal, former Professor of Dept. of Civil Engineering and Prof. P. K. Mukherjee, former Professor of Dept. of Physics.

After that the Chairman, Senate requested Member-secretary, Senate to present the agenda of the 71st Senate meeting.

Prof. N. K. Roy, Member-Secretary of the Senate, on approval of the Chairman, Senate, placed the agenda items in the meeting for discussion and the following resolutions were taken:

Item No. Confirmation of the Minutes of the 70th Meeting of the Senate.

**Resolution:** Since, no comments have been received from the members of the Senate, minutes of the 70th Senate meeting held on August 02, 2023 were confirmed by the Senate.

Item No. Actions Taken Report on the Resolutions Taken in the 70<sup>th</sup> 71.2 Meeting of the Senate.

**Resolution:** The Senate perused the action taken by the Institute on the decisions of the 70<sup>th</sup> meeting of the Senate held on August 02, 2023 and noted the Action Taken Reports with satisfaction as circulated with the agenda papers of the 71<sup>st</sup> Senate meeting.

Item No. To consider and approve the names of degree recipients in the 19<sup>th</sup> Convocation of the Institute.

**Resolution:** The Dean (Academic Courses) with the permission of the Chairman, Senate presented the list of students, who have been found qualified for the award of degree in respective programs (refer to Annexures 71.3.1, 71.3.2, 71.3.3 of agenda notes of the 71st Senate meeting). The Senate considered and recommended for approval of the BoG to award respective degrees to all of them. A brief statistics in this regard is appended below.

to . [24/12/20



71st Meeting of the Senate, Date: December 18, 2023

S1.	8 10 100	No. of s	students g	graduating
No.	Name of the Program	Boys	Girls	Total
1	Bachelor of Technology	626	150	776
2	Dual Degree Program	6	2	8
3	Integrated Master of Science in Chemistry	6	6	12
4	Master of Technology	174	69	243
5	Master of Science	53	33	86
6	Master of Business Administration	7	10	17
7	Master of Social Work	1	5	6
8	Doctor of Philosophy till 08/12/2023	35	18	53
-	Grand Total	908	293	1201

To consider and approve the names of graduating students for
the award of various gold medals and best project certificates
the award of various government
in the 19th Convocation of the Institute.

**Resolution:** The Dean (Academic Courses) with the permission of the Chairman, Senate presented the names of 36 graduating students for the award of Institute Gold Medals, four Endowment Gold Medals and two graduating students for the Best Project Certificates. The list of such candidates was presented with the agenda notes of the 71st Senate meeting vide Annexure 71.4. The Senate considered their names and recommended for approval of BoG.

Item No.	To consider matters related to UG and PG studies.	
71.5		

**Resolutions:** The Senate considered the matters related to UG and PG studies including the resolutions of the UGAC and PGAC meetings held on 21.08.2023, 09.10.2023, and 11.12.2023 and Dean (Academic Courses) with the permission of the Chairman, Senate presented the minutes of those meetings one after another. Most of the items were observed as routine in nature and the Senate has ratified / approved the resolutions taken by the UGAC and PGAC with the following rider.

(a) The Senate considered and approved the Item No. 9 of UGAC and PGAC meeting held on 21-08-2023, i.e., the degree nomenclature of DBT-sponsored M. Sc. Program in Life Sciences shall be - (i) 1st and 2nd semesters grade cards, it will be mentioned as Master of Sciences in Life Sciences; (ii) 3rd and 4th semesters grade cards and final degree certificate, it will be mentioned as Master of Sciences in Life Sciences (Specialization: Microbial Biotechnology) or Master of Sciences in Life Sciences (Specialization: Plant & Animal Biotechnology), respectively.

D. P24/1/23



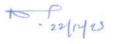
71st Meeting of the Senate, Date: December 18, 2023

- (b) The Senate considered and approved the Item No. 9 of UGAC and PGAC meeting held on 09-10-2023, i.e., the curricula and syllabii of first year B.Tech., Dual Degree (B.Tech. and M. Tech.), Integrated M. Sc. It shall be effective from the AY 2023-24.
- (c) The Senate considered and approved the Item No. 11 of UGAC and PGAC meeting held on 09-10-2023 with the rider Students having backlog in sessional / laboratory subjects or in theory subject(s) on account of attendance defaulter need to study the subject from the start of the semester. Evaluations of her/his performance on all three components, CA, MT and ET will be made again by the subject teachers. However, students in an idle semester shall not be permitted to enrol in any subjects as per the existing UG, PG regulations.
- (d) The Senate considered and approved the Item No. 9 of UGAC and PGAC meeting held on 11-12-2023 i.e., 8th semester UG students going for internships will join classes online, appear in Mid Term and End Semester Examinations off-line at the NIT Durgapur Campus as per the schedule mentioned in the Academic Calendar 2023-24. For this purpose, both classes and examinations of final semester UG students may be conducted on weekends.

Item No. To consider the resolutions of RAC meetings. 71.6

**Resolutions:** The Senate considered the resolutions of RAC meetings held on 14.09.2023, and 08.12.2023 and Dean (Academic Research) with the permission of the Chairman, Senate presented the minutes of those meetings one after another. Most of the items were observed as routine in nature and the Senate has ratified / approved the resolutions taken by the RAC with the following rider.

- (a) The Senate approved PhD (topic) registration of 68 nos. of PhD scholars as presented with the agenda notes of the 71st Senate meeting vide Annexure 71.6.3.
- (b) The Senate recommended for approval of BoG of 14 nos. of PhD scholars for the award of PhD degree as presented with the agenda notes of the 71st Senate meeting vide **Annexure 71.3.3**, sl no. 40 to 53.
- (c) The Senate approved discontinuation from PhD program of 05 nos. of scholars as presented with the agenda notes of the 71st Senate meeting vide **Annexure 71.6.3**.





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- (d) The Senate considered and not approved the request of extension of period of PhD registration of Subrata Joarder (Roll No. 14/CA/1505, Reg. No. NITD/PhD/CA/2016/00750), Prakash Kumar (Roll No. 12BT1502, Reg. No. NITD/PhD/BT/2015/00642), and Ankita Mukherjee (Roll No. 15CHE1103, Reg. No. NITD/PhD/CH/2016/00808) and their studentship is discontinued with immediate effect.
- (e) The Senate considered and approved the request of change of category from "C" to "B" of Mitali Patra (Roll No.: 22PH1109).
- (f) The Senate considered and not approved the request of extension of delivery of (topic) registration seminar by Moumita Goswami, (Roll No. 19CS1506) and her studentship is discontinued with immediate effect.
- (g) The Senate considered and not approved the request of campus release of Sagorika Chakraborty (Roll No. 22ES1101) and her studentship is discontinued with immediate effect.
- (h) The Senate considered and approved the matter of advertisement for admission in PhD programme during Even Semester 2023-2024 as presented with the agenda notes of the 71st Senate meeting vide Annexure 71.6.2.
- (i) The Senate considered and not approved the request of change of category Suman Kalyan Porel (Roll No. 23EC1501) and his studentship is discontinued with immediate effect.

Item No. To consider the nomination of two faculty members as members in BoG of the Institute

**Resolution:** As per "The National Institute of Technology Act 2007", vide Section 11 (f), the Senate considered and recommended - (i) *Prof. Gautam Kumar Mahanti, Professor (HAG), Dept. of Electronics and Communication Engineering and (ii) Dr. Aashish Kumar Bohre, Assistant Professor, Dept. of Electrical Engineering as members in the BoG of the Institute.* 

Item No. To consider revision of Clause Nos. 5 and 7 of the Sponsored 71.8 Research and Consultancy Cell (SRCC) guidelines.

**Resolutions:** With the permission of the Chairman, Senate, Dean (R&C) presented the agenda. The Senate considered and following resolutions were taken.

(j) Ratified the revision of Clause No. 5 of the SRCC guidelines. Revised norms for accounting of consultancy, testing and training as approved is mentioned below.

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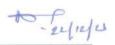
71st Meeting of the Senate, Date: December 18, 2023
MINUTES

Head/Item	Consultancy and Testing without Institute facilities (Type I: with Institute Overhead Rate of 30%)	Consultancy and Testing with Institute facilities (Type II: with Institute Overhead Rate of 40%)
Total Money Received	X	X
Service Tax	Т	T
Project Amount	Y=X-T	Y=X-T
Institute Overhead (I)	I=0.3Y	I=0.4Y
Remaining Amount (R)	R=0.7Y	R=0.6Y
Total Expenditure (E)	E	E
Balance Amount for Distribution (B)	B=R-E	B=R-E

The distribution of balance amount (B) for both Consultancy projects and routine Testing shall be the following:

S1. No.	Head/Item	Distribution of Capital B %
1	Director	5
2	Director Office	1
3	Dean / Associate Dean (R&C)	4
4	Dean / Associate Dean (R&C) Office	1.5
5	HOD	3
6	Office of HOD	1
7	Registrar & Office of Registrar	2.5
8	Accounts Department	2
9	PI & His Team	80

(ii) Approved the deletion of the Clause No. 7.0 of SRCC guidelines leaving the portion "Normally overhead charges shall be applicable @20% of the total project cost. Sometime, the overhead charge sanctioned by the sponsoring agency is less than 20%. In that case overhead charges will be acceptable as per sponsoring agency norm". Moreover, amount of fund received as overhead charges from the sponsoring agency will remain be there in the SRCC account.





71st Meeting of the Senate, Date: December 18, 2023

Item No. To consider the revision on norms and forms of utilization of 71.9 Cumulative Professional Development Allowance (CPDA)

**Resolutions:** The Senate considered and approved the revised norms and revised formats of utilization of Cumulative Professional Development Allowance (CPDA) as presented with the agenda notes of the 71st Senate meeting vide **Annexure 71.9**.

Item No. To consider opening of B. Tech. Program in Mathematics and 71.10 Computing from AY 2024-25.

**Resolutions:** The Senate considered and recommended for approval of BoG for starting a *B. Tech. program in Mathematics and Computing* with intake as 60 including all reservations as per GoI from the AY 2024-25 to be offered by the Department of Computer Science and Engineering. The curricula and syllabi will be prepared by the Department of Computer Science and Engineering and submitted to the Senate later on.

Item No. To consider opening of M. Tech. Program in AI and Data 71.11 Science from AY 2024-25.

**Resolutions:** The Senate considered and recommended for approval of BoG for starting an *M. Tech. program in AI and Data Science* with intake as 20 including all reservations as per GoI from the AY 2024-25 to be offered by the Department of Computer Science and Engineering. The curricula and syllabi will be prepared by the Department of Computer Science and Engineering and submitted to the Senate later on.

Item No. To consider discontinuation of few M. Tech. Programs. 71.12

**Resolutions:** The Senate considered and recommended for approval of BoG for discontinuation of the following four M. Tech. programs from the AY 2024-25 due to low admission rate over the last five years.

(a) M. Tech. Program in Chemical Engineering offered by the Dept. of Chemical Engg.

(b) M. Tech. Program in Energy Resources and Sustainable Environmental Engg. offered by the Dept. of Chemical Engg.

(c) M. Tech. Program in Metallurgy and Materials Technology offered by the Dept. of Metallurgical and Materials Engineering

(d) M. Tech. Program in Advanced Materials Science and Technology offered by the Dept. of Physics

Pelpel 23



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Item No. Any other matter with the permission of the chair 71.13

No additional Agenda items were placed in the meeting.

The meeting ended with a vote of thanks to the Chair.

Registrar & Secretary, Senate

NIT Durgapur

Date: 22-12-2023

22/12/2025

Director & Chairman, Senate

NIT Durgapur

Date: 22-12-2023



LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc Annexure - D 19TH CONVOCATION

Sl No	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL CGPA
NU		<u> </u>	Bachelor of Tec	hnology Program	L		Cui A
1	18BT8022	18U10507	Bachelor of Technology in	Biotechnology	Satrajit Guha	М	7.11
2	18BT8037	18U10615	Bachelor of Technology in	Biotechnology	Jyoti Ranjan	М	6.71
3	18BT8045	18U10658	Bachelor of Technology in	Biotechnology	Tushar Verma	М	6.53
4	19BT8001	19U10073	Bachelor of Technology in	Biotechnology	Ujjal Saha	М	7.49
5	19BT8002	19U10092	Bachelor of Technology in	Biotechnology	Titas Nath	F	8.68
6	19BT8003	19U10214	Bachelor of Technology in	Biotechnology	Boda Suman	М	7.22
7	19BT8004	19U10227	Bachelor of Technology in	Biotechnology	Rahul Sen	М	8.03
8	19BT8005	19U10247	Bachelor of Technology in	Biotechnology	Chowla Venkata Baby Shalini	F	8.85
9	19BT8006	19U10267	Bachelor of Technology in	Biotechnology	Jit Das	М	7.47
10	19BT8007	19U10279	Bachelor of Technology in	Biotechnology	Maheswar Ghosh	М	8.29
11	19BT8008	19U10292	Bachelor of Technology in	Biotechnology	Subhojit Ghosh	М	7.78
12	19BT8009	19U10305	Bachelor of Technology in	Biotechnology	Muchapothula Manish	М	7.77
13	19BT8010	19U10339	Bachelor of Technology in	Biotechnology	Sachin Dubey	М	8.18
14	19BT8011	19U10438	Bachelor of Technology in	Biotechnology	Nitin Yadav	М	7.70
15	19BT8013	19U10455	Bachelor of Technology in	Biotechnology	Sahil Mantri	М	7.74
16	19BT8014	19U10475	Bachelor of Technology in	Biotechnology	Chandramouli Saha	М	8.26
17	19BT8015	19U10497	Bachelor of Technology in	Biotechnology	Bhukya Renuka	F	7.05
18	19BT8017	19U10534	Bachelor of Technology in	Biotechnology	Prerna Jha	F	8.79
19	19BT8018	19U10542	Bachelor of Technology in	Biotechnology	Dip Jyoti Sardar	М	8.14
20	19BT8019	19U10545	Bachelor of Technology in	Biotechnology	Aditi Sengupta	F	8.44
21	19BT8020	19U10546	Bachelor of Technology in	Biotechnology	Disha Sharma	F	8.04
22	19BT8021	19U10551	Bachelor of Technology in	Biotechnology	Santanu Mahapatra	М	7.10
23	19BT8022	19U10552	Bachelor of Technology in	Biotechnology	Abhishek Sharma	М	7.98
24	19BT8024	19U10571	Bachelor of Technology in	Biotechnology	Avishek Bose	М	8.27
25	19BT8025	19U10584	Bachelor of Technology in	Biotechnology	Ashutosh Kumar Shaw	М	8.03
26	19BT8026	19U10586	Bachelor of Technology in	Biotechnology	Sagnik Pal	М	8.28
27	19BT8027	19U10588	Bachelor of Technology in	Biotechnology	Ritika Singh	F	8.61
28	19BT8028	19U10589	Bachelor of Technology in	Biotechnology	Shishodiya Akash	М	8.68
29	19BT8029	19U10591	Bachelor of Technology in	Biotechnology	Anshu Kumari	F	8.49
30	19BT8030	19U10597	Bachelor of Technology in	Biotechnology	Riya Kaushik	F	8.24
31	19BT8031	19U10619	Bachelor of Technology in	Biotechnology	Rhiti Mitra	F	8.18

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl No	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL CGPA
32	19BT8032	19U10635	Bachelor of Technology in	Biotechnology	Dyuti Mitra	F	8.40
33	19BT8033	19U10638	Bachelor of Technology in	Biotechnology	Anurag Kumar	М	8.52
34	19BT8034	19U10645	Bachelor of Technology in	Biotechnology	Subhrajyoti Biswas	М	7.72
35	19BT8035	19U10646	Bachelor of Technology in	Biotechnology	Nilurouthu Harish	М	7.79
36	19BT8037	19U10657	Bachelor of Technology in	Biotechnology	Raunaq Chakraborty	М	8.83
37	19BT8038	19U10662	Bachelor of Technology in	Biotechnology	Santam Roy Choudhury	М	8.25
38	19BT8039	19U10667	Bachelor of Technology in	Biotechnology	Giriraj Kumawat	М	8.28
39	19BT8040	19U10682	Bachelor of Technology in	Biotechnology	Vikrant Kumar Ranjan	М	8.34
40	19BT8041	19U10715	Bachelor of Technology in	Biotechnology	S Vivekanand	М	7.14
41	19BT8042	19U10716	Bachelor of Technology in	Biotechnology	Panthakani Prasanna Varma	F	6.85
42	19BT8043	19U10718	Bachelor of Technology in	Biotechnology	Akanksha Gautam	F	8.10
43	19BT8044	19U10729	Bachelor of Technology in	Biotechnology	Sachin Kumar Vishwakarma	М	8.02
44	19BT8046	19U10739	Bachelor of Technology in	Biotechnology	Katepalli Ajay Lakshmi Narasimha Rao	М	7.49
45	19BT8047	19U10744	Bachelor of Technology in	Biotechnology	Vennela Boddeti	F	8.33
46	19BT8048	19U10757	Bachelor of Technology in	Biotechnology	Soumyadeep Paul	М	8.01
47	19BT8049	19U10765	Bachelor of Technology in	Biotechnology	Nishish Mishra	М	7.49
48	19BT8050	19U10768	Bachelor of Technology in	Biotechnology	Gugulothu Sai	М	7.39
49	19BT8051	19U10774	Bachelor of Technology in	Biotechnology	Divyam Singh Tomar	М	7.63
50	19BT8052	19U10779	Bachelor of Technology in	Biotechnology	Shreya Das	F	7.22
51	19BT8053	19U10782	Bachelor of Technology in	Biotechnology	Jay Vijay Kedar	М	7.44
52	19BT8054	19U10785	Bachelor of Technology in	Biotechnology	D.Sriram	М	7.74
53	19BT8055	19U10786	Bachelor of Technology in	Biotechnology	M Preethi	F	8.04
54	19BT8056	19U10800	Bachelor of Technology in	Biotechnology	Rathod Shiva Krishna	М	7.37
55	19BT8057	19U10802	Bachelor of Technology in	Biotechnology	Yellanki Niharika	F	8.12
56	19BT8058	19U10803	Bachelor of Technology in	Biotechnology	Edagottu Venkateswara Raju	М	7.94
57	19BT8059	19U10812	Bachelor of Technology in	Biotechnology	Sneha Yadav	F	7.76
58	18BT8023	18U10511	Bachelor of Technology in	Biotechnology	Surabhi Vinay Kumar	М	6.88
59	19CE8001	19U10009	Bachelor of Technology in	Civil Engineering	Shivam Dwivedi	М	8.71
60	19CE8002	19U10016	Bachelor of Technology in	Civil Engineering	Satyam Shorya Jha	М	7.64
61	19CE8003	19U10021	Bachelor of Technology in	Civil Engineering	Sumit Pal	М	7.93
62	19CE8004	19U10041	Bachelor of Technology in	Civil Engineering	Swastik Das	М	7.85
63	19CE8005	19U10091	Bachelor of Technology in	Civil Engineering	Souvik Ghosh	М	8.12

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

	191H CONVOCATION							
Sl No	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL CGPA	
64	19CE8006	19U10093	Bachelor of Technology in	Civil Engineering	Ranit Majee	М	8.09	
65	19CE8007	19U10108	Bachelor of Technology in	Civil Engineering	Suryadip Mondal	М	7.48	
66	19CE8008	19U10164	Bachelor of Technology in	Civil Engineering	Ankush Datta	М	7.97	
67	19CE8009	19U10180	Bachelor of Technology in	Civil Engineering	Avinash Priyadarshi	М	9.66	
68	19CE8010	19U10198	Bachelor of Technology in	Civil Engineering	Arnab Pal	М	9.01	
69	19CE8011	19U10203	Bachelor of Technology in	Civil Engineering	Goutam Yadav	М	7.94	
70	19CE8012	19U10239	Bachelor of Technology in	Civil Engineering	Sagnik Datta	М	8.52	
71	19CE8013	19U10282	Bachelor of Technology in	Civil Engineering	Karan Kapoor	М	7.36	
72	19CE8014	19U10283	Bachelor of Technology in	Civil Engineering	Kumari Swati	F	8.07	
73	19CE8015	19U10291	Bachelor of Technology in	Civil Engineering	Manish Kumar Meena	М	7.88	
74	19CE8016	19U10298	Bachelor of Technology in	Civil Engineering	Rohit Kumar	М	7.61	
75	19CE8017	19U10300	Bachelor of Technology in	Civil Engineering	Rupesh Kumar	М	7.27	
76	19CE8018	19U10314	Bachelor of Technology in	Civil Engineering	Pratik Chowdhury	М	8.49	
77	19CE8019	19U10319	Bachelor of Technology in	Civil Engineering	Md Sheesh Amber	М	8.03	
78	19CE8020	19U10334	Bachelor of Technology in	Civil Engineering	Chilakabathini Honey Nova	М	7.31	
79	19CE8021	19U10338	Bachelor of Technology in	Civil Engineering	Subodh Kumar Mishra	М	8.03	
80	19CE8022	19U10362	Bachelor of Technology in	Civil Engineering	Srikar Reddy Bolla	М	8.45	
81	19CE8023	19U10368	Bachelor of Technology in	Civil Engineering	Vishal Bharti	М	7.73	
82	19CE8024	19U10371	Bachelor of Technology in	Civil Engineering	Yash Kumar Pandey	М	8.52	
83	19CE8025	19U10379	Bachelor of Technology in	Civil Engineering	Srijan Sen	М	7.98	
84	19CE8026	19U10390	Bachelor of Technology in	Civil Engineering	Aadity Tiwari	М	7.60	
85	19CE8027	19U10395	Bachelor of Technology in	Civil Engineering	Akanksha Kumari	F	8.12	
86	19CE8028	19U10409	Bachelor of Technology in	Civil Engineering	Disanta Chanda	М	8.87	
87	19CE8029	19U10412	Bachelor of Technology in	Civil Engineering	Vishal Kumar	М	7.24	
88	19CE8030	19U10426	Bachelor of Technology in	Civil Engineering	Saurabh Yadav	М	8.19	
89	19CE8031	19U10432	Bachelor of Technology in	Civil Engineering	Rahul Bera	М	7.25	
90	19CE8033	19U10459	Bachelor of Technology in	Civil Engineering	Nelapudi Venkata Phaneendra	М	7.36	
91	19CE8034	19U10464	Bachelor of Technology in	Civil Engineering	Gandham Shanmukhi Valli Devi	F	8.29	
92	19CE8035	19U10472	Bachelor of Technology in	Civil Engineering	Adari Sai Likhith	М	8.20	
93	19CE8036	19U10491	Bachelor of Technology in	Civil Engineering	Abhishek Srivastav	М	7.51	
94	19CE8037	19U10511	Bachelor of Technology in	Civil Engineering	Rimil Saren	М	6.20	
95	19CE8038	19U10519	Bachelor of Technology in	Civil Engineering	Harsh Jha	М	7.77	

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL
<b>No</b> 96	19CE8039	19U10520	Bachelor of Technology in	Civil Engineering	Ruchika Gupta	F	<b>CGPA</b> 8.38
97		19U10521	Bachelor of Technology in	Civil Engineering	Kingshuk Mukherjee	M	9.09
98	19CE8041	19U10547	Bachelor of Technology in	Civil Engineering	Shirsendu Koner	M	8.31
99		19U10564	Bachelor of Technology in	Civil Engineering	Priyajeet Acharjee	M	7.83
100		19U10567	Bachelor of Technology in	Civil Engineering	Meenakshi Harikumar	F	9.19
101	19CE8044	19U10569	Bachelor of Technology in	Civil Engineering	Koena Saha	F '	8.11
101						M	6.98
		19U10572	Bachelor of Technology in	Civil Engineering	Reshwanth Annadasu		
103	19CE8046	19U10581	Bachelor of Technology in	Civil Engineering	Srimantini Bhattacharya	F	7.89
104		19U10598	Bachelor of Technology in	Civil Engineering	Sanjay Banerjee	М	8.17
105		19U10610	Bachelor of Technology in	Civil Engineering	Deepanjan Bhattacharyya	М	7.54
106	19CE8049	19U10618	Bachelor of Technology in	Civil Engineering	Anshu Kumari	F	7.84
107		19U10629	Bachelor of Technology in	Civil Engineering	Manshi Kumari	F	8.05
108	19CE8051	19U10634	Bachelor of Technology in	Civil Engineering	Anand Kumar Sahu	М	7.74
109	19CE8054	19U10669	Bachelor of Technology in	Civil Engineering	Medarametla Pavan Kumar	М	7.66
110	19CE8055	19U10670	Bachelor of Technology in	Civil Engineering	Palli Uday Kumar	М	6.72
111	19CE8056	19U10679	Bachelor of Technology in	Civil Engineering	Ajay Pooniya	М	7.24
112	19CE8057	19U10683	Bachelor of Technology in	Civil Engineering	Bandi Vahini	F	8.20
113	19CE8058	19U10707	Bachelor of Technology in	Civil Engineering	Atipamula Venkata Sai Karthik	М	7.45
114	19CE8059	19U10711	Bachelor of Technology in	Civil Engineering	Animesh Ghosh	М	7.59
115	19CE8060	19U10717	Bachelor of Technology in	Civil Engineering	Banti	М	6.99
116	19CE8061	19U10727	Bachelor of Technology in	Civil Engineering	Nayan Biswas	М	7.11
117	19CE8063	19U10752	Bachelor of Technology in	Civil Engineering	Abhishek Rout	М	7.97
118	19CE8064	19U10756	Bachelor of Technology in	Civil Engineering	Sri Kanth Koppara	М	6.95
119	19CE8065	19U10764	Bachelor of Technology in	Civil Engineering	Sayan Mandal	М	7.43
120	19CE8066	19U10766	Bachelor of Technology in	Civil Engineering	Oliva Majumder	F	7.41
121	19CE8067	19U10793	Bachelor of Technology in	Civil Engineering	Ankur Kumar	М	7.38
122	19CE8068	19U10814	Bachelor of Technology in	Civil Engineering	Shivam Yadav	М	7.27
123	19CH8001	19U10006	Bachelor of Technology in	Chemical Engineering	Rupam Nayek	М	7.51
124	19CH8002	19U10017	Bachelor of Technology in	Chemical Engineering	Rajneesh Anand	М	8.30
125	19CH8003	19U10024	Bachelor of Technology in	Chemical Engineering	Soumalya Ghosh	М	7.38
126	19CH8004	19U10034	Bachelor of Technology in	Chemical Engineering	Ranit Roy	М	8.60
127	19CH8005	19U10046	Bachelor of Technology in	Chemical Engineering	Rohit Ray	М	9.32
14/	1,0110003	17010040	Duchelor of reciniology ill	one incar Engineering	Rome Ray		3.32

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Date: 09/10/2023 Dean (Academic Courses) NITDGP/AY2022-23/19th Convo/UG/4



LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

	191H CONVOCATION								
Sl No	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL CGPA		
128	19CH8006	19U10070	Bachelor of Technology in	Chemical Engineering	Gulshan Kumar	М	7.87		
129	19CH8007	19U10076	Bachelor of Technology in	Chemical Engineering	Rishita Modak	F	8.81		
130	19CH8008	19U10087	Bachelor of Technology in	Chemical Engineering	Saumadeep Sen	М	8.10		
131	19CH8009	19U10090	Bachelor of Technology in	Chemical Engineering	Ritabrata Ganguly	М	8.38		
132	19CH8010	19U10112	Bachelor of Technology in	Chemical Engineering	Anurag Srivastava	М	8.77		
133	19CH8011	19U10115	Bachelor of Technology in	Chemical Engineering	Jishnu Das	М	8.69		
134	19CH8012	19U10124	Bachelor of Technology in	Chemical Engineering	Sebontika Bose	F	9.06		
135	19CH8013	19U10143	Bachelor of Technology in	Chemical Engineering	Divas Gupta	М	7.83		
136	19CH8014	19U10169	Bachelor of Technology in	Chemical Engineering	Arka Ghosh	М	8.41		
137	19CH8015	19U10185	Bachelor of Technology in	Chemical Engineering	Pinninti Sai Rakesh	М	7.35		
138	19CH8016	19U10197	Bachelor of Technology in	Chemical Engineering	Sk. Sahir Iqbal	М	7.76		
139	19CH8017	19U10210	Bachelor of Technology in	Chemical Engineering	Sunny Kumar	М	8.01		
140	19CH8018	19U10249	Bachelor of Technology in	Chemical Engineering	Argho Mondal	М	7.30		
141	19CH8019	19U10259	Bachelor of Technology in	Chemical Engineering	Sonali Sah	F	7.71		
142	19CH8020	19U10265	Bachelor of Technology in	Chemical Engineering	Ayush Singh	М	8.70		
143	19CH8021	19U10269	Bachelor of Technology in	Chemical Engineering	Sakhinana Srikar Sai	М	8.16		
144	19CH8022	19U10274	Bachelor of Technology in	Chemical Engineering	Rakhal Banerjee	М	9.08		
145	19CH8023	19U10285	Bachelor of Technology in	Chemical Engineering	Ishaun Sinha	М	8.32		
146	19CH8024	19U10288	Bachelor of Technology in	Chemical Engineering	Aadira Nair	F	8.26		
147	19CH8025	19U10304	Bachelor of Technology in	Chemical Engineering	Mainak Debnath	М	8.32		
148	19CH8026	19U10310	Bachelor of Technology in	Chemical Engineering	Nur Alam	М	8.35		
149	19CH8027	19U10331	Bachelor of Technology in	Chemical Engineering	Utkarsh Tiwari	М	8.63		
150	19CH8028	19U10353	Bachelor of Technology in	Chemical Engineering	Abrar Ul Haque	М	7.82		
151	19CH8029	19U10361	Bachelor of Technology in	Chemical Engineering	Ramteke Vineet Rajendra	М	7.97		
152	19CH8030	19U10374	Bachelor of Technology in	Chemical Engineering	Ayush Chaudhary	М	7.92		
153	19CH8032	19U10397	Bachelor of Technology in	Chemical Engineering	Saurav Kumar	М	7.98		
154	19CH8033	19U10458	Bachelor of Technology in	Chemical Engineering	Adarsh Pandey	М	7.37		
155	19CH8034	19U10470	Bachelor of Technology in	Chemical Engineering	Arghadip Nandi	М	7.99		
156	19CH8035	19U10486	Bachelor of Technology in	Chemical Engineering	Jatavath Krishna Prasad	М	7.20		
157	19CH8036	19U10530	Bachelor of Technology in	Chemical Engineering	Rishika Saha	F	7.98		
158	19CH8037	19U10535	Bachelor of Technology in	Chemical Engineering	Kriti Pramanik	F	7.95		
159	19CH8038	19U10543	Bachelor of Technology in	Chemical Engineering	Saheb Garain	М	8.03		

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Date: 09/10/2023 Dean (Academic Courses) NITDGP/AY2022-23/19th Convo/UG/5



LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl				191H CONVOCATION	1		FINAL
No	Roll No	Reg. No.	Programme	Branch	Name	Gender	CGPA
160	19CH8039	19U10548	Bachelor of Technology in	Chemical Engineering	Mounam Maiti	М	9.09
161	19CH8040	19U10554	Bachelor of Technology in	Chemical Engineering	Koushik Khan	М	7.07
162	19CH8041	19U10556	Bachelor of Technology in	Chemical Engineering	Suchismita Pal	F	8.65
163	19CH8042	19U10579	Bachelor of Technology in	Chemical Engineering	Soumyadeep Mukhopadhyay	М	8.15
164	19CH8043	19U10593	Bachelor of Technology in	Chemical Engineering	Aman Shaw	М	8.02
165	19CH8044	19U10600	Bachelor of Technology in	Chemical Engineering	Soumyajeet Mitra	М	8.24
166	19CH8045	19U10605	Bachelor of Technology in	Chemical Engineering	Ankit Jaiswal	М	8.05
167	19CH8046	19U10608	Bachelor of Technology in	Chemical Engineering	Arya Adak	М	7.86
168	19CH8047	19U10613	Bachelor of Technology in	Chemical Engineering	Yash Sinha	М	8.24
169	19CH8048	19U10616	Bachelor of Technology in	Chemical Engineering	Sharvesh Baliya	М	7.08
170	19CH8049	19U10636	Bachelor of Technology in	Chemical Engineering	Sourav Koery	М	7.77
171	19CH8050	19U10641	Bachelor of Technology in	Chemical Engineering	Utsav Pandey	М	8.18
172	19CH8051	19U10642	Bachelor of Technology in	Chemical Engineering	Aman Ali	М	8.06
173	19CH8052	19U10677	Bachelor of Technology in	Chemical Engineering	Rajesh Kumar Sablaniya	М	6.82
174	19CH8053	19U10681	Bachelor of Technology in	Chemical Engineering	Randhi Syamcharan	М	7.23
175	19CH8054	19U10692	Bachelor of Technology in	Chemical Engineering	Jarupla Himabindu	F	7.58
176	19CH8055	19U10701	Bachelor of Technology in	Chemical Engineering	Prashant Kumar	М	7.95
177	19CH8056	19U10713	Bachelor of Technology in	Chemical Engineering	Anshika Sharma	F	7.11
178	19CH8057	19U10720	Bachelor of Technology in	Chemical Engineering	Kartikay Maharshi	М	7.57
179	19CH8058	19U10723	Bachelor of Technology in	Chemical Engineering	Rudru Pavani Mounika	F	8.74
180	19CH8059	19U10725	Bachelor of Technology in	Chemical Engineering	Arbaj Khan	М	7.96
181	19CH8060	19U10750	Bachelor of Technology in	Chemical Engineering	Anand Nagar	М	8.08
182	19CH8061	19U10754	Bachelor of Technology in	Chemical Engineering	Rishabh Yadav	М	8.94
183	19CH8062	19U10758	Bachelor of Technology in	Chemical Engineering	Srikanth Guguloth	М	7.13
184	19CH8063	19U10771	Bachelor of Technology in	Chemical Engineering	Bhukya Rakesh	М	7.09
185	19CH8064	19U10783	Bachelor of Technology in	Chemical Engineering	Anuj Singh	М	8.54
186	19CH8065	19U10795	Bachelor of Technology in	Chemical Engineering	Rajshri Jhariya	F	7.17
187	19CH8066	19U10808	Bachelor of Technology in	Chemical Engineering	Chetan Sheoran	М	7.69
188	19CH8067	19U10809	Bachelor of Technology in	Chemical Engineering	Sammanita Singh	F	8.05
189	18CH8059	18U10699	Bachelor of Technology in	Chemical Engineering	Majji Sai Sanjay	М	6.46
190	18CS8006	18U10011	Bachelor of Technology in	Computer Science and Engineering	Prajata Roy	М	7.95
191	18CS8034	18U10092	Bachelor of Technology in	Computer Science and Engineering	Utsab Samanta	М	7.02
				Engineering		<u> </u>	G

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl	D 11 W	- ·		191H CONVOCATION			FINAL
No	Roll No	Reg. No.	Programme	Branch	Name	Gender	CGPA
192	18CS8043	18U10152	Bachelor of Technology in	Computer Science and Engineering Computer Science and	Amgoth Sri Kanth	М	7.13
193	18CS8095	18U10369	Bachelor of Technology in	Engineering	Hrishikesh Roy	М	6.97
194	19CS8001	19U10003	Bachelor of Technology in	Computer Science and Engineering	Ashutosh Thakur	М	8.78
195	19CS8002	19U10005	Bachelor of Technology in	Computer Science and Engineering	Subhadeep Dutta	М	8.93
196	19CS8003	19U10008	Bachelor of Technology in	Computer Science and Engineering	Supratim Mondal	М	7.42
197	19CS8005	19U10020	Bachelor of Technology in	Computer Science and Engineering	Gulshan Kumar Choudhary	М	9.05
198	19CS8006	19U10022	Bachelor of Technology in	Computer Science and Engineering	Mahadev Karmakar	М	8.43
199	19CS8007	19U10025	Bachelor of Technology in	Computer Science and Engineering	Anupam Das	М	8.81
200	19CS8008	19U10027	Bachelor of Technology in	Computer Science and Engineering	Rishav Raj Kumar	М	9.12
201	19CS8009	19U10029	Bachelor of Technology in	Computer Science and Engineering	Akash Mukherjee	М	7.52
202	19CS8010	19U10032	Bachelor of Technology in	Computer Science and Engineering	Akash Majhi	М	8.36
203	19CS8011	19U10038	Bachelor of Technology in	Computer Science and Engineering	Rohit Saha	М	8.52
204	19CS8012	19U10040	Bachelor of Technology in	Computer Science and Engineering	Arnab Sinhamahapatra	М	8.72
205	19CS8013	19U10042	Bachelor of Technology in	Computer Science and Engineering	Nikhil Kumar	М	9.14
206	19CS8014	19U10043	Bachelor of Technology in	Computer Science and Engineering	Abantika Basu	F	9.51
207	19CS8015	19U10048	Bachelor of Technology in	Computer Science and Engineering	Asim Sen	М	7.98
208	19CS8017	19U10053	Bachelor of Technology in	Computer Science and Engineering	Ajay Paswan	М	8.54
209	19CS8019	19U10062	Bachelor of Technology in	Computer Science and Engineering	Arpan Kesh	М	9.34
210	19CS8020	19U10064	Bachelor of Technology in	Computer Science and Engineering	Aniket Roy	М	8.00
211	19CS8021	19U10066	Bachelor of Technology in	Computer Science and Engineering	Sangram Ray	М	8.43
212	19CS8022	19U10068	Bachelor of Technology in	Computer Science and Engineering	Saptarshi Shome	М	8.95
213	19CS8023	19U10069	Bachelor of Technology in	Computer Science and Engineering	Sushanta Saren	М	8.47
214	19CS8024	19U10071	Bachelor of Technology in	Computer Science and Engineering	Manish Raj Baraik	М	8.49
215	19CS8025	19U10072	Bachelor of Technology in	Computer Science and Engineering	Ankit Vishwakarma	М	8.92
216	19CS8026	19U10075	Bachelor of Technology in	Computer Science and Engineering	Ashish Kumar	М	8.95
217	19CS8027	19U10077	Bachelor of Technology in	Computer Science and Engineering	Tanmoy Gorai	М	8.53
218	19CS8028	19U10080	Bachelor of Technology in	Computer Science and Engineering	Arka Seth	М	9.22
219	19CS8029	19U10082	Bachelor of Technology in	Computer Science and Engineering	Sankita Mandal	F	8.63
220	19CS8030	19U10083	Bachelor of Technology in	Computer Science and Engineering	Shadab Ahmad	М	9.06
221	19CS8031	19U10089	Bachelor of Technology in	Computer Science and Engineering	Mettapalli Sai Vamsi	М	7.32
222	19CS8032	19U10094	Bachelor of Technology in	Computer Science and Engineering	Karam Kumar Sahoo	М	8.68
223	19CS8033	19U10095	Bachelor of Technology in	Computer Science and Engineering	Nalla Yoshita	F	8.91

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# LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl No	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL CGPA
224	19CS8034	19U10102	Bachelor of Technology in	Computer Science and Engineering	Turpati Sai Balaji	М	8.82
225	19CS8035	19U10103	Bachelor of Technology in	Computer Science and Engineering	Arijit Biswas	M	8.32
226	19CS8036	19U10105	Bachelor of Technology in	Computer Science and Engineering	Kanumuri G S Rishit Varma	М	7.55
227	19CS8037	19U10120	Bachelor of Technology in	Computer Science and Engineering	Abha Jha	F	9.72
228	19CS8038	19U10121	Bachelor of Technology in	Computer Science and Engineering	Vipul Dev Hembrom	М	7.86
229	19CS8039	19U10122	Bachelor of Technology in	Computer Science and Engineering	Satyam Vivek	М	8.51
230	19CS8040	19U10125	Bachelor of Technology in	Computer Science and Engineering	Ridam Hazra	M	9.14
231	19CS8041	19U10128	Bachelor of Technology in	Computer Science and Engineering	Ayush Kumar Gupta	М	8.80
232	19CS8042	19U10130	Bachelor of Technology in	Computer Science and Engineering	Suryatapa Sau	F	6.79
233	19CS8043	19U10131	Bachelor of Technology in	Computer Science and Engineering	Poonam Kisku	F	7.87
234	19CS8044	19U10132	Bachelor of Technology in	Computer Science and Engineering	Archisman Ghosh	М	8.99
235	19CS8045	19U10135	Bachelor of Technology in	Computer Science and Engineering	Ankita Singh	F	8.72
236	19CS8046	19U10136	Bachelor of Technology in	Computer Science and Engineering	Aishik Bhattacharya	М	8.91
237	19CS8047	19U10139	Bachelor of Technology in	Computer Science and Engineering	Amit Kumar	М	8.43
238	19CS8048	19U10142	Bachelor of Technology in	Computer Science and Engineering Computer Science and	Saptarshi Sarkar	М	8.72
239	19CS8049	19U10145	Bachelor of Technology in	Engineering Computer Science and	Satyam Yadav	М	7.97
240	19CS8050	19U10147	Bachelor of Technology in	Engineering Computer Science and	Rupam Das	М	7.70
241		19U10151	Bachelor of Technology in	Engineering Computer Science and	Barnali Ghosh	F	9.24
242		19U10154	Bachelor of Technology in	Engineering Computer Science and	Souparno Paul	M	9.06
243		19U10157	Bachelor of Technology in	Engineering Computer Science and	Subhash Kumar Mallela Venkata Subrahmanyaviswa	M	7.85
244		19U10159	Bachelor of Technology in	Engineering Computer Science and	Chaitanya	M	8.79
245		19U10162	Bachelor of Technology in	Engineering Computer Science and	Sanipalli Renuka	F	9.33
246		19U10166	Bachelor of Technology in	Engineering Computer Science and	Jyoti Yadav	F	8.89
247		19U10170	Bachelor of Technology in	Engineering Computer Science and	Arunava Saha	M	8.83
248		19U10171	Bachelor of Technology in	Engineering Computer Science and	Borra Daivaleela	F	7.88
249		19U10172	Bachelor of Technology in	Engineering Computer Science and	Deepto Ghanti	M	8.55
250		19U10173	Bachelor of Technology in	Engineering Computer Science and	Sudipan Datta	M	7.67
251		19U10175	Bachelor of Technology in	Engineering Computer Science and	Anwer Sayeed	M	8.49 7.88
252		19U10182	Bachelor of Technology in	Engineering Computer Science and	Sougata Majumder	М 	
253 254		19U10193 19U10195	Bachelor of Technology in  Bachelor of Technology in	Engineering Computer Science and	Priety Das  Chidurala Hari Charan	 М	8.31 8.08
			Bachelor of Technology in	Engineering Computer Science and			
255	19CS8067	19U10199	Bachelor of Technology in	Engineering	Kshitij Shrivastava	М	8.93

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl No	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL CGPA
256	19CS8068	19U10205	Bachelor of Technology in	Computer Science and Engineering	Uddagiri Sai Venkat	М	8.54
257	19CS8069	19U10212	Bachelor of Technology in	Computer Science and Engineering	Sagar Agarwal	М	9.18
258	19CS8070	19U10213	Bachelor of Technology in	Computer Science and Engineering	Sohit Kumar Singh	М	8.79
259	19CS8071	19U10217	Bachelor of Technology in	Computer Science and Engineering	Uzzal Saha	М	7.92
260	19CS8072	19U10221	Bachelor of Technology in	Computer Science and Engineering	Shashwati Chakraborty Shyama	F	7.34
261	19CS8073	19U10226	Bachelor of Technology in	Computer Science and Engineering	Arvind Sahu	М	7.61
262	19CS8074	19U10228	Bachelor of Technology in	Computer Science and Engineering	Murtaza Mustafa Khumusi	М	9.16
263	19CS8075	19U10231	Bachelor of Technology in	Computer Science and Engineering	Ankit Maskara	М	8.73
264	19CS8077	19U10233	Bachelor of Technology in	Computer Science and Engineering	Vedang Pancholi	М	9.07
265	19CS8078	19U10234	Bachelor of Technology in	Computer Science and Engineering	Arnab Mukherjee	М	8.49
266	19CS8079	19U10235	Bachelor of Technology in	Computer Science and Engineering	Domavarapu Rahul	М	7.21
267	19CS8080	19U10242	Bachelor of Technology in	Computer Science and Engineering	Anurag Mondal	М	8.89
268	19CS8081	19U10251	Bachelor of Technology in	Computer Science and Engineering	Debanjan Banerjee	М	8.36
269	19CS8082	19U10261	Bachelor of Technology in	Computer Science and Engineering	Aman Kumar	М	8.33
270	19CS8083	19U10264	Bachelor of Technology in	Computer Science and Engineering	Subhadip Rudra	М	8.41
271	19CS8085	19U10273	Bachelor of Technology in	Computer Science and Engineering	Aditya Gupta	М	8.66
272	19CS8086	19U10275	Bachelor of Technology in	Computer Science and Engineering	Parth Vyas	М	8.78
273	19CS8087	19U10276	Bachelor of Technology in	Computer Science and Engineering	V Rohan Rao	М	8.99
274	19CS8088	19U10278	Bachelor of Technology in	Computer Science and Engineering	Athawale Gaurav Mahendra	М	8.33
275	19CS8089	19U10293	Bachelor of Technology in	Computer Science and Engineering	Ishan Dutta	М	8.29
276	19CS8090	19U10294	Bachelor of Technology in	Computer Science and Engineering	Gulla Pramila Ratna Kumari	F	7.91
277	19CS8091	19U10301	Bachelor of Technology in	Computer Science and Engineering	Vishal Virupan Mangade	М	8.28
278	19CS8092	19U10302	Bachelor of Technology in	Computer Science and Engineering	Awanish Kumar	М	7.91
279	19CS8093	19U10308	Bachelor of Technology in	Computer Science and Engineering	Malla Sai Charan	М	8.08
280	19CS8094	19U10320	Bachelor of Technology in	Computer Science and Engineering	Aquib Zaman	М	9.26
281	19CS8095	19U10321	Bachelor of Technology in	Computer Science and Engineering	Voruganti Gayatri Deepshikha	F	9.34
282	19CS8096	19U10325	Bachelor of Technology in	Computer Science and Engineering	Madhul Raj	М	8.30
283	19CS8097	19U10332	Bachelor of Technology in	Computer Science and Engineering	Mahankali Bhargavi	F	8.60
284	19CS8098	19U10341	Bachelor of Technology in	Computer Science and Engineering	Harsh Sodhani	М	8.87
285	19CS8100	19U10348	Bachelor of Technology in	Computer Science and Engineering	Vipin Bohra	М	9.00
286	19CS8101	19U10351	Bachelor of Technology in	Computer Science and Engineering	Abdul Alim	М	8.35
287	19CS8102	19U10363	Bachelor of Technology in	Computer Science and Engineering	Birlangi Tarun Kumar	М	8.36

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

	191H CONVOCATION									
Sl No	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL CGPA			
288	19CS8103	19U10364	Bachelor of Technology in	Computer Science and Engineering	Yogesh Kumar Jha	М	8.40			
289	19CS8104	19U10365	Bachelor of Technology in	Computer Science and Engineering	Mohammad Vasi	М	8.98			
290	19CS8105	19U10366	Bachelor of Technology in	Computer Science and Engineering	Malleswarapu Chandra Sekhar	М	7.56			
291	19CS8106	19U10369	Bachelor of Technology in	Computer Science and Engineering	Ankita Mandal	F	7.95			
292	19CS8107	19U10372	Bachelor of Technology in	Computer Science and Engineering	Sankhadeep Ghosh	М	8.52			
293	19CS8108	19U10376	Bachelor of Technology in	Computer Science and Engineering	Tanu Priya	F	8.74			
294	19CS8109	19U10378	Bachelor of Technology in	Computer Science and Engineering	Nirvik Agarwal	М	9.44			
295	19CS8110	19U10382	Bachelor of Technology in	Computer Science and Engineering	Arindam Paria	М	7.61			
296	19CS8111	19U10383	Bachelor of Technology in	Computer Science and Engineering	Maddu Amar Sri Lakshmi Prasanna Trinath	М	8.86			
297	19CS8112	19U10384	Bachelor of Technology in	Computer Science and Engineering	Sapparapu Bala Gangadhar	М	8.09			
298	19CS8113	19U10386	Bachelor of Technology in	Computer Science and Engineering	Vikas Kumar	М	7.44			
299	19CS8114	19U10391	Bachelor of Technology in	Computer Science and Engineering	Syed Mubashir Iftekhar	М	8.35			
300	19CS8115	19U10392	Bachelor of Technology in	Computer Science and Engineering	Harsh Bhushan Gupta	М	8.33			
301	19CS8116	19U10393	Bachelor of Technology in	Computer Science and Engineering	Rishu Ranjan Singh	М	8.83			
302	19CS8117	19U10399	Bachelor of Technology in	Computer Science and Engineering	Koppineedi Dileep Sanjeev	М	7.08			
303	19CS8118	19U10403	Bachelor of Technology in	Computer Science and Engineering	Saurav Kumar Roy	М	8.46			
304	19CS8119	19U10407	Bachelor of Technology in	Computer Science and Engineering	Ratnaparkhi Onkar Laxmikant	М	8.75			
305	19CS8120	19U10408	Bachelor of Technology in	Computer Science and Engineering	Deepak Kumar	М	8.57			
306	19CS8121	19U10410	Bachelor of Technology in	Computer Science and Engineering	Arnab Bhakta	М	8.50			
307	19CS8122	19U10418	Bachelor of Technology in	Computer Science and Engineering	Swarnabh Paul	М	9.32			
308	19CS8123	19U10419	Bachelor of Technology in	Computer Science and Engineering	Neelapu Asha Rishitha	F	9.04			
309	19CS8124	19U10421	Bachelor of Technology in	Computer Science and Engineering	Kancharla Sashidhar Chowdary	М	8.87			
310	19CS8125	19U10424	Bachelor of Technology in	Computer Science and Engineering	Asif Hassan	М	8.71			
311	19CS8126	19U10434	Bachelor of Technology in	Computer Science and Engineering	Ram Sharma	М	8.41			
312	19CS8127	19U10441	Bachelor of Technology in	Computer Science and Engineering	Bhukya Rahul Naik	М	7.82			
313	19CS8128	19U10442	Bachelor of Technology in	Computer Science and Engineering	Sabavath Dinesh	М	7.66			
314	19CS8129	19U10443	Bachelor of Technology in	Computer Science and Engineering	Mandapati Amoolya	F	8.57			
315	19CS8130	19U10444	Bachelor of Technology in	Computer Science and Engineering	Mohammed Ubaid Khan	М	8.70			
316	19CS8131	19U10446	Bachelor of Technology in	Computer Science and Engineering	Praveen Kumar Ravindran Sibanirani	М	8.20			
317	19CS8132	19U10448	Bachelor of Technology in	Computer Science and Engineering	Abhishek Basu	М	8.46			
318	19CS8133	19U10449	Bachelor of Technology in	Computer Science and Engineering	Sarthak Joshi	М	7.95			
319	19CS8134	19U10450	Bachelor of Technology in	Computer Science and Engineering	Prakhar Srivastava	М	7.94			

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL
No		_	Programme	Computer Science and	Name	Gender	CGPA
320	19CS8135	19U10451	Bachelor of Technology in	Engineering Computer Science and	Sinjan Chakrabarty	M	7.92
321	19CS8136	19U10452	Bachelor of Technology in	Engineering	Deva Venkata Sai Rithish Punna	М	8.19
322	19CS8137	19U10465	Bachelor of Technology in	Computer Science and Engineering	Isha Agarwal	F	8.86
323	19CS8138	19U10466	Bachelor of Technology in	Computer Science and Engineering	Bishwajit Ghosh	М	8.67
324	19CS8139	19U10467	Bachelor of Technology in	Computer Science and Engineering	Sangam Kumar	М	9.06
325	19CS8140	19U10468	Bachelor of Technology in	Computer Science and Engineering	Allu Kumara Sai Subrahmanyam	М	8.16
326	19CS8141	19U10481	Bachelor of Technology in	Computer Science and Engineering	Kuldeep Gautam	М	7.64
327	19CS8142	19U10482	Bachelor of Technology in	Computer Science and Engineering	Ananya Biswas	F	7.60
328	19CS8143	19U10485	Bachelor of Technology in	Computer Science and Engineering	Anwesha Dan	F	9.15
329	19CS8144	19U10489	Bachelor of Technology in	Computer Science and Engineering	Suman Kumar Sahu	М	8.28
330	19CS8145	19U10495	Bachelor of Technology in	Computer Science and Engineering	Aditi Gedam	F	7.75
331	19CS8146	19U10496	Bachelor of Technology in	Computer Science and Engineering	Ravi Kumar Gupta	М	8.50
332	19CS8147	19U10503	Bachelor of Technology in	Computer Science and Engineering	Shaik Rahen	М	7.72
333	19CS8148	19U10508	Bachelor of Technology in	Computer Science and Engineering	Kankan Paramanik	М	8.69
334	19CS8149	19U10513	Bachelor of Technology in	Computer Science and Engineering	Tilakraj Jayaprakash Narayanan	М	7.79
335	19CS8151	19U10529	Bachelor of Technology in	Computer Science and Engineering	Sakshi	F	7.65
336	19CS8152	19U10533	Bachelor of Technology in	Computer Science and Engineering	Pranit Pandey	М	8.52
337	19CS8153	19U10562	Bachelor of Technology in	Computer Science and Engineering	Shaik Nannu Abdul Hafiz	М	7.51
338	19CS8154	19U10568	Bachelor of Technology in	Computer Science and Engineering	Shashwat Gupta	М	8.56
339	19CS8155	19U10574	Bachelor of Technology in	Computer Science and Engineering	Bonala Sai Varshith Reddy	M	8.20
340	19CS8156	19U10576	Bachelor of Technology in	Computer Science and Engineering	Sudev Dhali	М	7.88
341	19CS8157	19U10606	Bachelor of Technology in	Computer Science and Engineering	Pranay Gupta	М	8.44
342	19CS8158	19U10617	Bachelor of Technology in	Computer Science and Engineering	Tangella Ajay Siva Sai	М	8.65
343	19CS8159	19U10622	Bachelor of Technology in	Computer Science and Engineering	Anshika Chaudhary	F	8.72
344	19CS8160	19U10631	Bachelor of Technology in	Computer Science and Engineering	Debolina Chowdhury	F	8.40
345	19CS8161	19U10633	Bachelor of Technology in	Computer Science and Engineering	Riddhadipta Nath	М	8.83
346	19CS8162	19U10637	Bachelor of Technology in	Computer Science and Engineering	Aishika Midder	F	8.04
347	19CS8163	19U10649	Bachelor of Technology in	Computer Science and Engineering	Atul Kumar	М	8.27
348	19CS8164	19U10651	Bachelor of Technology in	Computer Science and Engineering	Menish Kumar Chandra	М	8.61
349	19CS8165	19U10653	Bachelor of Technology in	Computer Science and Engineering	Abhinav Aarya	М	8.67
350	19CS8166	19U10661	Bachelor of Technology in	Computer Science and Engineering	Putha Sri Nandan Reddy	М	9.20
351	19CS8167	19U10671	Bachelor of Technology in	Computer Science and Engineering	Rohith Chekuri	М	7.98

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# LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL
<b>No</b> 352	19CS8168	19U10678	Bachelor of Technology in	Computer Science and	Nilay Roy	M	7.62
353	19CS8169	19U10690	Bachelor of Technology in	Engineering Computer Science and	Ganduri Sreeshanth	M	8.91
354		19U10732	Bachelor of Technology in	Engineering Computer Science and	Vishal Mahavar	M	8.98
355	19CS8171	19U10737	Bachelor of Technology in	Engineering Computer Science and	Prasann Kumar Gupta	M	9.21
				Engineering Computer Science and	+		
356		19U10738	Bachelor of Technology in	Engineering Computer Science and	Popuri Sree Rama Charan	М	9.23
357	19CS8173	19U10748	Bachelor of Technology in	Engineering	Ranga Saketh	M	8.63
358	19CS8174	19U10753	Bachelor of Technology in	Computer Science and Engineering	Dodda Chandu	М	8.14
359	19CS8175	19U10759	Bachelor of Technology in	Computer Science and Engineering	Jampala Venkata Harika	F	8.57
360	19CS8176	19U10772	Bachelor of Technology in	Computer Science and Engineering	Bokka Loukya Sree	F	7.48
361	19CS8177	19U10778	Bachelor of Technology in	Computer Science and Engineering	Kavisetti Jagadish	М	8.35
362	19CS8178	19U10780	Bachelor of Technology in	Computer Science and Engineering	Vikas Kumar	М	7.13
363	19CS8179	19U10788	Bachelor of Technology in	Computer Science and Engineering	Harshit Surana	М	9.64
364	19CS8180	19U10792	Bachelor of Technology in	Computer Science and	Nuteti Ushodaya	F	8.92
365	19CS8181	19U10798	Bachelor of Technology in	Engineering Computer Science and	Gudey Sonali	F	7.85
366		19U10804	Bachelor of Technology in	Engineering Computer Science and	Partho Bhowmick	M	7.17
367		19U10806	Bachelor of Technology in	Engineering Computer Science and	Omkar Mohanty	M	8.49
				Engineering Computer Science and	-		
368	19CS8184	19U10807	Bachelor of Technology in	Engineering Computer Science and	Arnav Kumar Banerjee	M	8.38
369		19U10811	Bachelor of Technology in	Engineering Computer Science and	Rohan Kumar Gupta	М	9.24
370	19CS8186	19U10813	Bachelor of Technology in	Engineering	Aman Kumar	M	8.49
371	19CS8187	19U10816	Bachelor of Technology in	Computer Science and Engineering	Abdul Rashif	М	7.74
372	19CS8188	19U10820	Bachelor of Technology in	Computer Science and Engineering	Aaditya Pratap Singh	M	7.48
373	19EC8001	19U10001	Bachelor of Technology in	Electronics and Communication	Sukanya Dutta	F	7.83
374	19EC8002	19U10002	Bachelor of Technology in	Electronics and Communication	Aditi Dhibar	F	8.51
375	19EC8003	19U10014	Bachelor of Technology in	Electronics and Communication	Soumadeep Das	М	7.84
376	19EC8004	19U10018	Bachelor of Technology in	Electronics and	Avik Ghatak	М	8.78
377	19EC8005	19U10031	Bachelor of Technology in	Communication Electronics and	Avishek Shaw	М	8.13
378	19EC8006	19U10036	Bachelor of Technology in	Communication Electronics and	Shouvik Paul	M	8.20
379		19U10059	Bachelor of Technology in	Communication Electronics and	Sayandip Acharjee	M	8.09
380		19U10060	Bachelor of Technology in	Communication Electronics and	Chandrima Roy Chowdhury	F	8.17
				Communication Electronics and			
381		19U10063	Bachelor of Technology in	Communication Electronics and	Ankita Shaw	F	8.83
382	19EC8010	19U10086	Bachelor of Technology in	Communication	Saikat Das	М	7.73
383	19EC8011	19U10106	Bachelor of Technology in	Electronics and Communication	Deepak Kirtania	М	8.22

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl No	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL CGPA
384	19EC8012	19U10107	Bachelor of Technology in	Electronics and Communication	Rohit Kumar Sadhukhan	М	8.93
385	19EC8013	19U10110	Bachelor of Technology in	Electronics and Communication	Arpan Das	М	8.50
386	19EC8014	19U10123	Bachelor of Technology in	Electronics and Communication	Pushpanjali Bharti	F	8.01
387	19EC8015	19U10127	Bachelor of Technology in	Electronics and Communication	Abhishek Paul	М	9.06
388	19EC8016	19U10129	Bachelor of Technology in	Electronics and Communication	Diganta Ray Mandal	М	8.31
389	19EC8017	19U10153	Bachelor of Technology in	Electronics and Communication	Sayak Das	M	9.03
390	19EC8018	19U10165	Bachelor of Technology in	Electronics and Communication	Vaishali Barua	F	8.26
391	19EC8019	19U10168	Bachelor of Technology in	Electronics and	Anshuman Singh	M	8.68
392	19EC8020	19U10174	Bachelor of Technology in	Communication Electronics and Communication	Damireddy Sai Preetham	M	8.82
393	19EC8021	19U10186	Bachelor of Technology in	Electronics and Communication	Tanujit Ghosh	M	8.71
394	19EC8022	19U10187	Bachelor of Technology in	Electronics and Communication	Pemmanaboina Akhileswari	F	8.20
395	19EC8023	19U10188	Bachelor of Technology in	Electronics and Communication	Anjali Kumari	F	9.13
396	19EC8024	19U10200	Bachelor of Technology in	Electronics and Communication	Rajdeep Singh	M	7.99
397	19EC8025	19U10204	Bachelor of Technology in	Electronics and Communication	Hemal Murmu	M	7.61
398	19EC8027	19U10215	Bachelor of Technology in	Electronics and Communication	Shreya Rai	F	8.42
399	19EC8028	19U10220	Bachelor of Technology in	Electronics and Communication	Aranya Hazra	F	7.80
400	19EC8029	19U10222	Bachelor of Technology in	Electronics and Communication	Kandyana Dharani	F	8.44
401	19EC8030	19U10238	Bachelor of Technology in	Electronics and Communication	Tejaswani Agrawal	F	8.97
402	19EC8031	19U10243	Bachelor of Technology in	Electronics and Communication	Gurram Akanksha	F	8.19
403	19EC8032	19U10246	Bachelor of Technology in	Electronics and Communication	Nazeer Shaik	М	8.03
404	19EC8033	19U10260	Bachelor of Technology in	Electronics and Communication	Avishek Kumar Mahato	М	7.64
405	19EC8034	19U10272	Bachelor of Technology in	Electronics and Communication	Ankush Mondal	М	8.18
406	19EC8035	19U10284	Bachelor of Technology in	Electronics and Communication	Joydeep Das	М	8.28
407	19EC8036	19U10306	Bachelor of Technology in	Electronics and Communication	Tanushree Bhattacharya	F	8.51
408	19EC8037	19U10317	Bachelor of Technology in	Electronics and Communication	Ayush Sharma	М	8.30
409	19EC8038	19U10329	Bachelor of Technology in	Electronics and Communication	Banoth Prabhat Rathod	М	8.09
410	19EC8039	19U10330	Bachelor of Technology in	Electronics and Communication	Mukesh Barnwal	М	9.26
411	19EC8040	19U10335	Bachelor of Technology in	Electronics and Communication	Pasupuleti Harshitha	F	9.10
412	19EC8041	19U10342	Bachelor of Technology in	Electronics and Communication	Ganivada Sumanth	М	7.81
413	19EC8042	19U10346	Bachelor of Technology in	Electronics and Communication	Donthula Sai Teja	М	8.93
414	19EC8043	19U10350	Bachelor of Technology in	Electronics and Communication	Voleti Naga Venkata Sri Satya Sai Arun	М	9.13
415	19EC8044	19U10352	Bachelor of Technology in	Electronics and Communication	Yeluri Surya Chaitanya	М	8.26

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl	Doll No.	Dog No	Риодиатта	Pronch		Condon	FINAL
No	Roll No	Reg. No.	Programme	Branch	Name	Gender	CGPA
416	19EC8045	19U10360	Bachelor of Technology in	Electronics and Communication	Gontla Venkata Sai Krishna Snehith	М	8.57
417	19EC8046	19U10367	Bachelor of Technology in	Electronics and Communication	Pramita Das	F	9.14
418	19EC8047	19U10370	Bachelor of Technology in	Electronics and Communication	Alluri Gowtham	М	8.67
419	19EC8048	19U10375	Bachelor of Technology in	Electronics and Communication	Yash Shah	М	7.89
420	19EC8049	19U10388	Bachelor of Technology in	Electronics and Communication	Leela Prasad Dammalapati	М	8.24
421	19EC8050	19U10389	Bachelor of Technology in	Electronics and Communication	Hemant Jain	М	8.53
422	19EC8051	19U10406	Bachelor of Technology in	Electronics and Communication	Amar Kumar	М	8.58
423	19EC8052	19U10422	Bachelor of Technology in	Electronics and Communication	Manjeet Kumar	М	8.25
424	19EC8053	19U10445	Bachelor of Technology in	Electronics and Communication	Ganneni Dundi Manikanta	М	8.66
425	19EC8054	19U10457	Bachelor of Technology in	Electronics and Communication	Aashish Illa	М	8.37
426	19EC8055	19U10460	Bachelor of Technology in	Electronics and Communication	Kandru Purnasarath	М	8.57
427	19EC8056	19U10462	Bachelor of Technology in	Electronics and Communication	Yogesh Raj	М	8.72
428	19EC8057	19U10463	Bachelor of Technology in	Electronics and Communication	Boodireddy Rohith	М	8.39
429	19EC8058	19U10469	Bachelor of Technology in	Electronics and Communication	Jallipalli Sai Hruthik	М	8.17
430	19EC8059	19U10474	Bachelor of Technology in	Electronics and Communication	Bypureddy Veera Venkata Satyanarayana	М	7.91
431	19EC8060	19U10480	Bachelor of Technology in	Electronics and Communication	Koram Kodanda Pavan Kumar	М	7.66
432	19EC8061	19U10492	Bachelor of Technology in	Electronics and Communication	Kaya Mahima	F	8.94
433	19EC8062	19U10499	Bachelor of Technology in	Electronics and Communication	Tayade Vaibhav Kailas	М	7.47
434	19EC8063	19U10502	Bachelor of Technology in	Electronics and Communication	Gundluri Mohan	М	8.42
435	19EC8064	19U10505	Bachelor of Technology in	Electronics and Communication	Nunavath Kiran Kumar	М	7.60
436	19EC8065	19U10531	Bachelor of Technology in	Electronics and Communication	Rajdeep Mondal	М	8.85
437	19EC8066	19U10580	Bachelor of Technology in	Electronics and Communication	Kshounish Chakraborty	М	8.69
438	19EC8067	19U10583	Bachelor of Technology in	Electronics and Communication	Soumyadeep Das	М	8.07
439	19EC8068	19U10587	Bachelor of Technology in	Electronics and Communication	Srinivas Mithra Kanchumarthi	М	8.30
440	19EC8070	19U10603	Bachelor of Technology in	Electronics and Communication	Yash Maroo	М	8.81
441	19EC8071	19U10609	Bachelor of Technology in	Electronics and Communication	Ayush Tiwari	М	8.72
442	19EC8072	19U10644	Bachelor of Technology in	Electronics and Communication	Kadamanchi Mahesh	M	7.91
443	19EC8073	19U10652	Bachelor of Technology in	Electronics and Communication	Ayush Maurya	M	8.30
444	19EC8074	19U10658	Bachelor of Technology in	Electronics and Communication	Aman Pandey	M	8.44
445	19EC8075	19U10659	Bachelor of Technology in	Electronics and Communication	Anik Kumar Mondal	M	8.66
446	19EC8076	19U10668	Bachelor of Technology in	Electronics and Communication	Kombathula Vinay Kumar	M	7.77
447	19EC8077	19U10673	Bachelor of Technology in	Electronics and Communication	Penumala Rahul	М	7.68

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL
<b>No</b> 448	19EC8078	19U10675	Bachelor of Technology in	Electronics and	Porendla Pavan	M	<b>CGPA</b> 8.95
449		19U10691	Bachelor of Technology in	Communication Electronics and	Shobhit Pandey	M	9.17
				Communication Electronics and	-		
450		19U10699	Bachelor of Technology in	Communication Electronics and	Aditi Jha	F	8.41
451	19EC8081	19U10704	Bachelor of Technology in	Communication Electronics and	Akshat Bhatnagar	M	9.11
452	19EC8082	19U10709	Bachelor of Technology in	Communication	Dawa Dhendup Lama	M	7.49
453	19EC8083	19U10712	Bachelor of Technology in	Electronics and Communication	Gandla Sriman Chakri	M	9.18
454	19EC8084	19U10770	Bachelor of Technology in	Electronics and Communication	Devansh Goyal	М	8.67
455	19EC8085	19U10775	Bachelor of Technology in	Electronics and Communication	Siddharth Tripathi	М	8.43
456	19EC8086	19U10790	Bachelor of Technology in	Electronics and Communication	Polimera Pavan Sai Reddy	М	7.96
457	19EC8087	19U10791	Bachelor of Technology in	Electronics and	Prakhar Kumar	M	8.32
458	19EC8088	19U10796	Bachelor of Technology in	Communication Electronics and	Padala Jayaram	M	8.53
459		19U10801	Bachelor of Technology in	Communication Electronics and	Kotha Saiteja	M	7.86
460		19U10004	Bachelor of Technology in	Communication Electrical Engineering	Chitrita Roy		7.61
					-		
461		19U10007	Bachelor of Technology in	Electrical Engineering	Saishree Mahakud	F	8.04
462	19EE8003	19U10019	Bachelor of Technology in	Electrical Engineering	Deepayan Pal	M	8.90
463	19EE8004	19U10023	Bachelor of Technology in	Electrical Engineering	Anurag Kumar	M	7.85
464	19EE8005	19U10033	Bachelor of Technology in	Electrical Engineering	Gaurav Kumar Yadav	M	8.45
465	19EE8006	19U10035	Bachelor of Technology in	Electrical Engineering	Amitav Bhaskar Saha	M	8.97
466	19EE8007	19U10039	Bachelor of Technology in	Electrical Engineering	Subham Ghosal	М	8.01
467	19EE8008	19U10047	Bachelor of Technology in	Electrical Engineering	Shubhojit Chattopadhyay	М	8.37
468	19EE8009	19U10050	Bachelor of Technology in	Electrical Engineering	Pragya Kumari	F	7.17
469	19EE8010	19U10056	Bachelor of Technology in	Electrical Engineering	Pratik Bhudari	М	8.70
470	19EE8011	19U10096	Bachelor of Technology in	Electrical Engineering	Rahul Kumar	M	9.31
471	19EE8012	19U10097	Bachelor of Technology in	Electrical Engineering	Sadiya Sadaf	F	8.71
472	19EE8013	19U10109	Bachelor of Technology in	Electrical Engineering	Ayush Pratap Singh	M	9.12
473		19U10113	Bachelor of Technology in	Electrical Engineering	Pratyush Ghosh	M	8.20
474		19U10118	Bachelor of Technology in	Electrical Engineering	Lambodhar Tudu	M	8.09
			**				
475	19EE8016	19U10133	Bachelor of Technology in	Electrical Engineering	Rishab Dugar	M	8.72
476		19U10137	Bachelor of Technology in	Electrical Engineering	Dip Narayan Saha	M	8.05
477	19EE8018	19U10144	Bachelor of Technology in	Electrical Engineering	Umesh Chandra Das	M	7.49
478	19EE8019	19U10150	Bachelor of Technology in	Electrical Engineering	Jyotishman Chakraborty	M	7.74
479	19EE8020	19U10152	Bachelor of Technology in	Electrical Engineering	Madaka Purna Sai Prasanth	М	9.27

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl	Doll No	Dog No	Duognamma	191H CONVOCATION	Nama	Condon	FINAL
No	Roll No	Reg. No.	Programme	Branch	Name	Gender	CGPA
480	19EE8021	19U10156	Bachelor of Technology in	Electrical Engineering	Rahul Kumar	М	8.44
481	19EE8022	19U10158	Bachelor of Technology in	Electrical Engineering	Simhadri Sujana	F	8.38
482	19EE8023	19U10160	Bachelor of Technology in	Electrical Engineering	Aryan Kanoujia	М	8.20
483	19EE8024	19U10176	Bachelor of Technology in	Electrical Engineering	Arkopravo Das	М	9.07
484	19EE8025	19U10181	Bachelor of Technology in	Electrical Engineering	Siddharth Rajak	М	8.52
485	19EE8026	19U10183	Bachelor of Technology in	Electrical Engineering	Koppera Nithish Kumar	М	8.43
486	19EE8027	19U10191	Bachelor of Technology in	Electrical Engineering	Ayush Raj	М	7.96
487	19EE8028	19U10194	Bachelor of Technology in	Electrical Engineering	Vikash Kumar	М	7.42
488	19EE8029	19U10202	Bachelor of Technology in	Electrical Engineering	Ankit Kumar Singh	М	8.50
489	19EE8030	19U10207	Bachelor of Technology in	Electrical Engineering	Banothu Sagar	М	7.49
490	19EE8031	19U10211	Bachelor of Technology in	Electrical Engineering	Sophia Minz	F	7.79
491	19EE8032	19U10216	Bachelor of Technology in	Electrical Engineering	Pranto Chatterjee	М	7.11
492	19EE8033	19U10229	Bachelor of Technology in	Electrical Engineering	Allu Sai Charan	М	7.96
493	19EE8034	19U10237	Bachelor of Technology in	Electrical Engineering	Ramesh Singh Sardar	М	6.91
494	19EE8035	19U10240	Bachelor of Technology in	Electrical Engineering	Saikat Mal	М	7.62
495	19EE8038	19U10281	Bachelor of Technology in	Electrical Engineering	Prabhat Kumar Tanti	М	8.32
496	19EE8039	19U10290	Bachelor of Technology in	Electrical Engineering	Kotla Nishkala Reddy	F	8.72
497	19EE8040	19U10296	Bachelor of Technology in	Electrical Engineering	Payel Bose	F	8.73
498	19EE8041	19U10307	Bachelor of Technology in	Electrical Engineering	Vishnu Gupta	М	7.43
499	19EE8042	19U10311	Bachelor of Technology in	Electrical Engineering	Karande Bhojanna	М	7.92
500	19EE8043	19U10327	Bachelor of Technology in	Electrical Engineering	Dainampelly Ruthvik	М	7.85
501	19EE8044	19U10340	Bachelor of Technology in	Electrical Engineering	Gautam Kumar	М	8.96
502	19EE8045	19U10344	Bachelor of Technology in	Electrical Engineering	Akash Debnath	М	8.79
503	19EE8046	19U10357	Bachelor of Technology in	Electrical Engineering	Dharavath Tejaswi	F	7.47
504	19EE8047	19U10358	Bachelor of Technology in	Electrical Engineering	Lohit Agarwalla	М	8.04
505	19EE8048	19U10359	Bachelor of Technology in	Electrical Engineering	Appasani Prem Sai	М	8.20
506	19EE8049	19U10377	Bachelor of Technology in	Electrical Engineering	Subhadip Mandal	М	9.10
507	19EE8050	19U10387	Bachelor of Technology in	Electrical Engineering	Chitrapu Leesa Praisy	F	7.91
508	19EE8052	19U10398	Bachelor of Technology in	Electrical Engineering	Prathamesh Sushil Wankhede	М	8.02
509	19EE8053	19U10414	Bachelor of Technology in	Electrical Engineering	Deboleena Das	F	8.63
510	19EE8054	19U10431	Bachelor of Technology in	Electrical Engineering	Sneha Kumari	F	8.10
511	19EE8055	19U10461	Bachelor of Technology in	Electrical Engineering	Veebhuti Jyotshna	F	7.65
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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl				191H CONVOCATION			FINAL
No	Roll No	Reg. No.	Programme	Branch	Name	Gender	CGPA
512	19EE8056	19U10471	Bachelor of Technology in	Electrical Engineering	Kowluri Sri Sahithi	F	8.96
513	19EE8057	19U10487	Bachelor of Technology in	Electrical Engineering	Potturu Goutham	М	8.22
514	19EE8058	19U10498	Bachelor of Technology in	Electrical Engineering	Tarun Sharma	М	8.22
515	19EE8059	19U10500	Bachelor of Technology in	Electrical Engineering	Kaustuv Kanchan Chattopadhyay	М	8.31
516	19EE8060	19U10522	Bachelor of Technology in	Electrical Engineering	Sachin Sharma	М	8.32
517	19EE8061	19U10523	Bachelor of Technology in	Electrical Engineering	Divyanshu Gupta	М	9.14
518	19EE8062	19U10524	Bachelor of Technology in	Electrical Engineering	Aditya Mitra	М	8.77
519	19EE8063	19U10526	Bachelor of Technology in	Electrical Engineering	Sayan Mondal	М	9.01
520	19EE8064	19U10528	Bachelor of Technology in	Electrical Engineering	Abantika Saha	F	9.00
521	19EE8065	19U10541	Bachelor of Technology in	Electrical Engineering	Sayan Das	М	8.37
522	19EE8066	19U10555	Bachelor of Technology in	Electrical Engineering	Raj Suyash Ranjan	М	8.37
523	19EE8067	19U10558	Bachelor of Technology in	Electrical Engineering	Vemula Rahul	М	8.05
524	19EE8068	19U10566	Bachelor of Technology in	Electrical Engineering	Sohini Bhattacharya	F	9.58
525	19EE8069	19U10573	Bachelor of Technology in	Electrical Engineering	Anirban Moi	М	7.57
526	19EE8070	19U10590	Bachelor of Technology in	Electrical Engineering	Kalakonda Dheeraj Reddy	М	7.65
527	19EE8071	19U10594	Bachelor of Technology in	Electrical Engineering	Subham Gupta	М	8.65
528	19EE8072	19U10607	Bachelor of Technology in	Electrical Engineering	Tuhin Karak	М	8.61
529	19EE8073	19U10612	Bachelor of Technology in	Electrical Engineering	Souradeepta Pal	М	9.28
530	19EE8074	19U10615	Bachelor of Technology in	Electrical Engineering	Koustav Sanyal	М	9.06
531	19EE8075	19U10621	Bachelor of Technology in	Electrical Engineering	Diksha Senapati	F	7.84
532	19EE8076	19U10627	Bachelor of Technology in	Electrical Engineering	Aman Kumar	М	8.31
533	19EE8077	19U10650	Bachelor of Technology in	Electrical Engineering	Yogeswar Sarnakar	М	6.82
534	19EE8078	19U10672	Bachelor of Technology in	Electrical Engineering	Yamanni Shalem	М	7.58
535	19EE8079	19U10689	Bachelor of Technology in	Electrical Engineering	Gulfam Raza	М	7.92
536	19EE8080	19U10694	Bachelor of Technology in	Electrical Engineering	Vishwajeet Singh	М	8.61
537	19EE8081	19U10698	Bachelor of Technology in	Electrical Engineering	Anurag Singh	М	8.10
538	19EE8082	19U10705	Bachelor of Technology in	Electrical Engineering	Srishtik Dutta	М	9.21
539	19EE8083	19U10710	Bachelor of Technology in	Electrical Engineering	Rishabh Chauhan	М	7.70
540	19EE8084	19U10719	Bachelor of Technology in	Electrical Engineering	Prashant Mishra	М	7.97
541	19EE8085	19U10740	Bachelor of Technology in	Electrical Engineering	Pratyay De	М	9.35
542	19EE8086	19U10751	Bachelor of Technology in	Electrical Engineering	Vemulapalli Sivaji Ganesh Naidu	М	8.03
543	19EE8087	19U10769	Bachelor of Technology in	Electrical Engineering	Aman Raj	М	8.64

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl No	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL CGPA
544	19EE8088	19U10773	Bachelor of Technology in	Electrical Engineering	Meesala Akhil Sai	М	7.96
545	19EE8090	19U10794	Bachelor of Technology in	Electrical Engineering	Aayush Kumar	М	8.09
546	19EE8091	19U10797	Bachelor of Technology in	Electrical Engineering	Gaikamble Sumedh Anil Rao	М	7.74
547	19EE8092	19U10810	Bachelor of Technology in	Electrical Engineering	Aishwarya Prakash	F	7.55
548	19EE8093	19U10817	Bachelor of Technology in	Electrical Engineering	Jena Shree Chaitanya	М	7.35
549	18ME8151	18U10731	Bachelor of Technology in	Mechanical Engineering	Banoth Rohith Kasna Naik	М	6.91
550	18ME8155	18U10754	Bachelor of Technology in	Mechanical Engineering	Shubham Kumar	М	7.33
551	19ME8001	19U10010	Bachelor of Technology in	Mechanical Engineering	Prasenjit Mandi	М	7.13
552	19ME8002	19U10011	Bachelor of Technology in	Mechanical Engineering	Piyush Kumar	М	8.86
553	19ME8003	19U10013	Bachelor of Technology in	Mechanical Engineering	Ankan Pramanik	М	8.59
554	19ME8004	19U10015	Bachelor of Technology in	Mechanical Engineering	Ashish Saha	М	8.23
555	19ME8005	19U10026	Bachelor of Technology in	Mechanical Engineering	Arkanil Bakly	М	8.04
556	19ME8006	19U10028	Bachelor of Technology in	Mechanical Engineering	Sarthak Bhar	М	8.58
557	19ME8007	19U10030	Bachelor of Technology in	Mechanical Engineering	Rakhi Soren	F	7.47
558	19ME8008	19U10045	Bachelor of Technology in	Mechanical Engineering	Munna Barnwal	М	7.56
559	19ME8009	19U10049	Bachelor of Technology in	Mechanical Engineering	Abu Hozaifa	М	8.49
560	19ME8010	19U10051	Bachelor of Technology in	Mechanical Engineering	Souptik Das	М	8.51
561	19ME8011	19U10055	Bachelor of Technology in	Mechanical Engineering	Sayantani Roy	F	8.99
562	19ME8012	19U10057	Bachelor of Technology in	Mechanical Engineering	Pritam Chakraborty	М	8.67
563	19ME8013	19U10061	Bachelor of Technology in	Mechanical Engineering	Arghya Gorai	М	8.26
564	19ME8014	19U10065	Bachelor of Technology in	Mechanical Engineering	Anirban Biswas	М	7.73
565	19ME8015	19U10067	Bachelor of Technology in	Mechanical Engineering	Prasant Prasad	М	8.00
566	19ME8016	19U10074	Bachelor of Technology in	Mechanical Engineering	Rohit Barua	М	8.31
567	19ME8017	19U10078	Bachelor of Technology in	Mechanical Engineering	Rahul Mondal	М	7.99
568	19ME8018	19U10079	Bachelor of Technology in	Mechanical Engineering	Arkadeep Paul	М	8.73
569	19ME8019	19U10081	Bachelor of Technology in	Mechanical Engineering	Heman Hansda	М	7.06
570	19ME8020	19U10084	Bachelor of Technology in	Mechanical Engineering	Anik Mondal	М	8.19
571	19ME8021	19U10085	Bachelor of Technology in	Mechanical Engineering	Prithwisha Nath	F	8.37
572	19ME8022	19U10088	Bachelor of Technology in	Mechanical Engineering	Chiitrak Sarkar	М	8.85
573	19ME8023	19U10099	Bachelor of Technology in	Mechanical Engineering	Alikana Subrhamanyam	М	7.66
574	19ME8024	19U10100	Bachelor of Technology in	Mechanical Engineering	Allampalli Vinay	М	7.12
575	19ME8025	19U10101	Bachelor of Technology in	Mechanical Engineering	Malluvalasa Shyam	М	7.76

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

				191H CONVOCATION	T	ı	1
Sl No	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL CGPA
576	19ME8026	19U10111	Bachelor of Technology in	Mechanical Engineering	Abhijit Roy	М	7.90
577	19ME8027	19U10114	Bachelor of Technology in	Mechanical Engineering	Aman Sonkar	М	8.71
578	19ME8028	19U10116	Bachelor of Technology in	Mechanical Engineering	Tuhina Rakshit	F	8.09
579	19ME8029	19U10119	Bachelor of Technology in	Mechanical Engineering	Yash Vardhan Prasad	М	8.07
580	19ME8030	19U10126	Bachelor of Technology in	Mechanical Engineering	Lisa Saha	F	6.63
581	19ME8031	19U10134	Bachelor of Technology in	Mechanical Engineering	Gourab Ghosh	М	7.03
582	19ME8032	19U10138	Bachelor of Technology in	Mechanical Engineering	Shweta Chauhan	F	7.55
583	19ME8033	19U10141	Bachelor of Technology in	Mechanical Engineering	Souvik Mukherjee	М	7.57
584	19ME8034	19U10146	Bachelor of Technology in	Mechanical Engineering	Shikha Suman	F	8.36
585	19ME8035	19U10148	Bachelor of Technology in	Mechanical Engineering	Ramiz Mollah	М	8.10
586	19ME8036	19U10149	Bachelor of Technology in	Mechanical Engineering	Priyanshu Kumar	М	8.56
587	19ME8037	19U10155	Bachelor of Technology in	Mechanical Engineering	Himanshu Raj	М	8.76
588	19ME8038	19U10163	Bachelor of Technology in	Mechanical Engineering	Chayan Biswas	М	8.01
589	19ME8039	19U10179	Bachelor of Technology in	Mechanical Engineering	Vinay Kumar	М	7.94
590	19ME8040	19U10184	Bachelor of Technology in	Mechanical Engineering	Paltasingi Pavani	F	7.77
591	19ME8041	19U10190	Bachelor of Technology in	Mechanical Engineering	Shrungarapati Srirathna Sreya	F	8.09
592	19ME8042	19U10201	Bachelor of Technology in	Mechanical Engineering	Subrata Dutta	М	8.65
593	19ME8043	19U10209	Bachelor of Technology in	Mechanical Engineering	Abhijeet Kumar	М	7.87
594	19ME8044	19U10218	Bachelor of Technology in	Mechanical Engineering	Gangarapu Sai Krishna Charan	М	8.83
595	19ME8045	19U10219	Bachelor of Technology in	Mechanical Engineering	Rajiv Sarkar	М	7.08
596	19ME8046	19U10224	Bachelor of Technology in	Mechanical Engineering	Sandeep Kumar	М	7.79
597	19ME8047	19U10225	Bachelor of Technology in	Mechanical Engineering	Deepak Kumar Sah	М	7.94
598	19ME8048	19U10236	Bachelor of Technology in	Mechanical Engineering	Sourasish Chowdhury	М	7.76
599	19ME8049	19U10241	Bachelor of Technology in	Mechanical Engineering	Anubhab Mondal	М	6.52
600	19ME8051	19U10245	Bachelor of Technology in	Mechanical Engineering	Aniketh Ghosh	М	8.04
601	19ME8052	19U10250	Bachelor of Technology in	Mechanical Engineering	Sape Naveena	F	8.06
602	19ME8053	19U10252	Bachelor of Technology in	Mechanical Engineering	Maharshi Das	М	8.37
603	19ME8054	19U10253	Bachelor of Technology in	Mechanical Engineering	Pratik Sikdar	М	8.07
604	19ME8055	19U10254	Bachelor of Technology in	Mechanical Engineering	Vivek Verma	М	8.45
605	19ME8056	19U10255	Bachelor of Technology in	Mechanical Engineering	Mamidi Veera Venkata Santhosh Vamsi Akhil	М	7.91
606	19ME8057	19U10262	Bachelor of Technology in	Mechanical Engineering	Rohit Sanjeev Sontakke	М	7.87
607	19ME8058	19U10277	Bachelor of Technology in	Mechanical Engineering	Akash Vishwakarma	М	7.52

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Date: 09/10/2023

### NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl				191H CONVOCATION	1	_	FINAL
No	Roll No	Reg. No.	Programme	Branch	Name	Gender	CGPA
608	19ME8059	19U10280	Bachelor of Technology in	Mechanical Engineering	Sanka Rama Sai Rohith	М	8.25
609	19ME8060	19U10286	Bachelor of Technology in	Mechanical Engineering	Akshat Admache	М	7.98
610	19ME8061	19U10287	Bachelor of Technology in	Mechanical Engineering	Neha Kumari Yadav	F	7.82
611	19ME8062	19U10289	Bachelor of Technology in	Mechanical Engineering	Rahul Dhakharwal	М	8.39
612	19ME8063	19U10295	Bachelor of Technology in	Mechanical Engineering	Tallapareddy Sai Lakshmi Narasimha Reddy	М	8.81
613	19ME8065	19U10299	Bachelor of Technology in	Mechanical Engineering	Ashishkumar Mihirkumar Jha	М	8.84
614	19ME8066	19U10303	Bachelor of Technology in	Mechanical Engineering	Archi Saha	F	7.07
615	19ME8067	19U10309	Bachelor of Technology in	Mechanical Engineering	Arani Gangopadhyay	М	8.91
616	19ME8068	19U10312	Bachelor of Technology in	Mechanical Engineering	Karri Neeharika	F	8.13
617	19ME8069	19U10313	Bachelor of Technology in	Mechanical Engineering	Manchikanti Sharmila	F	8.18
618	19ME8070	19U10315	Bachelor of Technology in	Mechanical Engineering	Challa Srividya	F	8.23
619	19ME8071	19U10316	Bachelor of Technology in	Mechanical Engineering	Alapan Kuila	М	8.27
620	19ME8072	19U10323	Bachelor of Technology in	Mechanical Engineering	Aniket Verma	М	7.99
621	19ME8074	19U10326	Bachelor of Technology in	Mechanical Engineering	Koustav Das	М	8.04
622	19ME8075	19U10333	Bachelor of Technology in	Mechanical Engineering	Doddaka Avinash	М	8.17
623	19ME8076	19U10336	Bachelor of Technology in	Mechanical Engineering	Mallipudi Sri Lakshmi Devaraj	М	7.96
624	19ME8077	19U10337	Bachelor of Technology in	Mechanical Engineering	Aryan Raj Pathak	М	8.49
625	19ME8078	19U10345	Bachelor of Technology in	Mechanical Engineering	Madagala Siva Sai Vijay	М	8.10
626	19ME8079	19U10347	Bachelor of Technology in	Mechanical Engineering	Avishek Deb	М	7.43
627	19ME8081	19U10354	Bachelor of Technology in	Mechanical Engineering	Nalamasu Rahul	М	8.94
628	19ME8082	19U10355	Bachelor of Technology in	Mechanical Engineering	Hare Krishna Shukla	М	8.41
629	19ME8083	19U10356	Bachelor of Technology in	Mechanical Engineering	Chandaka Satya Vani	F	7.74
630	19ME8084	19U10373	Bachelor of Technology in	Mechanical Engineering	Udiga Bhanu Prakash	М	7.65
631	19ME8087	19U10394	Bachelor of Technology in	Mechanical Engineering	Prashant Kumar Singh	М	9.00
632	19ME8088	19U10401	Bachelor of Technology in	Mechanical Engineering	Sayantani Dey	F	8.91
633	19ME8089	19U10411	Bachelor of Technology in	Mechanical Engineering	Vummidi Sai Kiran	М	8.72
634	19ME8090	19U10413	Bachelor of Technology in	Mechanical Engineering	Divyam Srivastava	М	7.94
635	19ME8091	19U10415	Bachelor of Technology in	Mechanical Engineering	Priyanjali Shukla	F	8.89
636	19ME8092	19U10416	Bachelor of Technology in	Mechanical Engineering	Sneha Chattopadhyay	F	8.72
637	19ME8093	19U10417	Bachelor of Technology in	Mechanical Engineering	Abhishek Kumar	М	7.81
638	19ME8094	19U10423	Bachelor of Technology in	Mechanical Engineering	Abhijit Singh	М	8.10
639	19ME8095	19U10425	Bachelor of Technology in	Mechanical Engineering	Dip Mistri	М	7.85

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Dean (Academic Courses)



Date: 09/10/2023

### NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

<b>No</b> 640	Roll No	Reg. No.	Programme		Nama	Condor	FINAL
640				Branch	Name	Gender	CGPA
		19U10427	Bachelor of Technology in	Mechanical Engineering	Korra Nandini Kethan	F	7.55
641	19ME8097	19U10428	Bachelor of Technology in	Mechanical Engineering	Aditya Kumar	M	7.37
642	19ME8098	19U10430	Bachelor of Technology in	Mechanical Engineering	Karuturi Venkata Pavan Kumar	М	8.45
643	19ME8099	19U10433	Bachelor of Technology in	Mechanical Engineering	Prithviraj Chouhan	М	7.47
644	19ME8100	19U10436	Bachelor of Technology in	Mechanical Engineering	Challa Vinod Kumar	М	7.36
645	19ME8101	19U10440	Bachelor of Technology in	Mechanical Engineering	Gadi Jekshat Sridhar Naidu	М	6.83
646	19ME8102	19U10453	Bachelor of Technology in	Mechanical Engineering	Baratam Dharani	F	8.34
647	19ME8103	19U10454	Bachelor of Technology in	Mechanical Engineering	Eunice Raju Gundala	F	7.42
648	19ME8104	19U10456	Bachelor of Technology in	Mechanical Engineering	Konga Shiva Ganesh	М	8.69
649	19ME8105	19U10473	Bachelor of Technology in	Mechanical Engineering	Kumar Rahul	М	7.72
650	19ME8106	19U10476	Bachelor of Technology in	Mechanical Engineering	Vaskar Halder	М	8.24
651	19ME8107	19U10477	Bachelor of Technology in	Mechanical Engineering	Gadi Sai Chenna Kesava Naidu	М	8.11
652	19ME8108	19U10478	Bachelor of Technology in	Mechanical Engineering	Soham Panja	М	8.49
653	19ME8109	19U10479	Bachelor of Technology in	Mechanical Engineering	Tanmay Mondal	М	7.49
654	19ME8110	19U10483	Bachelor of Technology in	Mechanical Engineering	Annepu Ruchita	F	8.75
655	19ME8111	19U10484	Bachelor of Technology in	Mechanical Engineering	Sukrity Ghosh	F	9.38
656	19ME8112	19U10493	Bachelor of Technology in	Mechanical Engineering	Supriyo Karmakar	М	8.00
657	19ME8113	19U10494	Bachelor of Technology in	Mechanical Engineering	Akshay Meena	М	6.70
658	19ME8115	19U10504	Bachelor of Technology in	Mechanical Engineering	Arjun Parihar	М	7.62
659	19ME8116	19U10507	Bachelor of Technology in	Mechanical Engineering	Rishabh Mishra	М	8.19
660	19ME8117	19U10509	Bachelor of Technology in	Mechanical Engineering	Durga Shankar Pati Tripathi	М	9.04
661	19ME8118	19U10510	Bachelor of Technology in	Mechanical Engineering	Prashant Tiwari	М	8.70
662	19ME8119	19U10512	Bachelor of Technology in	Mechanical Engineering	Santhosh Nathan Ilankumaran	М	7.69
663	19ME8120	19U10515	Bachelor of Technology in	Mechanical Engineering	Noel Togi	М	7.65
664	19ME8121	19U10518	Bachelor of Technology in	Mechanical Engineering	Ansh Jha	F	8.47
665	19ME8122	19U10525	Bachelor of Technology in	Mechanical Engineering	Saptaparna Patra	М	9.15
666	19ME8123	19U10527	Bachelor of Technology in	Mechanical Engineering	Soumyadip Ghosh	М	8.60
667	19ME8124	19U10532	Bachelor of Technology in	Mechanical Engineering	Tanmoy Karmakar	М	8.28
668	19ME8125	19U10538	Bachelor of Technology in	Mechanical Engineering	Jugantar Mukherjee	М	8.76
669	19ME8126	19U10544	Bachelor of Technology in	Mechanical Engineering	Aditya Srivastava	М	8.78
670	19ME8127	19U10550	Bachelor of Technology in	Mechanical Engineering	Bandi Vijay Reddy	М	7.70
671	19ME8128	19U10553	Bachelor of Technology in	Mechanical Engineering	Anubhab Bose	М	7.37

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Dean (Academic Courses)



LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

		191H CUNVOCATION							
Sl No	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL CGPA		
672	19ME8129	19U10563	Bachelor of Technology in	Mechanical Engineering	Souham Banerjee	М	8.97		
673	19ME8130	19U10565	Bachelor of Technology in	Mechanical Engineering	Shayan Bera	М	8.98		
674	19ME8131	19U10577	Bachelor of Technology in	Mechanical Engineering	Shubham Goyal	М	7.93		
675	19ME8132	19U10578	Bachelor of Technology in	Mechanical Engineering	Raunak Roy	М	7.96		
676	19ME8133	19U10582	Bachelor of Technology in	Mechanical Engineering	Sumona Chatterjee	F	7.73		
677	19ME8134	19U10585	Bachelor of Technology in	Mechanical Engineering	Atanu Mondal	М	8.53		
678	19ME8135	19U10592	Bachelor of Technology in	Mechanical Engineering	Soubhik Dutta	М	7.99		
679	19ME8136	19U10595	Bachelor of Technology in	Mechanical Engineering	Sounak Bhol	М	7.84		
680	19ME8137	19U10611	Bachelor of Technology in	Mechanical Engineering	Ajaendla Nivas	М	7.85		
681	19ME8138	19U10624	Bachelor of Technology in	Mechanical Engineering	Vishal Suresh Haralalka	М	8.12		
682	19ME8139	19U10625	Bachelor of Technology in	Mechanical Engineering	Lingampally Thanooj	М	7.77		
683	19ME8140	19U10628	Bachelor of Technology in	Mechanical Engineering	Kukkadapu Anitha	F	8.09		
684	19ME8141	19U10630	Bachelor of Technology in	Mechanical Engineering	Jayant Kumar Srivastava	М	8.34		
685	19ME8142	19U10640	Bachelor of Technology in	Mechanical Engineering	Aniket Biswas	М	8.12		
686	19ME8143	19U10656	Bachelor of Technology in	Mechanical Engineering	Suvodeep Biswas	М	7.32		
687	19ME8144	19U10665	Bachelor of Technology in	Mechanical Engineering	Subhadeep Chatterjee	М	8.60		
688	19ME8145	19U10674	Bachelor of Technology in	Mechanical Engineering	G N Nikhil Abhi Teja	М	7.65		
689	19ME8146	19U10676	Bachelor of Technology in	Mechanical Engineering	Neelarapu Sumanth	М	7.67		
690	19ME8147	19U10684	Bachelor of Technology in	Mechanical Engineering	Illapu Mohan Rao	М	7.49		
691	19ME8148	19U10685	Bachelor of Technology in	Mechanical Engineering	Katha Sai Lokeswara Reddy	М	8.96		
692	19ME8149	19U10687	Bachelor of Technology in	Mechanical Engineering	Saksham Saxena	М	8.29		
693	19ME8150	19U10688	Bachelor of Technology in	Mechanical Engineering	Deb Argha Saha	М	8.77		
694	19ME8151	19U10693	Bachelor of Technology in	Mechanical Engineering	Arika Mani Sagar	М	6.87		
695	19ME8152	19U10696	Bachelor of Technology in	Mechanical Engineering	Telikicherla Avinash	М	7.88		
696	19ME8154	19U10700	Bachelor of Technology in	Mechanical Engineering	Abhirup Dasgupta	М	8.88		
697	19ME8155	19U10714	Bachelor of Technology in	Mechanical Engineering	Perepureddy Venkatesh	М	7.87		
698	19ME8156	19U10721	Bachelor of Technology in	Mechanical Engineering	Mayank Yadav	М	7.67		
699	19ME8159	19U10735	Bachelor of Technology in	Mechanical Engineering	Adabala Guna Rama Krishna Raju	М	7.87		
700	19ME8160	19U10741	Bachelor of Technology in	Mechanical Engineering	Padilam Siva Durga Lakshmana Dora	М	8.67		
701	19ME8161	19U10742	Bachelor of Technology in	Mechanical Engineering	Abhijit Kumar	М	7.82		
702	19ME8162	19U10745	Bachelor of Technology in	Mechanical Engineering	Gugloth Pruthvi	М	7.40		
703	19ME8163	19U10747	Bachelor of Technology in	Mechanical Engineering	Satyam Mishra	М	8.16		

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

		191H CONVOCATION								
Sl No	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL CGPA			
704	19ME8165	19U10761	Bachelor of Technology in	Mechanical Engineering	Ankit Kumar	М	7.85			
705	19ME8166	19U10762	Bachelor of Technology in	Mechanical Engineering	Veerla Manish Yadav	М	8.11			
706	19ME8167	19U10763	Bachelor of Technology in	Mechanical Engineering	Sanagavarapu Hemanth	М	8.59			
707	19ME8168	19U10767	Bachelor of Technology in	Mechanical Engineering	Vakada Ajay Kumar	М	7.47			
708	19ME8169	19U10777	Bachelor of Technology in	Mechanical Engineering	Bhamidipalli Amrutha Varshini	F	7.66			
709	19ME8170	19U10781	Bachelor of Technology in	Mechanical Engineering	Kapu Veera Venkata Sai Shanmuka Manoj	М	8.20			
710	19ME8171	19U10789	Bachelor of Technology in	Mechanical Engineering	Deepak Meena	М	6.69			
711	19ME8172	19U10805	Bachelor of Technology in	Mechanical Engineering	Adithi Roy Chowdhury	F	7.55			
712	19ME8173	19U10815	Bachelor of Technology in	Mechanical Engineering	Sourav Sarkar	М	6.85			
713	19ME8174	19U10818	Bachelor of Technology in	Mechanical Engineering	Vikas Hansdak	М	7.13			
714	19MM8001	19U10037	Bachelor of Technology in	Metallurgical and Materials Engineering	Sayan Majumder	М	7.84			
715	19MM8002	19U10044	Bachelor of Technology in	Metallurgical and Materials Engineering	Souryatanu Saha	М	8.41			
716	19MM8003	19U10098	Bachelor of Technology in	Metallurgical and Materials Engineering	Ahammed Imtiaj Ali	М	8.57			
717	19MM8004	19U10104	Bachelor of Technology in	Metallurgical and Materials Engineering	Tirtharaj Paul	М	8.54			
718	19MM8005	19U10117	Bachelor of Technology in	Metallurgical and Materials Engineering	Shubhadip Paul	М	8.50			
719	19MM8006	19U10140	Bachelor of Technology in	Metallurgical and Materials Engineering	Vishal Jaiswal	М	8.11			
720	19MM8007	19U10161	Bachelor of Technology in	Metallurgical and Materials Engineering	Subodh Laguri	М	7.43			
721	19MM8008	19U10167	Bachelor of Technology in	Metallurgical and Materials Engineering	Sayan Ghosh	М	8.56			
722	19MM8009	19U10177	Bachelor of Technology in	Metallurgical and Materials Engineering	Yenneti Mohan Krishna	М	8.74			
723	19MM8010	19U10192	Bachelor of Technology in	Metallurgical and Materials Engineering	Shivam Kumar	М	7.88			
724	19MM8011	19U10208	Bachelor of Technology in	Metallurgical and Materials Engineering	Animesh Mandal	М	7.04			
725	19MM8012	19U10230	Bachelor of Technology in	Metallurgical and Materials Engineering	Banamali Kar	М	8.35			
726	19MM8013	19U10248	Bachelor of Technology in	Metallurgical and Materials Engineering	Venkumahanthi Bhanu Shankara Siddhardha	М	8.80			
727	19MM8014	19U10256	Bachelor of Technology in	Metallurgical and Materials Engineering	Bidyutprabha Das	F	8.34			
728	19MM8015	19U10258	Bachelor of Technology in	Metallurgical and Materials Engineering	Saptarshi Roy	М	8.83			
729	19MM8016	19U10263	Bachelor of Technology in	Metallurgical and Materials Engineering	Rageshree Bhattacharjee	F	8.99			
730	19MM8017	19U10268	Bachelor of Technology in	Metallurgical and Materials Engineering	Ailavarapu Surya Sanjana	F	8.23			
731	19MM8018	19U10270	Bachelor of Technology in	Metallurgical and Materials Engineering	Atul Pooniya	М	8.28			
732	19MM8020	19U10322	Bachelor of Technology in	Metallurgical and Materials Engineering	Sohel Sahin	М	7.32			
733	19MM8021	19U10404	Bachelor of Technology in	Metallurgical and Materials Engineering	Manish Kumar	М	7.79			
734	19MM8022	19U10405	Bachelor of Technology in	Metallurgical and Materials Engineering	Saurabh Vilas Sonwalkar	М	8.14			
735	19MM8023	19U10420	Bachelor of Technology in	Metallurgical and Materials Engineering	Aditi Sharon Ekka	F	7.76			

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL
No				Metallurgical and		Genuel	CGPA
736	19MM8024	19U10429	Bachelor of Technology in	Materials Engineering Metallurgical and	Divyansh Kumar	M	9.04
737	19MM8025	19U10435	Bachelor of Technology in	Materials Engineering	Mehul Gupta	М	8.86
738	19MM8026	19U10447	Bachelor of Technology in	Metallurgical and Materials Engineering	Lekhraj Paroda	М	9.05
739	19MM8027	19U10488	Bachelor of Technology in	Metallurgical and Materials Engineering	Ashish Meena	М	7.72
740	19MM8028	19U10514	Bachelor of Technology in	Metallurgical and Materials Engineering	Vysyaraju Venugopala Raju	М	8.24
741	19MM8029	19U10517	Bachelor of Technology in	Metallurgical and Materials Engineering	Ramyanil Raha	М	9.22
742	19MM8030	19U10536	Bachelor of Technology in	Metallurgical and Materials Engineering	Shubham Raj	М	7.87
743	19MM8031	19U10537	Bachelor of Technology in	Metallurgical and Materials Engineering	Sudipta Sahana	М	7.63
744	19MM8032	19U10539	Bachelor of Technology in	Metallurgical and Materials Engineering	Ankit Rai	М	8.58
745	19MM8033	19U10540	Bachelor of Technology in	Metallurgical and Materials Engineering	Priyajeet Goswami	М	8.18
746	19MM8034	19U10557	Bachelor of Technology in	Metallurgical and Materials Engineering	Sandeep Kumar Vaishya	М	7.64
747	19MM8035	19U10559	Bachelor of Technology in	Metallurgical and Materials Engineering	Aritra Roy	М	8.19
748	19MM8036	19U10570	Bachelor of Technology in	Metallurgical and Materials Engineering	Rahul Kumar Shaw	М	7.73
749	19MM8037	19U10575	Bachelor of Technology in	Metallurgical and Materials Engineering	Richa Mishra	F	8.82
750	19MM8038	19U10596	Bachelor of Technology in	Metallurgical and Materials Engineering	Pandranki Chandra Sekhar Naidu	М	7.66
751	19MM8039	19U10599	Bachelor of Technology in	Metallurgical and Materials Engineering	Pranav Bajpai	М	9.02
752	19MM8040	19U10602	Bachelor of Technology in	Metallurgical and Materials Engineering	Jarapala Sri Chandana	F	7.56
753	19MM8041	19U10604	Bachelor of Technology in	Metallurgical and Materials Engineering	Bakku Rakesh	М	8.23
754	19MM8043	19U10620	Bachelor of Technology in	Metallurgical and Materials Engineering	Ankit Yadav	М	8.29
755	19MM8044	19U10623	Bachelor of Technology in	Metallurgical and Materials Engineering	Tamojit Chatterjee	М	7.90
756	19MM8045	19U10626	Bachelor of Technology in	Metallurgical and Materials Engineering	Srideep Bhattacharya	М	8.26
757	19MM8046	19U10648	Bachelor of Technology in	Metallurgical and Materials Engineering	Dev Khanna	М	8.07
758	19MM8047	19U10654	Bachelor of Technology in	Metallurgical and Materials Engineering	Anushka Tiwari	F	8.73
759	19MM8048	19U10660	Bachelor of Technology in	Metallurgical and Materials Engineering	Amit Kumar Sahu	M	7.78
760	19MM8049	19U10663	Bachelor of Technology in	Metallurgical and Materials Engineering	Ganta Sai Supraja	F	8.73
761	19MM8050	19U10680	Bachelor of Technology in	Metallurgical and Materials Engineering	Vadiga Sreeja	F	7.69
762	19MM8051	19U10686	Bachelor of Technology in	Metallurgical and Materials Engineering Metallurgical and	Srijita Ghosh	F	8.19
763	19MM8052		Bachelor of Technology in	Materials Engineering	Aniket Panigrahi	М	9.14
764	19MM8053	19U10702	Bachelor of Technology in	Metallurgical and Materials Engineering Metallurgical and	Shalin Srivastava	М	8.08
765	19MM8055	19U10733	Bachelor of Technology in	Metallurgical and Materials Engineering Metallurgical and	Amitabha Biswas	М	7.29
766	19MM8056		Bachelor of Technology in	Metallurgical and Materials Engineering Metallurgical and	Suravarapu Harshith Bhargav	M	7.34
767	19MM8057	19U10736	Bachelor of Technology in	Metallurgical and Materials Engineering	Aditya Kumar	М	7.51

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LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

191H CONVOCATION								
Sl No	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL CGPA	
768	19MM8058	19U10743	Bachelor of Technology in	Metallurgical and Materials Engineering	Geddam Varnika Sri	F	8.07	
769	19MM8059	19U10746	Bachelor of Technology in	Metallurgical and Materials Engineering	Gunta Pavan Sai	М	7.41	
770	19MM8060	19U10755	Bachelor of Technology in	Metallurgical and Materials Engineering	Raj Gaurav	М	8.45	
771	19MM8061	19U10776	Bachelor of Technology in	Metallurgical and Materials Engineering	Poshala Yashwanth	М	7.30	
772	19MM8062	19U10787	Bachelor of Technology in	Metallurgical and Materials Engineering	Surisetty Shyam Srinivas	М	8.96	
773	19MM8063	19U10799	Bachelor of Technology in	Metallurgical and Materials Engineering	Chelluboina Sravani	F	8.20	
774	19MM8064	19U10819	Bachelor of Technology in	Metallurgical and Materials Engineering	Bijay Singh Poona	М	7.66	
775	19MM8065	19U10821	Bachelor of Technology in	Metallurgical and Materials Engineering	Vishal Kumar	М	7.16	
776	18MM8044	18U10586	Bachelor of Technology in	Metallurgical and Materials Engineering	Dharavath Koushik	М	7.24	
		D	Dual Degree Program (	B.Tech. and M. Tec	ch. in )			
1	18BT1001	18U10259	Bachelor of Technology (under Dual Degree program)	Biotechnology	Sushma Brahma	F	7.39	
2	18BT1002	18U10516	Bachelor of Technology (under Dual Degree program)	Biotechnology	Shankhadeep Mondal	М	7.85	
3	18BT1003	18U10583	Bachelor of Technology (under Dual Degree program)	Biotechnology	Priyanshu Pandey	М	8.53	
4	18BT1004	18U10669	Bachelor of Technology (under Dual Degree program)	Biotechnology	Sauma Suvra Majumdar	М	8.73	
5	18BT1005	18U10696	Bachelor of Technology (under Dual Degree program)	Biotechnology	Shubham Maurya	М	7.69	
6	18CH1001	18U10035	Bachelor of Technology (under Dual Degree program)	Chemical Engineering	Pritam Paul	М	7.88	
7	18CH1002	18U10097	Bachelor of Technology (under Dual Degree program)	Chemical Engineering	Swagata Laxmi Sengupta	F	9.08	
8	18CH1004	18U10647	Bachelor of Technology (under Dual Degree program)	Chemical Engineering	Bhisetti Hari Venkata Prasad	М	7.72	
1	18BT1001	18U10259	Master of Technology (under Dual Degree program) in	Biotechnology	Sushma Brahma	F	7.39	
786	18BT1002	18U10516	Master of Technology (under Dual Degree program) in	Biotechnology	Shankhadeep Mondal	М	7.85	
787	18BT1003	18U10583	Master of Technology (under Dual Degree program) in	Biotechnology	Priyanshu Pandey	М	8.53	
788	18BT1004	18U10669	Master of Technology (under Dual Degree program) in	Biotechnology	Sauma Suvra Majumdar	М	8.73	
789	18BT1005	18U10696	Master of Technology (under Dual Degree program) in	Biotechnology	Shubham Maurya	М	7.69	
790	18CH1001	18U10035	Master of Technology (under Dual Degree program) in	Chemical Engineering	Pritam Paul	M	7.88	
791	18CH1002	18U10097	Master of Technology (under Dual Degree program) in	Chemical Engineering	Swagata Laxmi Sengupta	F	9.08	
792	18CH1004	18U10647	Master of Technology (under Dual Degree program) in	Chemical Engineering	Bhisetti Hari Venkata Prasad	M	7.72	
				Sc. in Chemistry	<u>'</u>			
1	17CY1011	17U10733	Integrated Master of Science in	Chemistry	Geetanjali Paul	F	7.91	
2	18CY1001	18U10049	Integrated Master of Science in	Chemistry	Aritra Kundu	M	8.48	
3	18CY1003	18U10384	Integrated Master of Science in	Chemistry	Somdatta Paul	F	8.07	
4	18CY1004	18U10508	Integrated Master of Science in	Chemistry	Kasu Jyothirlatha Venkata Nageswar	F	8.85	

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Date: 09/10/2023

# NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

# LIST DEGREE RECIPIENTS - B.Tech., Dual Degree, Int. M.Sc 19TH CONVOCATION

Sl No	Roll No	Reg. No.	Programme	Branch	Name	Gender	FINAL CGPA
5	18CY1005	18U10550	Integrated Master of Science in	Chemistry	Abhigyan Deoli	М	8.52
6	18CY1006	18U10607	Integrated Master of Science in	Chemistry	Sankar Panda	М	7.73
7	18CY1007	18U10633	Integrated Master of Science in	Chemistry	Priya Pant	F	8.41
8	18CY1008	18U10644	Integrated Master of Science in	Chemistry	Somenath Chattopadhyay	М	7.37
9	18CY1009	18U10651	Integrated Master of Science in	Chemistry	Arundhati Mondal	F	7.92
10	18CY1011	18U10689	Integrated Master of Science in	Chemistry	Rohan Ramtake	М	7.51
11	18CY1012	18U10703	Integrated Master of Science in	Chemistry	Ajay	М	7.56
12	18CY1015	18U10738	Integrated Master of Science in	Chemistry	Nikita Bhowmik	F	8.29



LIST OF DEGREE RECIPIENTS - POST GRADUATE STUDIES  ${\bf 19}^{\rm TH}$  CONVOCATION

SI. No.	Roll No.	Reg. No.	Program	Specialization	Name	Gender	FINAL CGPA
1	21BT4101	21P10044	Master of Technology	in Biotechnology	Narmadha M	F	9.24
2	21BT4102	21P10045	Master of Technology	in Biotechnology	Dharmendra Kumar	М	8.80
3	21BT4103	21P10059	Master of Technology	in Biotechnology	Adityarup Das	М	8.81
4	21BT4104	21P10073	Master of Technology	in Biotechnology	Sonali Raj	F	9.06
5	21BT4105	21P10076	Master of Technology	in Biotechnology	D Tamilselvan	М	8.87
6	21BT4106	21P10130	Master of Technology	in Biotechnology	Swarnabha Goswami	М	9.17
7	21BT4107	21P10171	Master of Technology	in Biotechnology	Deepak Kumar Mahato	М	8.37
8	21BT4108	21P10184	Master of Technology	in Biotechnology	Mehak Ahuja	F	9.14
9	21BT4109	21P10190	Master of Technology	in Biotechnology	Sanjukta Banerjee	F	9.41
10	21BT4110	21P10216	Master of Technology	in Biotechnology	Paramveer Yadav	М	9.04
11	21BT4111	21P10280	Master of Technology	in Biotechnology	Madhabendra Mohon Kar	М	9.29
12	21BT4112	21P10313	Master of Technology	in Biotechnology	Meheria Hazari	F	8.89
13	21BT4113	21P10322	Master of Technology	in Biotechnology	Manali Sunilrao Shegokar	F	9.17
14	21BT4114	21P10332	Master of Technology	in Biotechnology	Uma Jyoti Pal	F	8.86
15	21BT4115	21P10334	Master of Technology	in Biotechnology	Sudibya Sinha	F	8.59
16	21BT4117	21P10364	Master of Technology	in Biotechnology	Simdhuja Maka	F	8.29
17	21CE4101	21P10042	Master of Technology	in Structural Engineering	Subhrajit Sinha	M	8.11
18	21CE4103	21P10049	Master of Technology	in Structural Engineering	Samir Kumar	M	8.58
19	21CE4104	21P10071	Master of Technology	in Structural Engineering	Kumbla Anupa Nayak	M	9.35
20	21CE4105	21P10077	Master of Technology	in Structural Engineering	Akshay Kumar	F	8.96
21	21CE4107	21P10164	Master of Technology	in Structural Engineering	Venkat Raj Konam	F	8.80
22	21CE4107	21P10169	Master of Technology	in Structural Engineering	Rithwez Damarla		8.51
23	21CE4108	21P10109 21P10187	Master of Technology	in Structural Engineering	MD Farhan Alam	M	8.92
24	21CE4109 21CE4110	21P10197	Master of Technology	in Structural Engineering		M	9.09
25	21CE4110 21CE4112	21P10193 21P10275		in Structural Engineering	Arunima Sengupta	M	8.70
26			Master of Technology	, , ,	Saurabh Suman	F	
27	21CE4113 21CE4114	21P10281	Master of Technology	in Structural Engineering	G Rahul Raj	M	8.03
28	21CE4114 21CE4115	21P10296 21P10301	Master of Technology	in Structural Engineering	Aryan Saini	F	8.78
			Master of Technology	in Structural Engineering	Radhe Yassung	M	8.58
29 30	21CE4116	21P10321	Master of Technology	in Structural Engineering	Vashu Dev	M	8.45
	21CE4117	21P10348	Master of Technology	in Structural Engineering	Irfan Hashmee	F	8.58
31	21CE4118	21P10349	Master of Technology	in Structural Engineering	Bhanu Kiran Gudipati	F	8.74
32	21CE4119	21P10353	Master of Technology	in Structural Engineering	MD Shoaib Akhtar	M	8.28
33	21CE4201	21P10041	Master of Technology	in Geotechnical Engineering	MD Aman Nimezi	F	8.89
34	21CE4202	21P10056	Master of Technology	in Geotechnical Engineering	Arif Iqbal	M	7.54
35	21CE4203	21P10068	Master of Technology	in Geotechnical Engineering	Burhan Ahmad Wani	M	8.63
36	21CE4204	21P10074	Master of Technology	in Geotechnical Engineering	S Vajram	F	8.76
37	21CE4205	21P10082	Master of Technology	in Geotechnical Engineering	Shalu Roy	М	9.10
38	21CE4206	21P10086	Master of Technology	in Geotechnical Engineering	Aman Kumar	М	8.46
39	21CE4207	21P10158	Master of Technology	in Geotechnical Engineering	Pritam Singh	F	8.49
40	21CE4208	21P10162	Master of Technology	in Geotechnical Engineering	Kundan Kumar	М	8.99
41	21CE4209	21P10170	Master of Technology	in Geotechnical Engineering	Kavya L R	М	8.67
42	21CE4210	21P10197	Master of Technology	in Geotechnical Engineering	Kumar Shubham	М	8.67
43	21CE4211	21P10200	Master of Technology	in Geotechnical Engineering	Shriti Singh	М	8.85
44	21CE4212	21P10209	Master of Technology	in Geotechnical Engineering	Mahesh Balsukuri	F	8.75
45	21CE4214	21P10228	Master of Technology	in Geotechnical Engineering	Mozammil Saqlain	М	8.38
46	21CE4215	21P10252	Master of Technology	in Geotechnical Engineering	Suchhanda Mondal	М	8.97
47	21CE4216	21P10268	Master of Technology	in Geotechnical Engineering	Rajashree Barman	М	8.94
48	21CE4217	21P10278	Master of Technology	in Geotechnical Engineering	Rajeev Ranjan	F	8.00
49	21CE4218	21P10359	Master of Technology	in Geotechnical Engineering	Sharmistha Chakraborty	М	8.90
50	21CE4219	21P10362	Master of Technology	in Geotechnical Engineering	Soumik Dana	М	8.67
51	21CE4220	21P10387	Master of Technology	in Geotechnical Engineering	Nikhil Jha	М	8.72
52	21CH4101	21P10207	Master of Technology	in Chemical Engineering	Sunanda Dutta	М	9.38
53	21CH4102	21P10389	Master of Technology	in Chemical Engineering	Bidisha Majumder	F	8.65

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LIST OF DEGREE RECIPIENTS - POST GRADUATE STUDIES

19<sup>TH</sup> CONVOCATION

SI. No.	Roll No.	Reg. No.	Program	Specialization	Name	Gender	FINAL CGPA
54	21CH4103	21P10394	Master of Technology	in Chemical Engineering	Poulami Hazra	F	8.73
55	21CH4104	21P10395	Master of Technology	in Chemical Engineering	Debanik Bose	М	8.69
56	21CH4105	21P10412	Master of Technology	in Chemical Engineering	Aratrika Roy Chowdhury	F	9.75
57	21CH4106	21P10419	Master of Technology	in Chemical Engineering	Nisha Shree	F	8.99
58	21CH4107	21P10421	Master of Technology	in Chemical Engineering	Komal Vashishth	F	8.79
59	21CH4201	21P10132	Master of Technology	in Energy Resources and Sustainable Environmental Engineering	Rexona Khatoon	F	9.20
60	21CH4202	21P10392	Master of Technology	in Energy Resources and Sustainable Environmental Engineering	Asha Rani Patra	F	9.26
61	21CH4203	21P10393	Master of Technology	in Energy Resources and Sustainable Environmental Engineering	Utkarsh Raj	М	7.90
62	21CH4205	21P10406	Master of Technology	in Energy Resources and Sustainable Environmental Engineering	Vivek Kumar	М	8.20
63	21CH4206	21P10410	Master of Technology	in Energy Resources and Sustainable Environmental Engineering	Aniruddha Chowdhury	М	7.63
64	21CS4101	21P10043	Master of Technology	in Computer Science and Engineering	Vimlesh Verma	М	8.65
65	21CS4102	21P10052	Master of Technology	in Computer Science and Engineering	Govind Kumar	М	8.66
66	21CS4103	21P10054	Master of Technology	in Computer Science and Engineering	Sai Manisha Annam	F	9.15
67	21CS4104	21P10069	Master of Technology	in Computer Science and Engineering	Saurabh Rai	М	8.32
68	21CS4105	21P10078	Master of Technology	in Computer Science and Engineering	MD. Tousin Akhter	М	9.32
69	21CS4106	21P10083	Master of Technology	in Computer Science and Engineering	Anipindi Rajesh	М	8.79
70	21CS4107	21P10091	Master of Technology	in Computer Science and Engineering	Swati Singh	F	8.89
71	21CS4108	21P10092	Master of Technology	in Computer Science and Engineering	Kalyani Karmakar	F	8.48
72	21CS4109	21P10098	Master of Technology	in Computer Science and Engineering	Malay Bhowmick	М	8.62
73	21CS4111	21P10105	Master of Technology	in Computer Science and Engineering	Arup Nath	М	9.00
74	21CS4112	21P10110	Master of Technology	in Computer Science and Engineering	Puja Kumari	F	8.2
75	21CS4113	21P10114	Master of Technology	in Computer Science and Engineering	Aniket Pyne	М	8.82
76	21CS4114	21P10118	Master of Technology	in Computer Science and Engineering	Prem Nath Dey	М	8.69
77	21CS4115	21P10119	Master of Technology	in Computer Science and Engineering	Sourav Nandi	М	9.2
78	21CS4116	21P10120	Master of Technology	in Computer Science and Engineering	Debapriya Sarkar	М	8.35
79	21CS4118	21P10123	Master of Technology	in Computer Science and Engineering	Sankhadeep Bhowmick	М	8.45
80	21CS4120	21P10142	Master of Technology	in Computer Science and Engineering	Ankit Rai	М	8.06
81	21CS4122	21P10152	Master of Technology	in Computer Science and Engineering	Anupama Mishra	F	8.76
82	21CS4123	21P10166	Master of Technology	in Computer Science and Engineering	Poonam Sai	F	8.3
83	21CS4124	21P10173	Master of Technology	in Computer Science and Engineering	Arpita Mandal	М	9.13
34	21CS4125	21P10180	Master of Technology	in Computer Science and Engineering	Shalini Singh	F	9.01
85	21CS4126	21P10188	Master of Technology	in Computer Science and Engineering	Naman Sahu	F	8.73
86	21CS4127	21P10212	Master of Technology	in Computer Science and Engineering	Avishek Gupta	М	8.23
87	21CS4128	21P10213	Master of Technology	in Computer Science and Engineering	Suraj Kumar	М	8.17
88	21CS4129	21P10221	Master of Technology	in Computer Science and Engineering	Yash Vinodkumar Wadhwani	М	7.68
89	21CS4131	21P10245	Master of Technology	in Computer Science and Engineering	Koyena Chowdhury	М	9.28
90	21CS4132	21P10248	Master of Technology	in Computer Science and Engineering	Debal Ghosh	F	8.04
91	21CS4133	21P10259	Master of Technology	in Computer Science and Engineering	Nandita Ghosh	М	9.2
92	21CS4134	21P10263	Master of Technology	in Computer Science and Engineering	Ningthoujam Shamananda Singh	F	8.6
93	21CS4135	21P10274	Master of Technology	in Computer Science and Engineering	Amrita Maitra	М	8.6
94	21CS4136	21P10283	Master of Technology	in Computer Science and Engineering	Kshetrimayum Simanta Singh	F	8.6
95	21CS4138	21P10299	Master of Technology	in Computer Science and Engineering	Suyash Shikhar Srivastava	М	8.4
96	21CS4139	21P10302	Master of Technology	in Computer Science and Engineering	Nilesh Madharia	М	8.73
97	21CS4140	21P10306	Master of Technology	in Computer Science and Engineering	Megha Lodh	М	8.8
98	21CS4141	21P10315	Master of Technology	in Computer Science and Engineering	Devasish Mahato	F	9.0
99	21CS4142	21P10317	Master of Technology	in Computer Science and Engineering	Pragati Agrawal	М	8.34
00	21CS4143	21P10318	Master of Technology	in Computer Science and Engineering	Tushar Madan Kadam	F	8.80
01	21CS4145	21P10345	Master of Technology	in Computer Science and Engineering	Kamta Prasad	М	8.03
102	21CS4146	21P10354	Master of Technology	in Computer Science and Engineering	Gaurav Pradhan	М	8.00

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LIST OF DEGREE RECIPIENTS - POST GRADUATE STUDIES

19<sup>TH</sup> CONVOCATION

SI. No.	Roll No.	Reg. No.	Program	Specialization	Name	Gender	FINAL CGPA
103	21CS4148	21P10361	Master of Technology	in Computer Science and Engineering	Punit Kumar Verma	М	8.10
104	21CS4149	21P10363	Master of Technology	in Computer Science and Engineering	Nand Kishore Prasad	М	8.32
105	21CS4150	21P10366	Master of Technology	in Computer Science and Engineering	Dipnarayan Das	М	8.61
106	21EC4102	21P10065	Master of Technology	in Telecommunication Engineering	Vedula Kiran Bharadwaj	М	9.57
107	21EC4103	21P10096	Master of Technology	in Telecommunication Engineering	Debabrata Ghorui	F	9.39
108	21EC4105	21P10273	Master of Technology	in Telecommunication Engineering	Debakshi Gupta	М	9.45
109	21EC4106	21P10391	Master of Technology	in Telecommunication Engineering	Anubrata Sarkar	М	9.19
110	21EC4107	21P10396	Master of Technology	in Telecommunication Engineering	Charul Singh	М	9.36
111	21EC4108	21P10404	Master of Technology	in Telecommunication Engineering	Abhishek Raj	М	9.23
112	21EC4109	21P10409	Master of Technology	in Telecommunication Engineering	Sima Kumari	F	9.32
113	21EC4110	21P10420	Master of Technology	in Telecommunication Engineering	Avinaba Tapadar	М	9.21
114	21EC4201	21P10040	Master of Technology	in Microelectronics and VLSI	Debjyoti Banerjee	М	9.76
115	21EC4202	21P10062	Master of Technology	in Microelectronics and VLSI	Preethi Rajan	М	9.45
116	21EC4203	21P10063	Master of Technology	in Microelectronics and VLSI	Manish Kumar	М	9.45
117	21EC4204	21P10075	Master of Technology	in Microelectronics and VLSI	Shubham Kumar Gupta	М	9.64
118	21EC4205	21P10104	Master of Technology	in Microelectronics and VLSI	Aman Ranjan	F	9.31
119	21EC4206	21P10113	Master of Technology	in Microelectronics and VLSI	Raja Gupta	М	8.99
120	21EC4207	21P10189	Master of Technology	in Microelectronics and VLSI	Dhaarna Urwasha	M	9.24
121	21EC4208	21P10214	Master of Technology	in Microelectronics and VLSI	Mohit Rawat	M	9.77
122	21EC4209	21P10225	Master of Technology	in Microelectronics and VLSI	Sumanth Kayyala	M	8.89
123	21EC4210	21P10240	Master of Technology	in Microelectronics and VLSI	Jagrit Umarwal	M	9.01
124	21EC4211	21P10247	Master of Technology	in Microelectronics and VLSI	Lokesh Nayini	M	9.04
125	21EC4211	21P10270	Master of Technology	in Microelectronics and VLSI	Vikash Sharma	M	8.89
126	21EC4213	21P10286	Master of Technology	in Microelectronics and VLSI	Komal Kumari Singh	M	9.62
127	21EC4214	21P10290	Master of Technology	in Microelectronics and VLSI	Arun Kumar Rana		9.30
128	21EC4215	21P10300	Master of Technology	in Microelectronics and VLSI	Mukesh Kumar	M F	9.19
129	21EC4216	21P10314	Master of Technology	in Microelectronics and VLSI	Vivek Anand		9.27
130	21EC4217	21P10339	Master of Technology	in Microelectronics and VLSI	Sreyankar Malakar	M F	8.51
131	21EC4218	21P10342	Master of Technology	in Microelectronics and VLSI	Ankit Jaiswal		9.41
132	21EC4218	21P10342	Master of Technology	in Microelectronics and VLSI		M	9.41
133	21EC4219 21EC4220	21P10343		in Microelectronics and VLSI	Nagaraju Penumanu Rahul Kumar	F	9.34
134	20EE4111	20P10210	Master of Technology  Master of Technology	in Power Systems	Rupal Panda	M	8.65
135	21EE4101	21P10055	Master of Technology	•	Muddamalla Hareesh	M	8.28
				in Power Systems		F	
136	21EE4102	21P10095	Master of Technology	in Power Systems	Bhawan Kumar Jha	M	8.31
137	21EE4103	21P10102	Master of Technology	in Power Systems	Pritam Chakraborty	M	8.97
138	21EE4104	21P10140	Master of Technology	in Power Systems	Swastick Chakraborty	M	8.63
139	21EE4105	21P10154	Master of Technology	in Power Systems	Mira Rani Choudhury	M	8.55
140	21EE4107	21P10178	Master of Technology	in Power Systems	Ishan Chakraborty	M	9.14
141	21EE4108	21P10181	Master of Technology	in Power Systems	Surja Kamal Ghosh	M	9.07
142	21EE4109	21P10258	Master of Technology	in Power Systems	Vivek Ranjan	M	8.51
143	21EE4110	21P10276	Master of Technology	in Power Systems	Satyajit Pradhan	M	8.48
144	21EE4111	21P10282	Master of Technology	in Power Systems	Kavita Kumari	M	7.80
145	21EE4112	21P10298	Master of Technology	in Power Systems	Saurabh Srivastava	M	8.41
146	21EE4113	21P10307	Master of Technology	in Power Systems	Nitish Kumar Sahoo	M	8.92
147	21EE4114	21P10309	Master of Technology	in Power Systems	Nidhi Kumari	M	8.70
148	21EE4115	21P10335	Master of Technology	in Power Systems	Antu Roy	F	7.13
149	21EE4116	21P10341	Master of Technology	in Power Systems	Prabhat Kumar	M	7.63
150	21EE4117	21P10358	Master of Technology	in Power Systems	Mahesh Kumar Shaw	M	8.17
151	21EE4118	21P10381	Master of Technology	in Power Systems	Sana Azhar	F	8.37
152	21EE4119	21P10388	Master of Technology	in Power Systems	Karan Kumar Singh	F	7.83
153	21EE4201	21P10038	Master of Technology	in Power Electronics and Machine Drives	Vishwakarma Kumar	М	8.20
154	21EE4202	21P10066	Master of Technology	in Power Electronics and Machine Drives	Soumyakanti Roy	М	9.41

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LIST OF DEGREE RECIPIENTS - POST GRADUATE STUDIES

19<sup>TH</sup> CONVOCATION

SI. No.	Roll No.	Reg. No.	Program	Specialization	Name	Gender	FINAL CGPA
155	21EE4203	21P10079	Master of Technology	in Power Electronics and Machine Drives	Sambit Das	F	9.10
156	21EE4204	21P10088	Master of Technology	in Power Electronics and Machine Drives	Amardeep Kumar Singh	М	8.42
157	21EE4205	21P10094	Master of Technology	in Power Electronics and Machine Drives	Pritish Kumar Sahu	М	8.55
158	21EE4206	21P10112	Master of Technology	in Power Electronics and Machine Drives	Anuprash Gurung	М	8.39
159	21EE4207	21P10135	Master of Technology	in Power Electronics and Machine Drives	Bidisha Bhattacharya	М	9.01
160	21EE4208	21P10146	Master of Technology	in Power Electronics and Machine Drives	Shivam	М	8.72
161	21EE4209	21P10172	Master of Technology	in Power Electronics and Machine Drives	Pawan Kumar	М	7.58
162	21EE4211	21P10195	Master of Technology	in Power Electronics and Machine Drives	Poonam Kumari	М	8.24
163	21EE4212	21P10231	Master of Technology	in Power Electronics and Machine Drives	Somdutta Tikadar	F	8.10
164	21EE4213	21P10308	Master of Technology	in Power Electronics and Machine Drives	Nihal Kumar	М	8.62
165	21EE4214	21P10328	Master of Technology	in Power Electronics and Machine Drives	Vineet Bharadwaj	М	9.38
166	21EE4216	21P10340	Master of Technology	in Power Electronics and Machine Drives	Palepu Lakshmi Chandana	М	9.08
167	21EE4217	21P10355	Master of Technology	in Power Electronics and Machine Drives	Rajendra Cheepinapi	М	8.25
168	21EE4219	21P10383	Master of Technology	in Power Electronics and Machine Drives	Prarambhik Sur	F	9.52
169	21EE4302	21P10243	Master of Technology	in Instrumentation and Control	Arijit Bhowmik	М	9.17
170	21EE4303	21P10285	Master of Technology	in Instrumentation and Control	Tishya Chattopadhyay	М	9.26
171	21EE4305	21P10372	Master of Technology	in Instrumentation and Control	Gautam Kumar	F	8.96
172	21EE4306	21P10390	Master of Technology	in Instrumentation and Control	Ayush Lal	М	8.24
173	21EE4307	21P10400	Master of Technology	in Instrumentation and Control	Subham Mahanta	М	9.06
174	21EE4308	21P10408	Master of Technology	in Instrumentation and Control	Hariom Thakur	М	9.00
175	21EE4309	21P10411	Master of Technology	in Instrumentation and Control	Afzal	F	9.00
176	21EE4310	21P10416	Master of Technology	in Instrumentation and Control	Mirza Seraj Baig	М	9.33
177	21ES4101	21P10051	Master of Technology	in Environmental Science and Technology	Rahul Kumar	М	8.09
178	21ES4102	21P10057	Master of Technology	in Environmental Science and Technology	A Shivani	F	8.61
179	21ES4104	21P10085	Master of Technology	in Environmental Science and Technology	Asha Shende	F	8.54
180	21ES4105	21P10087	Master of Technology	in Environmental Science and Technology	Pravin Lal	М	8.93
181	21ES4106	21P10106	Master of Technology	in Environmental Science and Technology	Ravi Kumar Yadav	М	8.19
182	21ES4107	21P10109	Master of Technology	in Environmental Science and Technology	Apurwa Runda	F	8.54
183	21ES4109	21P10155	Master of Technology	in Environmental Science and Technology	Jhilik Gantait	F	8.90
184	21ES4111	21P10217	Master of Technology	in Environmental Science and Technology	Abhinav	М	8.16
185	21ES4114	21P10297	Master of Technology	in Environmental Science and Technology	Lohit Paul	М	8.86
186	21ES4115	21P10373	Master of Technology	in Environmental Science and Technology	Pinaki Hazra	М	9.03
187	21ES4116	21P10382	Master of Technology	in Environmental Science and Technology	Mithu Prasad	М	8.34
188	21ES4117	21P10384	Master of Technology	in Environmental Science and Technology	Sameer Shafi Ganaie	M	8.96

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LIST OF DEGREE RECIPIENTS - POST GRADUATE STUDIES

19<sup>TH</sup> CONVOCATION

SI. No.	Roll No.	Reg. No.	Program	Specialization	Name	Gender	FINA CGP/
189	21ES4118	21P10386	Master of Technology	in Environmental Science and Technology	Debasree Roy	F	8.41
190	21ES4119	21P10418	Master of Technology	in Environmental Science and Technology	Ravi Ghunawat	М	8.66
191	21MA4101	21P10037	Master of Technology	in Operations Research	Varun Vinod Deshmukh	М	8.75
192	21MA4102	21P10064	Master of Technology	in Operations Research	Vishwa Nitish Kerkar	F	8.99
193	21MA4104	21P10117	Master of Technology	in Operations Research	Sourav Ray	М	8.36
194	21MA4105	21P10161	Master of Technology	in Operations Research	Pourush Kumar Gupta	М	8.37
195	21MA4106	21P10236	Master of Technology	in Operations Research	Sheetal Singh	F	8.99
196	21MA4109	21P10336	Master of Technology	in Operations Research	Ishani Ray	F	9.69
197	21MA4112	21P10360	Master of Technology	in Operations Research	Himanshu Kumar	М	8.52
198	21MA4113	21P10377	Master of Technology	in Operations Research	Ankit Dev	М	7.93
199	21ME4101	21P10046	Master of Technology	in Machine Design	Anshu Raj	F	8.30
200	21ME4102	21P10053	Master of Technology	in Machine Design	Mohanakrishna Kamminana	М	8.16
201	21ME4103	21P10129	Master of Technology	in Machine Design	Avinash Kumar Singh	М	8.10
202	21ME4104	21P10148	Master of Technology	in Machine Design	Aditya Kumar Singh	М	8.14
203	21ME4106	21P10165	Master of Technology	in Machine Design	Ashish Anand	М	8.36
204	21ME4107	21P10210	Master of Technology	in Machine Design	Vivek Roushan	M	8.00
205	21ME4108	21P10215	Master of Technology	in Machine Design	Rishav Gupta	F	8.46
206	21ME4111	21P10289	Master of Technology	in Machine Design	Anup Yadav	M	8.56
207	21ME4112	21P10316	Master of Technology	in Machine Design	Dibyendu Khan	M	8.79
208	21ME4113	21P10346	Master of Technology	in Machine Design	Utsav	M	8.36
209	21ME4114	21P10370	Master of Technology	in Machine Design	Sourav Goswami	M	8.63
210	21ME4115	21P10378	Master of Technology	in Machine Design	Dipak Kumar Jala	M	8.14
211	21ME4202	21P10047	Master of Technology	in Thermal Engineering	Shantanu Prasad Thakar	M	8.78
212	21ME4203	21P10050	Master of Technology	in Thermal Engineering	Prakhar Rai	M	8.63
213	21ME4204	21P10126	Master of Technology	in Thermal Engineering	Kumar Shubhanshu	M	9.16
214	21ME4205	21P10136	Master of Technology	in Thermal Engineering	Sohom Ghosh	M	8.49
215	21ME4206	21P10138	Master of Technology	in Thermal Engineering	Ritwik Kumar	M	9.21
216	21ME4207	21P10167	Master of Technology	in Thermal Engineering	Shweta Bhardwaj	M	8.79
217	21ME4208	21P10206	Master of Technology	in Thermal Engineering	Rakshith T R	M	9.05
218	21ME4209	21P10229	Master of Technology	in Thermal Engineering	Puja Bezbaruah	M	8.99
219	21ME4210	21P10277	Master of Technology	in Thermal Engineering	Rupayan Roy	M	8.56
220	21ME4211	21P10326	Master of Technology	in Thermal Engineering	Jinmay Kalita	M	9.22
221	21ME4212	21P10329	Master of Technology	in Thermal Engineering	Sourov Ghosh		8.73
222	21ME4213	21P10365	Master of Technology	in Thermal Engineering	Abhijith C R	M	8.74
223	21ME4214	21P10303	3	• •	Saptarshi Das	M	9.18
223	21ME4302	21P10371 21P10070	Master of Technology  Master of Technology	in Thermal Engineering in Fluid Mechanics and Heat Transfer	Monalisa Mondal	M	7.88
225	21ME4302 21ME4303	21P10070 21P10072	Master of Technology	in Fluid Mechanics and Heat Transfer	Tharuneswar Reddy Mukka	M	8.52
226	21ME4303	21P10072	,	in Fluid Mechanics and Heat Transfer	· · · · · · · · · · · · · · · · · · ·	M	
226 227	21ME4304 21ME4305	21P10149 21P10208	Master of Technology	in Fluid Mechanics and Heat Transfer	Bahuroju Dileep Sadasivuni Raghu Karthik	M	8.64 9.15
227			Master of Technology	in Fluid Mechanics and Heat Transfer	-	F	
228	21ME4307 21ME4308	21P10397 21P10398	Master of Technology		Arnab Majee Protyush Kumar Mohanta	M	7.22
230	21ME4308 21ME4309	21P10398 21P10399	Master of Technology	in Fluid Mechanics and Heat Transfer	•	F	9.05
			Master of Technology	in Fluid Mechanics and Heat Transfer	Bijayalaxmi Mangaraj	M	8.55
231	21ME4310	21P10403	Master of Technology	in Fluid Mechanics and Heat Transfer	Anirban Mondal	M	7.52
232	21ME4311	21P10405	Master of Technology	in Fluid Mechanics and Heat Transfer	Arkya Gupta	M	8.04
233	21ME4312	21P10414	Master of Technology	in Fluid Mechanics and Heat Transfer	Abhishek Kumar Thakur	M	8.40
234 235	21ME4314 21MM4101	21P10423 21P10060	Master of Technology  Master of Technology	in Fluid Mechanics and Heat Transfer in Metallurgy and Materials Technology	Amiruzzahan Mondal Arindam Halder	M	8.63
			-			M	
236	21MM4102	21P10204	Master of Technology	in Metallurgy and Materials Technology	Sayantan Nandy	М	9.14
237	21MM4104	21P10304	Master of Technology	in Metallurgy and Materials Technology	Moumita Kundu	F	8.9

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LIST OF DEGREE RECIPIENTS - POST GRADUATE STUDIES

19<sup>TH</sup> CONVOCATION

SI.	Roll No.	Reg. No.	Program	Specialization	Name	Gender	FINAL
No.	Non No.	neg. No.	- Togram	Specialization	Nume	Gender	CGPA
238	21MM4106	21P10407	Master of Technology	in Metallurgy and Materials Technology	Utkarshita Kaushal	F	8.82
239	21MM4107	21P10415	Master of Technology	in Metallurgy and Materials Technology	Rohit Kumar Yadav	М	8.68
240	21PH4101	21P10107	Master of Technology	in Advanced Materials Science and Technology	Arindam Majhi	М	8.89
241	21PH4102	21P10223	Master of Technology	in Advanced Materials Science and Technology	Mayukh Mandal	М	9.34
242	21PH4104	21P10385	Master of Technology	in Advanced Materials Science and Technology	Bholanath Maji	М	8.86
243	21PH4105	21P10413	Master of Technology	in Advanced Materials Science and Technology	Sumitro Dey	М	9.24
244	21BT4502	21P20093	Master of Science	in Life Sciences	Kirti Jyoti	F	8.39
245	21BT4503	21P20103	Master of Science	in Life Sciences	Saborni Biswas	F	9.13
246	21BT4504	21P20128	Master of Science	in Life Sciences	Bidisha Chakraborty	F	9.19
247	21BT4505	21P20133	Master of Science	in Life Sciences	Saurav Bonik	М	8.23
248	21BT4506	21P20141	Master of Science	in Life Sciences	Paramartha Banerjee	М	8.77
249	21BT4508	21P20185	Master of Science	in Life Sciences	Apurva Srivastava	F	8.00
250	21BT4510	21P20196	Master of Science	in Life Sciences	Sambit Mandi	M	7.89
251	21BT4511	21P20219	Master of Science	in Life Sciences	Ananya Ayaskant	M	8.98
252	21BT4512	21P20338	Master of Science	in Life Sciences	Preetham S Kumar	M	8.21
253	21BT4514	21P20375	Master of Science	in Life Sciences	Mohammad Ammar Yasir	M	8.20
254	21CY4501	21P20061	Master of Science	in Chemistry	MD Munzirul Islam	M	9.31
255	21CY4502	21P20127	Master of Science	in Chemistry	Monimala Das	F	8.18
256	21CY4503	21P20151	Master of Science	in Chemistry	Swastik Dash		8.71
257	21CY4503	21P20151 21P20153	Master of Science	in Chemistry		M	
				·	Shradhaswarupa Biswal	F	9.26
258	21CY4505	21P20186	Master of Science	in Chemistry	Rahi Mahato	F	8.58
259	21CY4506	21P20191	Master of Science	in Chemistry	Sneha Chandra	F	9.22
260	21CY4507	21P20194	Master of Science	in Chemistry	Jangyeswar Bhutia	M	8.75
261	21CY4508	21P20199	Master of Science	in Chemistry	Koushik Barman	M	8.52
262	21CY4509	21P20203	Master of Science	in Chemistry	Joydeep Ray	M	8.56
263	21CY4510	21P20211	Master of Science	in Chemistry	Sunanda Maji	F	8.71
264	21CY4513	21P20230	Master of Science	in Chemistry	Ayush Kumar Jha	M	8.60
265	21CY4514	21P20233	Master of Science	in Chemistry	Sayan Khamaru	М	8.75
266	21CY4515	21P20234	Master of Science	in Chemistry	Omprakash Meher	М	9.10
267	21CY4516	21P20237	Master of Science	in Chemistry	Tanima Sahoo	F	8.90
268	21CY4517	21P20249	Master of Science	in Chemistry	Karishma	F	9.00
269	21CY4519	21P20265	Master of Science	in Chemistry	Sanjana Banerjee	F	8.82
270	21CY4520	21P20284	Master of Science	in Chemistry	Pankaj Prajapati	М	8.30
271	21CY4521	21P20288	Master of Science	in Chemistry	Ritwick Mallick	М	8.56
272	21CY4522	21P20294	Master of Science	in Chemistry	Avishek Gangopadhyay	М	8.79
273	21CY4523	21P20305	Master of Science	in Chemistry	Soumya Ranjana Sahoo	М	8.61
274	21CY4524	21P20330	Master of Science	in Chemistry	Sneha Mridha	F	8.93
275	21ES4501	21P20111	Master of Science	in Applied Geology and Geoinformatics	Rajesh Satpathy	М	7.76
276	21ES4502	21P20115	Master of Science	in Applied Geology and Geoinformatics	Sukalyan Roy	М	7.57
277	21ES4503	21P20116	Master of Science	in Applied Geology and Geoinformatics	Sushree Suman	F	8.20
278	21ES4504	21P20134	Master of Science	in Applied Geology and Geoinformatics	Chandan Kumar Das	М	7.75
279	21ES4505	21P20159	Master of Science	in Applied Geology and Geoinformatics	Pratilipi Beura	F	7.61
280	21ES4507	21P20198	Master of Science	in Applied Geology and Geoinformatics	Dibya Ranjan Sahoo	М	7.47

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LIST OF DEGREE RECIPIENTS - POST GRADUATE STUDIES  ${\bf 19}^{\rm TH}$  CONVOCATION

SI. No.	Roll No.	Reg. No.	Program	Specialization	Name	Gender	FINAL CGPA
281	21ES4508	21P20235	Master of Science	in Applied Geology and Geoinformatics	Abhilasha Gogoi	F	8.29
282	21ES4509	21P20242	Master of Science	in Applied Geology and Geoinformatics	Bindusmita Sahoo	F	8.10
283	21ES4511	21P20251	Master of Science	in Applied Geology and Geoinformatics	Dipti Agrawal	F	8.02
284	21ES4512	21P20256	Master of Science	in Applied Geology and Geoinformatics	Sushrita Dutta	F	8.94
285	21ES4513	21P20260	Master of Science	in Applied Geology and Geoinformatics	Shreyasi Mitra	F	8.68
286	21ES4515	21P20264	Master of Science	in Applied Geology and Geoinformatics	Sandipan Roy	М	7.01
287	21ES4516	21P20267	Master of Science	in Applied Geology and Geoinformatics	Sukanya Bhattacharya	F	8.26
288	21ES4517	21P20272	Master of Science	in Applied Geology and Geoinformatics	Adarsh Chandra Pati	М	7.34
289	21ES4518	21P20291	Master of Science	in Applied Geology and Geoinformatics	Hiranmayee Samal	F	7.48
290	21ES4519	21P20303	Master of Science	in Applied Geology and Geoinformatics	Amit Buda	М	6.92
291	21MA4501	21P20058	Master of Science	in Mathematics	Rudra Roy	М	9.20
292	21MA4502	21P20080	Master of Science	in Mathematics	Avijit Das	М	7.09
293	21MA4503	21P20081	Master of Science	in Mathematics	Sourav Panja	М	8.20
294	21MA4505	21P20090	Master of Science	in Mathematics	Miku Naik	М	8.28
295	21MA4506	21P20099	Master of Science	in Mathematics	Musharaf Hossain	М	8.63
296	21MA4507	21P20147	Master of Science	in Mathematics	Sujayan Gupta	М	8.46
297	21MA4508	21P20150	Master of Science	in Mathematics	Partha Chowdhury	М	7.54
298	21MA4509	21P20174	Master of Science	in Mathematics	Sanskriti Kumari	F	8.39
299	21MA4510	21P20182	Master of Science	in Mathematics	Angshuman Mahata	М	8.41
300	21MA4511	21P20201	Master of Science	in Mathematics	Sourav Patra	М	8.39
301	21MA4513	21P20205	Master of Science	in Mathematics	Subham Pal	М	7.98
302	21MA4514	21P20218	Master of Science	in Mathematics	Akshit Sharma	М	9.01
303	21MA4515	21P20254	Master of Science	in Mathematics	Subham Das	М	8.18
304	21MA4516	21P20255	Master of Science	in Mathematics	Manoj Kumar	М	8.73
305	21MA4517	21P20279	Master of Science	in Mathematics	Tanusree Mondal	F	8.57
306	21MA4518	21P20310	Master of Science	in Mathematics	Himanshu Sarkar	М	7.42
307	21MA4519	21P20311	Master of Science	in Mathematics	Baisakhi Pal	F	8.50
308	21MA4520	21P20327	Master of Science	in Mathematics	Niraj Kumar	М	8.00
309	21MA4521	21P20333	Master of Science	in Mathematics	Beauty Bhakta	F	8.32
310	21MA4522	21P20350	Master of Science	in Mathematics	Shaesta Azim	F	9.06
311	21MA4523	21P20380	Master of Science	in Mathematics	Girish Chandra Pradhan	М	7.99
312	21MA4524	21P20417	Master of Science	in Mathematics	Sathi Gharui	F	7.71
313	21PH4502	21P20101	Master of Science	in Physics	Mahe Taiba Hussain	F	8.16
314	21PH4503	21P20124	Master of Science	in Physics	Susanta Mandal	M	8.04
315	21PH4504	21P20125	Master of Science	in Physics	Tufan Mondal	М	7.80
316	21PH4505	21P20137	Master of Science	in Physics	Sayan Chakraborty	М	7.57
317	21PH4506	21P20144	Master of Science	in Physics	Soumyajyoti Kundu	М	9.12
318	21PH4507	21P20168	Master of Science	in Physics	Pratik Nandi	М	7.71
319	21PH4508	21P20175	Master of Science	in Physics	Debajyoti Roy	М	8.32
320	21PH4509	21P20176	Master of Science	in Physics	Ankita Palei	F	8.24
321	21PH4510	21P20179	Master of Science	in Physics	Saparja Roy	F	7.83
322	21PH4511	21P20222	Master of Science	in Physics	Prince Kumar	М	7.81
323	21PH4512	21P20232	Master of Science	in Physics	Pinaki Chatterjee	М	9.36
324	21PH4513	21P20244	Master of Science	in Physics	Chandan Kumar Nayak	М	8.16
325	21PH4514	21P20257	Master of Science	in Physics	Santanu Maity	М	8.14
326	21PH4515	21P20261	Master of Science	in Physics	Sohini Patra	F	8.86

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Date: 09/10/2023 NITDGP/AY2022-23/19th Convo/PG/7 Dean (Academic Courses)



LIST OF DEGREE RECIPIENTS - POST GRADUATE STUDIES  ${\bf 19}^{\rm TH}$  CONVOCATION

SI. No.	Roll No.	Reg. No.	Program	Specialization	Name	Gender	FINAL CGPA
327	21PH4519	21P20312	Master of Science	in Physics	Sucharita Sen	F	9.29
328	21PH4520	21P20320	Master of Science	in Physics	Srimanta Das	М	9.10
329	21PH4522	21P20368	Master of Science	in Physics	Ishee Prasad Kar	М	8.03
330	21MB4001	21P40001	Master of Business Administrations	(Major: Marketing, Minor: Systems and Operations Management)	Swagato Kishor Paul	М	7.84
331	21MB4005	21P40005	Master of Business Administrations	(Major: Human Resource Management and Organisational Behaviour, Minor: Systems and Operations Management)	Pranjali Nina Tayade	F	7.51
332	21MB4006	21P40006	Master of Business Administrations	(Major: Finance, Minor: Systems and Operations Management)	Bishal Das	М	8.43
333	21MB4008	21P40009	Master of Business Administrations	(Major: Systems and Operations Management, Minor: Marketing)	Koustav Roy	М	8.56
334	21MB4009	21P40010	Master of Business Administrations	(Major: Finance, Minor: Human Resource Management and Organisational Behaviour)	Divya Kumari	F	7.98
335	21MB4010	21P40011	Master of Business Administrations	(Major: Human Resource Management and Organisational Behaviour, Minor: Marketing)	Devleena Dey	F	7.88
336	21MB4011	21P40012	Master of Business Administrations	(Major: Human Resource Management and Organisational Behaviour, Minor: Systems and Operations Management)	Syed Sarah Tasnim	F	7.67
337	21MB4012	21P40013	Master of Business Administrations	(Major: Marketing, Minor: Finance)	Seema Yadav	F	7.13
338	21MB4013	21P40014	Master of Business Administrations	(Major: Human Resource Management and Organisational Behaviour, Minor: Marketing)	Shaniya Sheetal	F	7.59
339	21MB4014	21P40015	Master of Business Administrations	(Major: Human Resource Management and Organisational Behaviour, Minor: Marketing)	Ummay Bushra Khanam	F	8.13
340	21MB4015	21P40016	Master of Business Administrations	(Major: Finance, Minor: Systems and Operations Management)	Sohini Sen	F	8.08
341	21MB4016	21P40017	Master of Business Administrations	(Major: Marketing, Minor: Systems and Operations Management)	Bholanath Nandi	М	7.25
342	21MB4017	21P40018	Master of Business Administrations	(Major: Marketing, Minor: Systems and Operations Management)	Sandip Ray	М	7.91
343	21MB4020	21P40024	Master of Business Administrations	(Major: Finance, Minor: Systems and Operations Management)	Parisha Rana	F	7.46
344	21MB4021	21P40027	Master of Business Administrations	(Major: Marketing, Minor: Finance)	Arka Kundu	М	7.71
345	21MB4023	21P40030	Master of Business Administrations	(Major: Systems and Operations Management, Minor: Marketing)	Deep Kundu	М	7.78
346	21MB4025	21P40032	Master of Business Administrations	(Major: Human Resource Management and Organisational Behaviour, Minor: Marketing)	Saswati Satpathy	F	7.48
347	21HS4001	21P20007	Master of Social Work		Soumya Mukherjee	М	8.64
348	21HS4002	21P20020	Master of Social Work		Madhurima Baksi	F	8.60
349	21HS4004	21P20023	Master of Social Work		Aaradhyaa Boruah	F	9.06
350	21HS4005	21P20025	Master of Social Work		Shreyasee Kundu	F	9.32
351	21HS4006	21P20026	Master of Social Work		Durba Singha	F	8.12
352	21HS4007	21P20029	Master of Social Work		Atreyee Banerjee	F	9.08

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Date: 09/10/2023 NITDGP/AY2022-23/19th Convo/PG/8 Dean (Academic Courses)

#### **19TH CONVOCATION**

SL. NO.	Roll No.	Registration No.	Name of the Department	Name of the Student	Gender	Title of the Thesis	Date of Defense Seminar
1	17MA1103	NITD/PhD/MA/2018/01051	Mathematics	Sourav Mondal	М	Study of Some Graph Invariants and Their Applications	02.11.2022
2	15ME1107	NITD/PhD/ME/2017/00968	Mechanical Engineering	Praveen Sharma	М	Experimental and Numerical Study of Vibration and Stability Analysis of Rotating Shaft using Bearings and Lubricants	14.11.2022
3	14ECE1508	NITD/PhD/EC/2017/00894	Electronics and Communication Engineering	Anirban Chattopadhyay	М	Statistical signal processing based reconnaissance to explore the kinematics of Coronal Mass Ejection & its impact on Earth	14.11.2022
4	16CY1102	NITD/PhD/CY/2018/01000	Chemistry	Sanjoy Satpati	М	Anti-corrosive activity of Schiff bases involving biomolecules towards mild steel in hydrochloric acid medium	17.11.2022
5	16BT1102	NITD/PhD/BT/2018/01042	Biotechnology	Indrani Paul	F	Studies on bacterial delignification and biosurfactant production	12.12.2022
6	17PH1106	19RPH001	Physics	Swagata Biswas	F	Possible Signatures of New Physics in Rare Decays of b Hadrons in the Framework of Non-Universal Z' Model	04.01.2023
7	16BT1101	NITD/PhD/BT/2018/01031	Biotechnology	Priyanka Sarkar	F	Studies on biodegradation of 4-Nitrophenol by a bacterial consortium isolated from a pesticide contaminated agricultural soil	17.01.2023
8	12EE1510	20REE006	Electrical Engineering	Pullabhatla Srikanth	М	Integrated Intelligent System for Recognition and Location of Power Quality Problems in an Interconnected Power Systems	17.01.2023
9	15HS1504	NITD/PhD/HS/2016/00832	Humanities and Social Sciences	Gautam Mazumdar	М	Impact Assessment of Community Institution Model for promotion of Rural Micro Enterprises under NRLM Pilot Scheme- Start-Up Village Entrepreneurship Program (SVEP), India	20.01.2023
10	17CY1102	NITD/PhD/CY/2018/01068	Chemistry	Saikat Mishra	М	Biological Relevance and Reactivity of Cu(II/I) Complexes Supported by N,S Donor Ligands	27.01.2023
11	15CA1503	NITD/PhD/CS/2017/00969	Computer Science and Engineering	Pijush Kanti Dutta Pramanik	М	Sustainable Computing with Mobile Crowd Computing	30.01.2023
12	16PH1304	NITD/PhD/PH/2017/00844	Physics	Mahadeb Pal	М	Theoretical study of some properties of finite nuclei and core- crust transition density of neutron stars with finite range effective interaction	08.02.2023
13	18EE1501	20REE0016	Electrical Engineering	Mehebub Alam	М	Novel Algorithms of Line Outage Detection Using Synchrophasor Measurements	13.02.2023
14	16CE1302	NITD/PhD/CE/2017/00887	Civil Engineering	Shyamal Kumar Dutta Mazumdar	М	Performance Evaluation of the Compacted Lateritic Soil Amended with Bentonite and Fly Ash used as Composite Liner Material for Ash Pond Sites of Thermal Power Plant	13.02.2023
15	16EC1103A	NITD/PhD/EC/2018/00998	Electronics and Communication Engineering	Partha Das	М	Dielectric Engineering on GaN for High Electron Mobility Transistors	15.02.2023
16	16BT1301	NITD/PhD/BT/2018/01032	Biotechnology	Subhasree Majumdar	F	Studies on Bacterial Secondary Metabolites: Low-cost Production, Applications and Toxicity in Animal System	17.02.2023
17	16EC1101	NITD/PhD/EC/2018/01069	Electronics and Communication Engineering	Anjan Bandyopadhyay	М	Studies on Reconfigurable Multiband and Wideband Microwave Bandpass Filters	20.02.2023
18	18CH1101	20RCH004	Chemical Engineering	Sumona Show	F	Comparative Assessment of Ibuprofen Removal through Biosorption and Bioremediation Technique	20.02.2023
19	17EC1103	20REC013	Electronics and Communication Engineering	Argha Deep Paul	М	Resistive Memory Devices based on Al doped HfOx for Flexible Electronics Applications	21.02.2023
20	14ECE1514	NITD/PhD/EC/2016/00745	Electronics and Communication Engineering	Himangshu Pal	М	Natural Cellulosic Graphene: Synthesis, Characterization and Electro Chemistry Application	01.03.2023
21	17PH1102	NITD/PhD/PH/2018/01072	Physics	Tuli Chatterjee	F	Structural, microstructural and electrical characterizations of some metal-hydroxyapatite nanocomposites based bioceramics developed by chemical and green synthesis routes	29.03.2023
22	16CH1502	NITD/PhD/CH/2018/01009	Chemical Engineering	Anjali K. P.	F	Seaweed Mediated Synthesis of Nanoparticles: Its Characterization and Application	29.03.2023
23	12CSE1103	NITD/PhD/CS/2015/00672	Computer Science and Engineering	Deepa Naik	F	Studies in optical and wireless networks	06.04.2023
24	15HSS1103	NITD/PhD/HSS/2017/00855	Humanities and Social Sciences	Asoke Howlader	М	The Spectrum of Global Concerns in the Light of Glocalization: A Study in the Select Plays of Mahesh Dattani	11.04.2023
25	16ME1304	NITD/PhD/ME/2018/01029	Mechanical Engineering	Aman Arora	М	Development and Modelling of Low Pressure Actuated Pneumatic Artificial Muscle for Assistive Applications	12.04.2023
26	15CHE1507	NITD/PhD/CH/2015/00649	Chemical Engineering	M. J. Varghese	M	Removal of Organic Pollutants from Seawater using Solar Nano Photocatalysts	13.04.2023
27	18CE1510	20RCE057	Civil Engineering	Sudha Das Khan	F	Fuzzy Logic-based Condition Assessment and Ranking of Reinforced Concrete Bridges: A Study	19.04.2023
28	19MA1501	20RMA044	Mathematics	Prasanta Kumar Ghosh	M	Modelling of Some Green and Sustainable Supply Chain Problems under Different Payment Strategies	20.04.2023
29	15EE1502	NITD/PhD/EE/2016/00781	Electrical Engineering	Kingsuk Majumdar	М	Enhancement of ATC for Integrated Power System Incorporating UPFC and Renewable Energy Sources	20.04.2023
30	18PH1502	20RPH0024	Physics	Sanjib Mondal	М	Studies on metal nanoparticles covered Erbium doped TiO2 thin film based plasmonic Photodetectors	26.04.2023
31	13CHE1501	NITD/PhD/ChE/2015/00591	Chemical Engineering	Sabyasachi Pramanik	М	Adsorptive Removal of Cyanide and Phenol from Wastewater	26.04.2023

#### **19TH CONVOCATION**

SL. NO.	Roll No.	Registration No.	Name of the Department	Name of the Student	Gender	Title of the Thesis	Date of Defense Seminar
32	17MS1101	19RMS016	Management Studies	Sayan Gupta	М	A Comprehensive Soft-Computing Approach for Construction of Conservative Portfolio in Indian Equity Market	16.05.2023
33	16MS1302	NITD/PhD/MS/2017/00914	Management Studies	Sanjib Biswas	М	Empirical Inference of Investment Decision Making from Operations Research Context: An Insight of FMCG and Consumer Durable Sectors in India	24.05.2023
34	16MS1304	NITD/PhD/MS/2017/00966	Management Studies	Dipanita Deb	F	The Impact of Corporate Social Responsibility on the Financial Performance of Corporates: An International Evidence	24.05.2023
35	16EC1102	NITD/PhD/EC/2018/01011	Electronics and Communication Engineering	Sanjukta Mandal	F	Studies on Designing On-chip Antennas in Silicon IC for Short Range Communication	12.06.2023
36	17ME1102	NITD/PhD/ME/2018/01085	Mechanical Engineering	Bishwajit Sharma	М	Fluid Flow and Convective Heat Transfer past a Slotted Circular Cylinder	13.06.2023
37	16EC1102	NITD/PhD/EC/2018/01058	Electronics and Communication Engineering	Sujoy Mandal	М	Studies on Sideband Radiation Characteristics towards Improving Time-Modulated Antenna Array Performances	21.06.2023
38	17CH1103	NITD/PhD/CH/2018/01055	Chemical Engineering	Meenakshi Malhotra	F	Development of Sustainable Membrane-Based Technologies for Selenium Abatement Towards Reutilization from Aqueous System	23.06.2023
39	19CY1101	20RCY039	Chemistry	Aditya Suhasaria	М	Corrosion inhibition of mild steel in aqueous HCI medium by benzothiazole derivatives: structure reactivity correlation study	28.06.2023
40	17CS1101	NITD/PhD/CS/2018/01075	Computer Science and Engineering	Anindan Mondal	М	Hardware Trojan: Analysis of Attacks and Detection in the Context of Hardware Security	12.07.2023
41	19CY1501	20RCY069	Chemistry	Subhabrata Mabhai	М	Azo-linked CHEF-PET regulated 'turn-on' molecular probe for metal ion sensing	17.07.2023
42	17PH1107	19RPH008	Physics	Piyali Chatterjee	F	Bimetallic Oxide Nanostructures for Photoelectrochemical Water Splitting and Photocatalytic Dye Degradation	21.07.2023
43	12EE1101	NITD/PhD/EE/2013/00407	Electrical Engineering	Sambaran Ray	М	Performance Analysis and Assessment of Capacitance Requirement of Self-Excited Induction Generator	21.07.2023
44	17CS1102	NITD/PhD/CS/2018/01079	Computer Science and Engineering	Samriddhi Sarkar	F	Coalition Formation in Multi-agent Systems	04.08.2023
45	17PH1108	NITD/PhD/PH/2018/01071	Physics	Shubhadip Atta	М	Development and characterization of rare-earth doped ferrite- polymer nanocomposite films for dielectric and magneto- dielectric behaviour	11.08.2023
46	19CY1104	20RCY060	Chemistry	Saikat Mandal	М	Bioactivity and anticancer property of Pt(II) & Pd(II) complexes of different bidentate chelates: their DNA/BSA binding, molecular docking and theoretical aspects	01.09.2023
47	14EE1103	NITD/PhD/EE/2015/00661	Electrical Engineering	Biswaranjan Mishra	М	Novel Solution Approaches of Power Systems Static and Dynamic State Estimation with Optimal Placement of PMUs	18.09.2023
48	16CH1102	NITD/PhD/CH/2017/00924	Chemical Engineering	Payel Mondal	F	Ethanol Production from Waste Starchy Biomass and its Utilization	20.09.2023
49	17EE1104	19REE047	Electrical Engineering	Anitha Bhukya	F	Detection and Localization of Partial Discharge Sources in Air- insulated Substations using UHF Sensors	10.10.2023
50	15MME1105	NITD/PhD/MME/2017/00842	Metallurgical and Materials Engineering	Arvind Kumar Jaiswal	М	Low-Cost Synthesis and Characterization of Boron Nitride Reinforced Aluminium Based Metal Matrix Composite	03.11.2023
51	14CHE1502	NITD/PhD/ChE/2014/00539	Chemical Engineering	Tanushree Ghosh	F	Studies on Carbon dioxide Physisorption Behaviour of Zeolite Granules during Pneumatic Transport in Converging and Uniform Risers	28.11.2023
52	16MS1306	NITD/PhD/MS/2017/00987	Management Studies	Amrita Bhattacharya	F	An Investigation on the Retail Investor Behaviour in Urban West Bengal: Influence of Demographic Profile	05.12.2023
53	16MA1504	NITD/PhD/MA/2016/00827	Mathematics	Partha Parichha	М	Development of Effective Estimation Strategies for Population Parameters in Sample Surveys	06.12.2023

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SI No	Roll No	Reg. No.	Awards	to	in recognition of being First in	in	FINAL CGPA
1	19BT8005	19U10247	Institute Gold Medal	Chowla Venkata Baby Shalini	Bachelor of Technology in	Biotechnology	8.85
2	19CE8043	19U10567	Institute Gold Medal	Meenakshi Harikumar	Bachelor of Technology in	Civil Engineering	9.19
3	19CH8005	19U10046	Institute Gold Medal	Rohit Ray	Bachelor of Technology in	Chemical Engineering	9.32
4	19CS8037	19U10120	Institute Gold Medal	Abha Jha	Bachelor of Technology in	Computer Science and Engineering	9.72
5	19EC8039	19U10330	Institute Gold Medal	Mukesh Barnwal	Bachelor of Technology in	Electronics and Communication Engineering	9.26
6	19EE8068	19U10566	Institute Gold Medal	Sohini Bhattacharya	Bachelor of Technology in	Electrical Engineering	9.58
7	19ME8111	19U10484	Institute Gold Medal	Sukrity Ghosh	Bachelor of Technology in	Mechanical Engineering	9.38
8	19MM8029	19U10517	Institute Gold Medal	Ramyanil Raha	Bachelor of Technology in	Metallurgical and Materials Engineering	9.22

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Date: 09/10/2023

# NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

#### **INDIA**

#### 19TH CONVOCATION

#### LIST OF DUAL DEGREE AND INTEGRATED M.Sc INSTITUTE GOLD MEDAL RECIPIENTS

Sl No	Roll No	Reg. No.	Awards	to	in recognition of being First in	in	Final CGPA
1	18BT1004	18U10669	Institute Gold Medal	Sauma Suvra Majumdar	Master of Technology (under Dual Degree program) in	Biotechnology	8.79
2	18CH1002	18U10097	Institute Gold Medal	Swagata Laxmi Sengupta	Little Co. Laction - Dy Co.	Chemical Engineering	8.56
3	18CY1004	18U10508	Institute Gold Medal	Kasu Jyothirlatha Venkata Nageswari	Integrated Master of Science in	Chemistry	8.68

E-2

Date: Dean (Academic Courses)

# 19<sup>TH</sup> CONVOCATION

#### LIST OF INSTITUTE GOLD MEDAL RECIPIENTS OF POST GRADUATE PROGRAMME

SI. No.	Regn. No.	Roll No.	Awards	to	for securing the First position in	in	Final CGPA
1	21P10190	21BT4109	Institute Gold Medal	Sanjukta Banerjee	Master of Technology	Biotechnology	9.41
2	21P10071	21CE4104	Institute Gold Medal	Kumbla Anupa Nayak	Master of Technology	Structural Engineering	9.35
3	21P10082	21CE4205	Institute Gold Medal	Shalu Roy	Master of Technology	Geotechnical Engineering	9.1
4	21P10412	21CH4105	Institute Gold Medal	Aratrika Roy Chowdhury	Master of Technology	Chemical Engineering	9.75
5	21P10392	21CH4202	Institute Gold Medal	Asha Rani Patra	Master of Technology	Energy Resources and Sustainable Environmental Engineering	9.26
6	21P10078	21CS4105	Institute Gold Medal	MD. Tousin Akhter	Master of Technology	Computer Science and Engineering	9.32
7	21P10065	21EC4102	Institute Gold Medal	Vedula Kiran Bharadwaj	Master of Technology	Telecommunication Engineering	9.57
8	21P10214	21EC4208	Institute Gold Medal	Mohit Rawat	Master of Technology	Microelectronics and VLSI	9.77
9	21P10178	21EE4107	Institute Gold Medal	Ishan Chakraborty	Master of Technology	Power Systems	9.14
10	21P10383	21EE4219	Institute Gold Medal	Prarambhik Sur	Master of Technology	Power Electronics and Machine Drives	9.52
11	21P10416	21EE4310	Institute Gold Medal	Mirza Seraj Baig	Master of Technology	Instrumentation and Control	9.33
12	21P10373	21ES4115	Institute Gold Medal	Pinaki Hazra	Master of Technology	Environmental Science and Technology	9.03
13	21P10336	21MA4109	Institute Gold Medal	Ishani Ray	Master of Technology	Operations Research	9.69
14	21P10316	21ME4112	Institute Gold Medal	Dibyendu Khan	Master of Technology	Machine Design	8.79

Date: 09/10/2023

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Date: 09/10/2023

# NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

# 19<sup>TH</sup> CONVOCATION

#### LIST OF INSTITUTE GOLD MEDAL RECIPIENTS OF POST GRADUATE PROGRAMME

SI. No.	Regn. No.	Roll No.	Awards	to	for securing the First position in	in	Final CGPA
15	21P10326	21ME4211	Institute Gold Medal	Jinmay Kalita	Master of Technology	Thermal Engineering	9.22
16	21P10208	21ME4305	Institute Gold Medal	Sadasivuni Raghu Karthik	Master of Technology	Fluid Mechanics and Heat Transfer	9.15
17	21P10204	21MM4102	Institute Gold Medal	Sayantan Nandy	Master of Technology	Metallurgy and Materials Technology	9.14
18	21F10223	21PH4102	Institute Gold Medal	Mayukh Mandal	Master of Technology	Advanced Materials Science and Technology	9.34
19	21P20128	21BT4504	Institute Gold Medal	Bidisha Chakraborty	Master of Science	Life Sciences	9.19
20	21P20061	21CY4501	Institute Gold Medal	Md Munzirul Islam	Master of Science	Chemistry	9.31
21	21P20256	21ES4512	Institute Gold Medal	Sushrita Dutta	Master of Science	Applied Geology and Geoinformatics	8.94
22	21P20058	21MA4501	Institute Gold Medal	Rudra Roy	Master of Science	Mathematics	9.2
23	21P20232	21PH4512	Institute Gold Medal	Pinaki Chatterjee	Master of Science	Physics	9.36
24	21P40009	21MB4008	Institute Gold Medal	Koustav Roy	Master of Business Administrations		8.56
25	21P20025	21HS4005	Institute Gold Medal	Shreyasee Kundu	Master of Social Work	V)	9.32



#### 19TH CONVOCATION

#### LIST OF ENDOWMENT GOLD MEDAL RECIPIENTS

SI No	Roll No	Reg. No.	hereby awards	to		Final CGPA
1	19CS8037	19U10120	D. V. Sitabai Memorial Gold Medal	Abha Jha	for securing highest CGPA in Bachelor of Technology in the academic session ending in June 2023	9.72
2	19CS8037	19U10120	Parpatidevi Chandumal Memorial Gold Medal	Abha Jha	for scholastic excellence amount girl students in Bachelor of Technology in the academic session ending in June 2023	9.72
3	19MM8029	19U10517	Smt. Tarulata Sinha Memorial Gold Medal	Ramyanil Raha	for securing highest CGPA in Bachelor of Technology in Metallurgical and Materials Engineering in the academic session ending in June 2023	9,22
4	21P20232	21PH4512	Prof. M. S. Sinha Memorial Gold Medal (highest CGPA in Physics)	Pinaki Chatterjee	for securing highest CGPA in Master of Science in Physics in the academic session ending in June 2023	9.36

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Date: 09/10/2023

Dean (Academic Courses)



Date: 09/10/2023

# NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

#### 19TH CONVOCATION

#### RECIPIENTS OF BEST PROJECTS

L	GENUT 2 GRADIN					
	Sl No	Roll No	Reg. No.	hereby awards	to	Title of the Project
	1	19CE8012	1190110239	Best Project in Bachelor of Technology Program	Sagnik Datta	A Comparative Study On The Performance of Acoustic Emission Sensors for Damage Localization In Rail Section Through the Development of Artificial Intelligence Model
	2	21PH4105	121P10413	Best Project in Master of Technology Program	Sumitro Dey	Target-based Drug Discovery by Structural Modification of Nimesulide: Computational Exploration on the Inflammation Pathway



राष्ट्रीय प्रौद्योगिकी संस्थान दुर्गापुर

NATIONAL ÎNSTITUTE OF TECHNOLOGY DURGAPUR MAHATMA GANDHI AVENUE, DURGAPUR-713209

West Bengal, INDIA, www.nitdgp.ac.in

(An Autonomous Institution of the Govt. of India under Ministry of Education (Shiksha Mantralaya)

No.: NITD/Estt./Faculty-Roster/2023

Dated: - 22nd December, 2023

#### NOTE SHEET

Sub: Faculty Reservation Roster as maintained by the committee reg.

Enclosed please find the minutes dated 19.12.2023 of the meeting of the committee for maintenance of post based Reservation Roster for Faculty members of the Institute. The committee has finalized the maintenance of existing Reservation Roster following the guidelines of Hon'ble Supreme Court of India and DoPT, Government of India as 200 points Roster, 14 Points Roster, 13 Points Roster, Reservation in Teachers' Cadre, Act-2019 and Faculty Recruitment Rules as recommended by the Oversight Committee under the chairmanship of Dean (Faculty Welfare) along with Prof. M.K. Agrawal, Ex-Registrar, NIT Jamshedpur as an external expert. After maintenance of existing Roster, 43 Cadrewise faculty vacant positions have come out as on 31.12.2023 for which the details is placed under Flag-B.

Flag-B

Flag -A

The said Reservation Roster as maintained by the committee along with 43 vacant faculty positions may be placed to the forthcoming BoG meeting for approval and further necessary action.

Submitted for kind perusal and decision please.

To be place in meat 204.00 a agenda il un.



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# NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

MAHATMA GANDHI AVENUE, DURGAPUR-713209

West Bengal, INDIA, www.nitdgp.ac.in

(An Autonomous Institution of the Govt. of India under Ministry of Education (Shiksha Mantralaya)

No. NITD/Estt./Faculty-Roster/2023

Dated: 19th December, 2023

Sub: Minutes of the meeting of the committee for maintenance of post based Reservation Roster for faculty members.

For maintenance of post based existing Reservation Roster for faculty members of the Institute, a meeting is held at 3.30 P.M. on 18th & 19th December, 2023 at the Meeting Room of S.N. Roy Building of the Institute. The said Roster is maintained on the basis of 72 vacant positions which has been approved by BoG in its 62Meeting (Item No. 62.06) as placed under Flag-A, B & C. The following members are present in the said meeting.

During maintenance of existing Reservation Roster for faculty members, the following instructions of Government of India are being followed:

- O.M. No. 36012/2/96- SL. No.30(9) dated 2<sup>nd</sup> July, 1997 issued by DoP&T, Govt. of India based on the judgment of Supreme Court of India.
- 2. Copy of Reservation Register (200 points) of faculty members as on 26.09.2022.
- 3. Roster for direct recruitment up to 13 points.
- 4. Reservation Registers and Roster Registers- Chapter-5.
- 5. O.M. No. 36039/1/2019-Estt(Res) of DoP&T, Govt. of India regarding Liaison Officer for reservation of SC/ST/OBC/PwD/EWS and Ex-servicemen.
- 6. Letter of erstwhile MHRD dated 16.04.2019 No. F.No.33-9/2011-TS.III for implementation of Faculty Recruitment Rules as recommended by Oversight Committee.
- 7. Restructuring of Faculty Cadres in NITs, Letter No. F.5-16/2008-TS.III dated 17.05.2012 issued by erstwhile MHRD, Govt. of India.
- 8. Faculty Roster approved by BoG in its 62Meeting (Item No. 62.06).

Prof. P. Kumbhakar, Prof.(HAG), Deptt. of Physics & Dean(AR)

Prof. K.C. Ghanta, Prof. Deptt. of Chemical Engg.

Dr. D.R. Kisku, Associate Prof Deptt. of CSE & Liaison Officer, SC/ST ST Cell && PWD, NIT Durgapur.

Dr. Kazy Sufia Khannam, Associate Prof

Deptt. of Biotechnology

Prof. M.K. Agrawal

Ex-Registrar, NIT Jamshedpur

umar, Joint Registrar (Estt.)

& Liaison Officer, ESM

Prof.Suchismita Roy

Prof., Deptt. of CSE & Dean (FW)

# NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR MAHATMA GANDHI AVENUE, DURGAPUR-713209

# Cadre-wise vacancy in faculty posts as per the reservation roaster (31.12.2023)

Sl.No.	Cadre	UR	SC	ST	OBC	EWS	Total
1	Assistant Professor	12	5	3	10	7	37
2	Associate Professor	4	0	0	1	0	5
3	Professor	1	0	0	0	0	1
	Total	17	5	3	11	7	43

### Cadre-wise In-position faculty members as on 22.12.2023

Sl.No.	Cadre	UR	SC	ST	OBC	PWD	EWS	Total
1	Assistant Professor	62	24	2	19	2	0	109
2	Associate Professor	50	6	1	12	1	0	70
3	Professor	51	7	0	4	1	0	63
	Total	163	37	3	35	4	0	242



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	RESERVATION ROSTER REGISTER (200 point)	STER REGIST	ER (200 p		AS ON DECEMBER 31ST,	31ST, 20	2023		
	1. NAME OF THE CADRE: PROFESSOR (PAY LEVEL: 14A/15)	PROFESSOR (F	AY LEVEL:	14A/15)					
	2. CADRE STRENGTH: FLEXIBLE	XIBLE							
	3. METHOD OF RECRUITMENT:		RECRUITM	DIRECT RECRUITMENT ON ALL INDIA BASIS BY OPEN	NDIA BASIS	BY OPEN C	COMPETITION*	*NOI	
	4. PERCENTAGE OF RESERVATION PRESCRIBED: SCs 15%	RVATION PRE	CRIBED: SC		STs 7.5%; OBCs 27%; EWSs 10%	%; EWSs 1	%0		
UR or reserved for SCs/ STs/ OBCs/ EWSs	for sal	Date of Birth	Department	Current Position	Date of Appointment	Whether GENISC/ST/ OBC/EWS	Filled as UR/ SCs/ STs/ OBCs/EWSs	Signature of appointing authority or other authorised officer	Remarks
LR.	Vacated	02/01/1957	Elect. Engg.	Professor(H AG)	10/02/2009	GEN	UR		Prof. Saradindu Ghosh Postion vacated as Prof. Saradindu Ghosh superannuated on 31/01/2022
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SC-1									
OBC-2	2								
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ST-1									
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Roster Point No.	17	18	61	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43

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Roster Point No.	44	45	46	47	48	49	50	51	52	53	54	55	99	57	58	59	09	19	62	63	64	65	99	19	89	69	70	7.1

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Roster Point No.	72	73	74	75	9/	77	78	79	80	81	82	83	84	85	98	87	88	68	06	16	92	93	94	95	96	67	86	66

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Roster Point No.	100	101	102	103	104	105	901	107	108	109	110	1111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127

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Roster Point No. 1	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155

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UR or reserved for SCs/ STs/ OBCs/ EWSs	OBC-42	NR	UR	UR	ST-12	OBC-43	SC-24	OBC-44	EWS-16	NN	UR	OBC-45	SC-25	NR	EWS-17	OC-46	UR	NR	SC-26	ST-13	OBC-47	NR	OBC-48	NR	SC-27	EWS-18	OBC-49	NR
Roster Point No. 1	156	157	158	159	160	191	162	163	164	165	991	167	891	691	170	171	172	173	174	175	176	177	178	179	180	181	182	183

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Roster Point No. 1	184	185	186	187	188	189	190	161	192	193	194	195	961	197	198	199	200

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		NATIONAL	INSTITUTE (	NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR	GY DURGAP	UR			
	RESERVATION ROSTER REGIST	STER REGIS	ER (200	point) AS ON [	ON DECEMBER	31ST, 2023	13		
	1. NAME OF THE CADRE; ASSOCIATE PRO	SSOCIATE PR	OFESSOR (P	FESSOR (PAY LEVEL: 13A)					
	2. CADRE STRENGTH: FLEXIBLE	(IBLE							
	3. METHOD OF RECRUITMENT: DIRECT	IENT: DIRECT		RECRUITMENT ON ALL INDIA BASIS BY OPEN COMPETITION	DIA BASIS BY	Y OPEN CO	MPETITIO	Z	
	4. PERCENTAGE OF RESERVATION PRESC	VATION PRE	SCRIBED: SCs	s 15%; STs 7.5%; OBCs 27%; EWSs 10%	%; OBCs 27%	; EWSs 109	%		
UR or reserved for SCs/ STs/ OBCs/ EWSs	Name	Date of Birth	Department	Current Position	Date of Appointment	Whether GEN/SC/ST/ OBC/EWS	Filled as UR/ SCs/ STs/ OBCs/EWSs	Signature of appointing authority or other authorised	Remarks
UR	Dr. Paresh Nath Chatterjee	25/01/1983	Chemistry	Associate	03/08/2022	GEN	UR-1	OIIICEL	
UR	Vacant			Professor					
NR	Vacant								
OBC-1	Vacant								
UR	Vacant								
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SC-1	Dr. Sujan Kumar Saha	23/01/1982	Comp.Sc. & Engg.	Associate Professor	19/09/2022	SC	SC-1		
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Roster Point No.	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	F-13

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Roster Point No.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	09	61	62	63	64	65	99	29	89	69	70	71	72	73	F-14

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Point No.	74	75	76	77	78	79	80	81	82	83	84	85	98	87	888	89	06	91	92	93	94	95	96	97	98	66	100	101	102

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Roster Point No.	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	6

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Roster Point No.	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	

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Roster Point No.	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	

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Roster Point No.	190	191	192	193	194	195	196	197	198	199	200	

		NATIONAL	NATIONAL INSTITUTE OF TECHNOLOGY DUF	F TECHNOLOG	CHNOLOGY DURGAPUR	R			
	RESERVATION ROSTER REGISTER (200 point)	STER REGIS	TER (200 pc	-	AS ON DECEMBER 31ST, 2023	15T, 202	2		
	1. NAME OF THE CADR: ASSISTANT PROFESSOR (PAY LEV	SISTANT PRO	FESSOR (PAY	( LEVEL: 10/11/12)	12)				
	2. CADRE STRENGTH: FLEXIBLE	IBLE				7			
	3. METHOD OF RECRUITMENT: DIRECT RECRUITMENT	ENT: DIRECT	RECRUITME		ON ALL INDIA BASIS BY OPEN COMPETITION	OPEN CO	MPETITIO	Z	
	4. PERCENTAGE OF RESERVATION PRESCRIBED: SCs 15%; STs 7.5%; OBCs 27%; EWSs 10%	/ATION PRES	CRIBED: SCs	15%; STs 7.5%,	; OBCs 27%;	EWSs 109	9		
UR or reserved for SCs/ STs/ OBCs/ EWSs	Name Ss	Date of Birth	Department	Current Position	Date of Appointment	Whether GENISC/ST/ OBC/EWS	Filled as UR/ SCs/ STs/ OBCs/EWSs	Signature of appointing authority or other authorised officer	Remarks
NR.	Dr. Angshu Jajodia	01/04/1988	Hum. & So.Sc	Assistant Professor Gr-II	27/06/2022	GEN (PWD)	GEN	UR-1 (PWD)-1	
UR	Dr. (Ms.) Shyantani Maiti	15/08/1988	Comp.Sc. & Engg.	Assistant Professor Gr-II	01/07/2022	GEN	GEN	UR-2	
N.	Dr. (Ms.) Rinki Chokhani	15/08/1980	Hum. & So.Sc	Assistant Professor Gr-II	04/07/2022	GEN (PWD)	GEN	UR -3 (PWD)-2	
0BC-1	Dr. Krishnendu Pal	03/04/1990 Chemistry	Chemistry	Assistant Professor Gr-II	27/06/2022	OBC	OBC	OBC-1	
R.	Dr. Suman Samui	04/10/1989	E.C.E	Assistant Professor Gr-II	07/07/2022	GEN	GEN	UR-4	
R.	Vacated	9861/90/61	Earth & Env. Std.	Assistant Professor Gr-11	08/07/2022	GEN	GEN	UR-5	Dr. (Ms.) Shreya Karmakar Released on 18.12.2023 (A/N) on resignation
SC-1	Dr. (Ms.) Manisha Bal	26/11/1989	Chemical	Assistant Professor Gr-II	11/07/2022	SC	SC	SC-1	

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Remarks													Lawren Sheep Winner
Signature of appointing authority or other authorised officer	OBC-2	UR-6		UR-7	OBC-3	UR-8	ST-1	SC-2	OBC-4	UR-9	UR-10	0BC-5	4
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Whether GEN/SC/ST/ OBC/EWS	OBC	GEN		GEN	OBC	GEN	ST	SC	OBC	GEN	GEN	OBC	3
Date of Appointment (	30/06/2022	13/07/2022		13/07/2022	29/07/2022	21/07/2022	27/06/2022	20/07/2022	01/08/2022	25/07/2022	27/07/2022	08/08/2022	Page 2 of 10
Current Position	Assistant 3 Professor Gr-II	Assistant Professor Gr-II		Assistant Professor Gr-II	Assistant Professor Gr-II	Assistant Professor Gr-II	Assistant Professor Gr-II	Assistant Professor Gr-I	-	Assistant Professor Gr-II	Assistant Professor Gr-II	Assistant Professor Gr-II	Pag
Department		Comp.Sc. & A		Civil Engg. A	Physics /	Physics /	Comp.Sc. &	Comp.Sc. &		Elect. Engg.	E.C.E	Management Std	2
Date of Birth	26/12/1986 Chemistry	04/08/1983 C		0/08/1986	15/06/1989 F	28/03/1991 F	20/05/1982 C	22/08/1983	13/01/1988	03/12/1977	24/06/1989	23/06/1987	
Лате	Dr. Sourav Laha	Dr. (Ms.) Monalisa Mandal	Vacant	Dr. Sushovan Dutta	Dr. Karthikeyan. J	Dr. Arghya Chatterjee	Dr. Narayan Murmu	Dr. Subhas Chandra Sahana	Dr. (Ms.) Rajashree Das	Dr. (Ms.) Manika Saha	Dr. Nilanjan Biswas	Dr. Umamaheswararao Jada	E
UR or reserved for SCs/ STs/ OBCs/ EWSs	08C-2	UR	EWS-1	UR I	OBC-3	UR	ST-1	SC-2	0BC-4	N.	UR	OBC-5	
Roster Point No.	8	6	10	11	12	13	14	15	16	17	18	19	F-21

Remarks								Dr. Sankha Karmakar Relesed on 28.04.2023 (A/N) on resignation					Se Commenter of the Comment of the C	There or war as
Signature of appointing authority or other authorised officer	SC-3		UR-11	OBC-6	UR-12	UR-13	OBC-7	SC-4	ST-2	UR-14	OBC-8		UR-15	3
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Whether GEN/SC/ST/ OBC/EWS	SC		GEN	OBC	GEN	GEN	OBC	SC	ST	GEN	OBC		GEN (	3
Date of Appointment	21/07/2022		01/08/2022	29/08/2022	01/08/2022	03/08/2022	31/08/2022	26/07/2022	28/07/2022	04/08/2022	07/09/2022		11/08/2022	se 3 of 10
Current Position	Assistant Professor Gr-II		Assistant Professor Gr-II	Assistant Professor Gr-II	Assistant Professor Gr-II	Assistant Professor Gr-II	Assistant Professor Gr-II	Assistant Professor Gr-II	Assistant Professor Gr-II	Assistant Professor Gr-I	-		Assistant Professor Gr-II	Am Page
Department	Civil Engg.		Met.& Mat Eng	Mech. Engg.	Elect. Engg.	Civil Engg.	Elect. Engg.	Chemical	Civil Engg.	Comp.Sc. & Engg.	Elect. Engg.		Civil Engg.	Sm/ 6
Date of Birth	18/07/1990 Civil Engg.		01/04/1987	03/03/1990 Mech. Engg.	03/01/1988 E	28/08/1988	16/07/1987	09/10/1990 Chemical	17/11/1990	21/05/1984	01/03/1985		05/09/1985	Bur
Name	Dr. Suman Saha	Vacant	Dr. Barna Roy	Dr. Saif Akram	Dr. Soumya Chatterjee	Dr. Bandhan Bandhu Majumdar	Dr. Santanu Paul	Vacated	Dr. Gilbert Hinge	Dr. Suvadip Batabyal	Dr. Omkar Yadav	Vacant	Dr. Sabyasachi Biswas	
UR or reserved for SCs/ STs/ OBCs/ EWSs	SC-3	EWS-2	N.	0BC-6	UR	N.	0BC-7	SC-4	ST-2	UR	OBC-8	EWS-3	N.	
Roster Point No. 1	20	21	22	23	24	25	26	27	28	29	30	31	32 F	-22

Remarks										Wasim Akram Released on 16.02.2022 on		Prof. Amar Nath Mullick Postion vacated as Prof. Amar Nath Mullick superannuated on 31/01/2023 (joined as Lecturer)		Prof. P.P. Sengupta Postion vacated as Prof. P.P. Sengupta superannuated on 31/08/2022 (joined as Lecturer)	1200
appointing authority or other authorised officer	UR-16	OBC-9	SC-5	UR-17	UR-18		UR-19		SC-6	0BC-10		UR-20		UR-21	
rilled as UR/ SCs/ STs/ OBCs/EWSs	GEN	OBC	SC	GEN	GEN		GEN		SC	OBC		GEN		GEN	
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Appointment	18/08/2022	12/09/2022	05/08/2022	05/09/2022	20/09/2022		20/12/2022		05/09/2022	31/07/2014		01/02/2007		02/11/1982	Page 4 of 10
Current Position	Assistant Professor Gr-II		Assistant Professor Gr-II		Assistant Professor Gr-II	Trainee		Professor	1 7 7 7 7 1	Professor(HAG	Page				
Department	Mech. Engg.	Mech. Engg.	ivil Engg.	Chemical	Mech. Engg.		Comp.Sc. & Engg.		Mech. Engg.	Mech. Engg.		Mech. Engg.		Hum. & So.Sc	
Date of Birth	14/11/1987 N	15/06/1985 N	21/09/1986 Civil Engg.	23/12/1988	28/06/1987 Mech. Engg.		02/12/1988 C		02/03/1990 Mech. Engg.	16/07/1991		12/01/1958		14/08/1957	
Name	Dr. Ratnesh Kumar	Dr. Shashi Kant Verma	Dr. Sanku Konai	Dr. Debayan Das	Dr. Jayabrata Dhar	Vacant	Dr. Ankush Acharyya	Vacant	Dr. Debabrata Gayen	Vacated	Vacant	Vacated	Vacant	Vacated	Vacant
uk or reserved for SCs/ STs/ OBCs/ EWSs	N.	0BC-9	SC-5	UR	N.	OBC-10	N.	ST-3	SC-6	OBC-11	EWS-4	UR	OBC-12	UR	SC-7
Rosfer Point No. 1	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47

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Remarks	Postion vacated as Prof. (Mrs) Kajla Basu sudden demise on 14/01/2023			Prof. P.P. Gupta Postion vacated as Prof. P.P. Gupta superannuated on 31/06/2023 (joined as Lecturer)		Prof. Purnendu Ray Postion vacated as Prof. Purnendu Ray superannuated on 30/09/2023 (joined as Lecturer)																				200
appointing authority or other authorised	UR-22			UR-23		UR-24																				710
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Current Position	Professor			Professor	- E	Professor																			d	
Department	Mathematics			Chemical		Civil Engg.																				Am
Date of Birth	13/01/1962 Mathematics			23/06/1958		02/09/1958																				A TAN
Мате	Vacated	Vacant	Vacant	Vacated	Vacant	Vacated	Vacant	Vacant	Vacant	Vacant	Vacant	Vacant	Vacant	Vacant	Vacant	Vacant	Vacant	Vacant	Vacant	Vacant	Vacant	Vacant	Vacant	Vacant		
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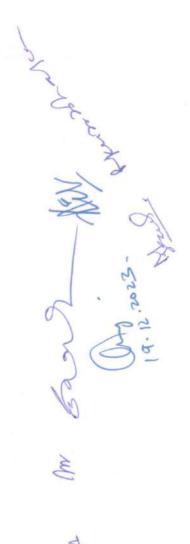
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Roster Point No.	73	74	75	76	77	78	79	80	81	82	83	84	85	98	87	88	89	90	91	92	93	94	95	96	97	86	66	100	101

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Roster Point No. r	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132

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Roster Point No.	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162

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UR or reserved for SCs/ STs/ OBCs/ EWSs	OBC-44	EWS-16	UR	UR	OBC-45	SC-25	UR	EWS-17	OC-46	UR	UR	SC-26	ST-13	OBC-47	UR	OBC-48	UR	SC-27	EWS-18	OBC-49	UR	UR	UR	OBC-50	SC-28	ST-14	OBC-51	EWS-19	UR	UR
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Roster Point No.	193	194	195	196	197	198	199	200	



Cadres

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Annexure-

Most Immediate / By Fax

23

No.F.5 – 16 / 2008 – TS.III
Government of India
Ministry of Human Resource Development
Department of Higher Education

New Delhi, the 2 June, 2012

To

The Director, National Institute of Technology, Durgapur – 713209 West Bengal

Subject:

Restructuring of Non-faculty Cadres in NITs - Creation of posts - regarding.

Sir,

The proposal of National Institute of Technology-Durgapur regarding creation of non-faculty posts has been examined in consultation with the Integrated Finance Division in this Ministry. The actual students' strength of the Institute for the year 2010-11 is 3424. In accordance with the student: faculty ratio of 12:1, the entitlement of faculty posts for NIT-Durgapur is 285. The present approved faculty strength of the Institute is 250. Further, in accordance with the existing instructions, the faculty: non-faculty ratio of NITs is 1:1.1. The entitlement of non-faculty posts for the Institute is 314 and the total non faculty posts in position are 204. The corresponding non-faculty strength is, therefore, being revised to 314. In view of the above, sanction of the competent authority is hereby conveyed for the creation of additional One Hundred Ten (110) non-faculty posts as mentioned below:

Non-faculty Posts:

SI No.	Name of Post	No. of posts proposed to be created	
Α	OFFICERS	700.000	
1.	Registrar	00	(PB4/₹10,000)
2.	Deputy Registrar/OSD*	04	(PB 3/₹7600)
3.	Assistant Registrar	05	(PB 3/₹5400)
4.	Audit Officer	-1	(PB2/₹4600)
5.	Jr. Accounts Officer	-1	(PB2/₹4600)
6.	Store Officer	-1	(PB 2/₹4600)
7.	Administrative officer	-1	(PB2/₹4600)
· 8.	Assistant Registrar (Academic)	1-11	(PB2/₹4600)
9.	Supdt. Engineer	01	(PB4/₹8700)
10.	Executive Engineer	02	(PB 3/₹6600)
11.	Maintenance Engineer	-1 -	(PB 3/₹5400)
12.	Librarian	00	(PB 4/₹10000)
13.	Dy. Librarian	01	(PB 3/₹8000)
14.	Asst Librarian	01	(PB 3/₹6000)
15.	Librarian	-1	(PB 3/₹6000)
16.	Sr. Medical Officer	01 -	(PB 3/₹7600) NP
17.	Medical Officer	00 .	(PB 3/₹5400) NP/
18.	Principal SAS Officer	00	(PB4/₹10000)
19.	Sr. SAS Officer	01	(PB3/₹8000)
20.	SAS Officer	01	(PB3/₹6000)
21.	Physical Training Instructor	-1	(PB3/₹4600)
22.	Security Officer	01	(PB3/₹5400)
23.	Principal Scientific/Technical Officer	02 -	(PB3/₹7600)

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al L

2,4.	Sr. Scientific/Technical Officer	00 -	/DD2/#0000
	Scientific/Technical Officer	03	(PB3/₹6600)
	oreman	-2	(PB3/₹5400)
			(PB3/₹5400)
ВТ	ECHNICAL HIGHER Subtot	al 13	
	echnical Assistant/ Junior Engineer/ SAS Assistant	104	
28. S	r. Technical Assistant/ Assistant Engineer/ Sr. SAS Assistant	24	(PB2/₹4200)
29. Te	echnical Assistant (SH II)/ SAS Assistant (SG II)	14 -	(PB2/₹4600)
30. Te	echnical Assistant (SH I)/ SAS Assistant (SG I)	00	(PB2/₹4800)
		01	(PB2/₹5400)
C TE	Subtota ECHNICAL LOWER	1 39	
	chnician /Lab. Assistant/ Work Assistant	50	(50)
	Technician/ Sr. Lab Assistant/ Sr. Work Assistant	50	(PB1/₹2000)
	chnician (SG II)/ Lab. Assistant (SG II)/ Work Assistant (SG II)	18	(PB1/₹2400)
34. Ted	chnician (SG I)/ Lab Assistant (SG I)/ Work Assistant (SG I)	00	(PB1/₹2800)
	Subtotal	.00	(PB2/₹4200)
D AD	MINISTRATION HIGHER	68	
27.00	perintendent /Accountant/ Secretary	-02	(DD05 1000)
36. Sr.	Superintendent/ Accountant/ Secretary	05	(PB2/₹4200)
37. Sr.	Superintendent/ Accountant/ Secretary (SG II)		(PB2/₹4600)
38. Sr. S	Superintendent/ Accountant/ Secretary (SG I)	00	(PB2/₹4800) .
	Subtotal	07	(PB2/₹5400)
E ADN	MINISTRATION LOWER	07	
	ssistant	13	(PB1/₹2000)
0. Sr. A	Assistant/ Stenographer	00	(PB1/₹2400)
1. Assis	stant (SG II)/ Sr. Stenographer	00	(PB1/₹2800)
2. Assis	stant (SG I)/ Stenographer (SG II)	00	(PB2/₹4200)
	ographer (SG I)	00	(PB2/₹4600)
	Subtotal	13	(1 021 (4000)
	PORTING (S)		
	dant / Security Guard/ Mali/ Care Taker	-56	(PB1/₹1800)
. Sr. At	tendant/ Security Guard/ Mali/ Care Taker	13	(PB1/₹1900)
. Attend	dant/ Security Guard/ Mali/ Care Taker (SG II)	09	(PB1/₹2000)
. Attend	fort/ Commit O Was III O - I	04	(PB1/₹2400)
		-30	1. 21/12/00/
		110	

\*\*(-) sign indicates that at present the actual strength is more than the entitled staff strength and the excess staff will be adjusted against other equivalent or higher posts till they are suitable redeployed/ promoted or wasted out.

2. As per the recommendation of the Sarangi Committee, the redeployment of staff (i.e. supernumerary staff) may be done as under:-

iii) Eligible employees may be promoted against regular cadre and suitably redeployed.

iv) Depending upon their qualification and suitability, they may be adjusted against the outsourced services wherever applicable.

In this regard, it may be mentioned that while restructuring the cadre of the non-faculty members of NITs, they may be redeployed to new posts/ designations subject to their eligibility, educational qualification and grade pay etc. This may be considered by a Committee comprising the members from the concerned NIT and respective BoG for approval.

21

- The revised non-faculty staff strength of 314 is required to be restructured in accordance with the Sarangi Committee report. The existing 204 posts of non-faculty would get subsumed in the 314 posts (including 110 posts) now being created. However, in the existing 204 posts, there are 30 posts of supporting staff which are over and above the proposed strength of 43 as per Sarangi Committee norms. Hence, these 30 supporting staff will have to be suitably retrained and redeployed or wasted out in due course and till such time they are retrained and redeployed etc., and equivalent number of posts will be kept vacant or in abeyance. The outcome will be the creation of 140 non-faculty posts in NIT Durgapur and simultaneous abolition of 30 posts i.e. net creation of 110 posts.
- 4. The total non-faculty posts of the Institute should not exceed its total entitlement i.e. 314 as a result of the creation of additional 110 non-faculty posts as mentioned above.
- The Institute may initiate steps for filling up of the additional sanctioned non-faculty posts in accordance with the uniform Recruitment Rules (RRs) for non-faculty positions in NITs placed on the website of this Ministry vide its File No. 33-2/2012-TS.III, dtd.30.05.2012. The uniform RRs are at present with the Ministry of Law & Justice for vetting before its Notification/Publication in the Official Gazette. Any modification in the RRs will be notified in Official Gazette. The Institute is advised to take into account the final Notified Uniform Recruitment Rules before the final recruitment of the Non-faculty positions.
- This issues with the approval of the competent authority in this Ministry.

Yours faithfully,

(Rajesh Slagh) Deputy Secretary (NITs)

Tel: 23073687

Copy to:-

(i) Chairman (Board of Governors), National Institute of Technology, Durgapur

(ii) IFD, Department of Higher Education, Ministry of Human Resource Development, New Delhi.

(iii) PSO to Secretary (HE), MHRD.

known by such names, as the Board may, within the budgetary provision, approve from time to time, on the recommendations of the Senate.

#### 17. THE DIRECTOR AND HIS POWERS

- (1) The Director of the Institute shall be appointed by the Visitor on contract basis on the recommendation of a Selection Committee constituted by him consisting of atleast five members including the Chairman who are experts in the field of technical education with experience at national and international level.
- (2) The Director shall be appointed for a period of five years and shall be governed by the terms and conditions of the Contract of Service entered into between the Institute and the Director in form specified in Schedule-A.
- (3) Subject to the budget provisions made for the specific purpose, the Director shall have the power to incur expenditure in accordance with the procedure as may be laid down in the ordinances.
- (4) The Director shall have the power to appropriate funds with respect to different items constituting the recurring budget up to a limit specified for the Head of Department in the Central Government for each item:

Provided that such appropriation shall not involve any increase in the budget and any liability in future years:

Provided further that every such appropriation shall, as soon as possible, be seported to the Board.

- (5) The Director shall have the power to write off irrecoverable losses up to a limit of ten thousand rupees and of irrecoverable value of store items lost or rendered unserviceable due to normal wear and tear or obsolete up to a limit of twenty five thousand rupees subject to such stipulations as may be made by the Board from time to time.
- (6) The Director shall have the power to donate obsolete equipment or store items, as identified by a Committee constituted for this purpose by the Director, to any educational institution in the vicinity of the Institute up to such limits as may be decided by the Board from time to time.
- (7) The Director, where he is the appointing authority, shall have the power to fix, on the recommendations of the Selection Committee, the initial pay of an incumbent at a stage higher than the minimum of the scale, but not involving more that five increments, in respect of posts to which appointment can be made by him under the powers vested in him by the provision of the Act or these statutes.
- (8) The Director shall have the power to employ Teaching Supporting Staff in the Laboratories, Technicians or Technical Instructors and Skilled Workmen, paid from contingencies from time to time, for not more than one year on such remuneration as may be decided by the Board.
- (9) The Director shall have the power to send members of the staff for training or to attend course of instruction inside India subject to such terms and conditions as may be specified by the ordinances.
- (10) The Director shall have the power to sanction temporary allocation of any building for any purpose other than that for which it was constructed.
- (11) If for any reason the Registrar is temporarily absent for a period not exceeding one month, the Director may take over or assign to any faculty member or member of staff of the Institute, any of the functions of the Registrar as he deems fit:

Provided that if at any time the temporary absence of the Registrar exceeds one month, the Board may, if it thinks fit, authorise the Director to take over or

assign the function of the Registrar, for a period exceeding one month.

- (12) All contracts for and on behalf of the Institute except the one between the Institute and the Director shall when authorised by a resolution of the Board passed in that behalf be in writing and be expressed to be made in the name of the Institute and every such contract shall be executed on behalf of the Institute by the Director, but the Director shall not be personally liable in respect of anything under such contract.
- (13) The Director may, during his absence from headquarters, specifically authorise in writing the Deputy Director or in his absence, one of the Deans or the Senior most Professor present to sanction advances for travelling allowance, contingencies and medical treatment of the staff and sign and counter-sign bills on his behalf.

(14) The Director may, at his discretion, constitute such committees, as he may consider appropriate for smooth functioning of the Institute.

- (15) In the event of the occurrence of any vacancy in the office of the Chairperson by reason of his death, resignation or otherwise or in the event of the Chairperson being unable to discharge his functions owing to absence, illness or any other cause, the Director may discharge the functions assigned to the Chairperson under section 16 of the Act.
- (16) The Director may, with the approval of the Board delegate any of his powers, authorities or responsibilities vested in him by virtue of the Act and Statutes to one or more members of Academic or Administrative Staff of the Institute.

#### 18. THE DEPUTY DIRECTOR

- (1) The appointment of the Deputy Director shall be made by the Visitor on the recommendation of the Selection Committee constituted by the Central Government with prior approval of the Visitor consisting of at least five members including the Chairman who are experts in the field of technical education with experience at National and International level.
- (2) The appointment shall be for a period of three years initially which may be extended by two times for one year each on recommendation of the Board.
- (3) The Deputy Director shall be governed by the terms and conditions of the Contract of Service entered into between the Institute and the Deputy Director in the form specified in Schedule-B.
- (4) The Deputy Director shall have all the powers of the Director during the vacancy in the post of Director of the Institute.
- (5) The Deputy Director shall assist the Director in academic and administrative work and in maintaining liaison with other institutions of higher learning and research, and also with industrial undertakings and other employers.

#### 19. DEANS

- (1) The Institute shall establish not more than six Deanships.
- (2) The Director shall appoint the Deans with intimation to the Chairperson.

  Board of Governors.
- (3) The Dean shall hold his post for two years extendable by one more year.
- (4) Only Professors or Associate Professors shall be eligible for becoming Deans.
- (5) Broad functions of Deans are enumerated in the Schedule 'C'.

#### [VNIT/OSD/01/Nov-2023]

Applications are invited for Officer on Special Duty (OSD) from retired officers from Government /PSU/Armed Forces/ Reputed Private organizations to deal with matters related to overall administration of the Institute that would include any one area out of areas like Academics, Examination, Hindi etc. The details of which are as given below.

#### Officer on Special Duty (OSD):

- Eligibility and Job Description: Retired officers from Government /PSU or Armed Forces to deal with matters related to overall administration of the Institute that would include any one area of experience in Academics, Examination. Establishment, Hostels, Stores Procurement. Audit and Finance. Students Affairs, Library, Hindi etc. Candidate should be graduate in any discipline.
- Age: Preferably below 65 years as on November 20, 2023.
- Remuneration: The remuneration will be paid on consolidated basis Rs.40,000/- per month.

The engagement is likely to be for a period of six months (extendable every six months) based on performance. The eligible candidates may apply in the prescribed form available on VNIT website (www.vnit.ac.in) along with all details like (including email, cell phone). Academic and Administrative Credentials (with relevant copies to substantiate) to the Registrar, V.N.I.T., South Ambazari Road, Nagpur – 440010 by November 20, 2023.

Only eligible and shortlisted candidates are likely to be invited for interaction. The number of positions may vary as per requirement. The institute reserves the right to seek higher norms than minimum while short listing, taking into account the requirement of Institute.

The Institute reserves right to reject application(s) without assigning any reason, to fill or not to fill any position.

The Director's decision will be final in this matter.

Spratte

REGISTRAR

G-6



## विश्वेश्वरय्या राष्ट्रीय प्रौद्योगिकी संस्थान नागपूर - 440 010 (भारत)

VISVESVARAYA NATIONAL INSTITUTE OF TECHNOLOGY NAGPUR 440 010 (India) (An Institution of National Importance under MoE, Government of India)

#### APPLICATION FORM

1.	Name of the Post:				*********		1			
							1 050000000	ttested		
1.	Name of the Applica (In Block Letters)	nt								
2.	Father's / Husband's	Name								
3.	Date of Birth (dd/mm/yyyy)				Gende Male/Fer		Age in Years as on 20 <sup>th</sup> November 2023		rital Status ed/Unmarried	Nationality
4.	Category		SCISTI	ORCI	PWD / UR					
5.	Address for Correspondence				PWDTOK					
	Tel.Nos./Fax Nos	Pin Code:		9:						
	Email				MI - 1110					
6.	Permanent Address		Pin Code:							
7.	Educational Qualific									
	Qualification	Dis	cipline		ame of the ersity/Institute	Year of Passing	% of Marks/ CGPA	Class/ Division		
	10 <sup>th</sup> or Equivalent			CHIVE	er sity/mstitute	rassing	CGFA	DIVISION		
	12th or Equivalent									
	Graduation									
	Post Graduation Others, if any									
		-					I			

8.	Present Employmen	nt with Salary De	tails					
	Institute/ Organization	Designation/ Post Held	From	То	Nature of Work	Pay Band	GP / AGP	Total Salary (Per month) in Rs.
9.	Work Experience De	etails	To	otal Wo	ork Experien	ce (in ye	ars):	
	Institute/ Organization	Designation/ Post Held	From	То	Nature of Work	Pay Band	GP / AGP	Total Salary (Per month) in Rs.
					1			
10.	Description of Work E (Give chronological e experience and relate	detailed description	on of the	work	performed by	you in	relation to	the previous
		<b>Q</b> 1,						
	8							
11.	Have you ever been Suspended from Worlf so, Give Reason an	k?	of it:					
12.	Mention Notice Perio Offered a Post	d Needed for Join	ning if					

13.	Name Two Referees with Co Address	omplete Contact Details Including Address, Tel. Nos., Fax Nos., Email
	(i)	(ii)
14.	Any other Relevant Information as Computer Knowledge at which have not been include the heads given above.	and Skills
15.	List of Enclosures (Academic	Experience and Professional Qualifications)
	a)	
	b)	
	c)	
	d)	
	e)	
	f)	
		DECLARATION
inforr	I MIOWICUGE and Deller II al	information furnished in this application are true and correct to the best any time I am found to have concealed/ suppressed any material/
Place	2:	
Date:		Signature of the Applicant

G-9



# भारतीय सूचना प्रौद्योगिकी संस्थान, नागपुर

Indian Institute of Information Technology, Nagpur

"An Institution of National Importance by an Act of Parliament"

RTTC, BSNL, Near TV Tower, Besides Balaji Temple, Seminary Hills, Nagpur – 440 006

Website: www.litn.ac.in Email: director@liltn.ac.in, registrar@liltn.ac.in Phone: 0712 – 2985010

## Recruitment Notice for Non-Teaching Contractual Positions to be engaged through Third Party Manpower Sourcing Agency

Advt. No.: IIITN/ADMIN/2020-21/NTSR/004

Date: 03/03/2021

Indian Institute of Information Technology, Nagpur (IIITN), which is established under Public-Private Partnership Scheme by Ministry of Education, Government of India, is an "Institution of National Importance" under the provisions of Indian Institute of Information Technology (Public-Private Partnership) Act, 2017.

IIIT, Nagpur is offering Under Graduate and PhD Programmes in Computer Science & Engineering (CSE) and Electronics & Communication Engineering (ECE) Courses.

The Institute will be shortly shifting to its state-of-the-art Permanent Campus proposed to be developed on sprawling 100 Acres of land at Village Waranga near Butibori in Nagpur District.

The Institute invites applications from eligible candidates for the following Non-Teaching Contractual Position to be engaged through Third Party Manpower Sourcing Agency:

#### Post A: Officer on Special Duty (OSD) - One Post

Job Description: He / She will assist the Registrar in General Administration and activities related to Accounts & Audit, Purchase, Stores, Academics, Hostel, Examination, Establishment, Office Correspondence, Statutory Compliances, Industry Interaction / Co-ordination etc. He / She is expected to have knowledge and ability to supervise the Administration and Industry Interaction.

Reporting to: Registrar or as advised by the Competent Authority from time to time.

Qualification & Experience: First Class Bachelor Degree in any discipline from a recognized University / Institute with excellent academic record. Degree in the area of Management / Engineering / Law / Chartered or Cost Accountant, Company Secretary is desirable.

Work experience of at least 20 Years is essential. Retired person from Government (Central/State) / PSU's / Industry / Private Company can also apply. Experience in Educational Institute of National repute like IITs/NITs/IIMs/IIITs/CFTIs/Reputed Industries will be preferred. The candidate should be able to work independently and should have excellent communication and interpersonal skills and multi-tasking abilities. A good oral and written communication skill in English/Hindi is essential.

Salary & Allowances: Rs. 75,000/- Per Month. (Consolidated)

Age: Exceeding 45 years.

Subject line of Email: Application for the Post of Officer On Special Duty (OSD) - (Ref: Adv/IIITN/Admin/2020-21/NTSR/004)

#### Post B: Associate Officer on Special Duty (AOSD) - One Post

Job Description: He / She will assist the Registrar in General Administration and activities related to Audit, Purchase, Stores, Hostel, Establishment, Tendering through Government e-Market Place (GeM), Scholarships etc.

Reporting to: Registrar or as advised by the Competent Authority from time to time.

Qualification & Experience: First Class Bachelor Degree in any discipline from a recognized University / Institute with excellent academic record. Degree in the area of Management / Engineering / Law / Chartered or Cost Accountant, Company Secretary is desirable.

Work experience of at least 10 Years is essential. Person from Industry / Private Company can also apply. Experience in Educational Institute of National repute like IITs/NITs/IIMs/IIITs/CFTIs/Reputed Industries will be a distinct advantage. The candidate should be able to work independently and should have excellent communication and interpersonal skills and multi-tasking abilities. A good oral and written communication skill in English/Hindi is essential.

Salary & Allowances: Rs. 45,000/- Per Month. (Consolidated)

Age: Not Exceeding 45 years.

Subject line of Email: Application for the Post of Associate Officer On Special Duty (AoSD) - (Ref: Adv/IIITN/Admin/2020-21/NTSR/004)

#### General Information and Instructions to Applicants

- 1. All the positions are purely temporary & contractual in nature for a period of 11 Months with provision for subsequent extensions as per Institute Policy subject to performance. Decision of the Director shall be final in all respect.
- 2. The Institute reserves the right to reject any/all application(s) and/or cancel the advertisement in whole or in part without citing any reason at any stage of processing.
- 3. The Institute reserves the right to increase or decrease the number of posts to be filled as per the sole discretion of the Director.
- No TA/DA and/or Lodging/Boarding will be paid for attending the Interview if held in Offline Mode. As the Institute is operating from its Makeshift Campus, no accommodation shall be provided.
- 5. The Interviews may be held in Offline Mode or Online Mode at the sole discretion of the Director. The eligible applicants shall be communicated accordingly at appropriate stage.
- 6. The applications are to be filled & submitted in soft copy only in the prescribed format of the Institute attached as Annexure 1.
- 7. Applicants are not required to send hard copy of the application to the Institute. However, the scanned copy of the application should be properly scanned and legible.

- 8. The Application Form shall not be supplied on postal request. The candidates are advised to download the same from Institute Website viz. www.iiitn.ac.in.
- 9. Candidates are advised to fill the Prescribed Application Form and mail the same within the stipulated time. Applications received after due date & time shall not be accepted. Please attach relevant supporting documents / certificates along with Application Form. The Candidate will have to bring the original and one set of self-attested photocopies of documents at the time of interview (if held in Offline Mode) OR if selected through Online Interview, while reporting for joining. At the time of verification of documents, if documents are not as per Institute's criteria or originals are not presented then candidate will not be allowed to attend Interview / selection shall be cancelled. Hiding information or submitting false information will lead to cancellation of candidature at any stage of recruitment.
- 10. All qualification, experience and age limit will be recognized as on the closing date of receipt of the application.
- 11. Candidates who wish to apply for more than one post should apply separately for each post in the prescribed format.
- 12. The Institute reserves the right to set higher norms than minimum while short listing taking into account the specific requirements of the Institute. The short listing norms may not be uniform across all the posts and shall be binding on the applicants. The decision of the Institute related to all matters pertaining to the recruitment shall be final and binding on the applicants. Fulfillment of qualifications per-se does not entitle a candidate to be called for the interview.
- 13. Any modification/correction/addition etc. if any, related to the Advertisement and/or related to the recruitment process will be uploaded in the Institute web site only. No other means of communication will be used for the same. Therefore, the candidates are advised to periodically visit the Institute website for updates, if any.
- 14. Institute reserves the right to offer lower post to the candidate otherwise found suitable.
- 15. The Institute shall communicate the details of the interview (Offline or Online) to the eligible candidates only. No separate communication regarding eligibility, short listing as well as interview shall be sent to other candidates. No correspondence regarding reasons for not short listing the candidate shall be entertained. The decision of the Director shall be final in all respect.
- 16. The Institute shall communicate the relevant details pertaining to the joining only to the selected candidate(s) directly through email. No communication shall be done / entertained to / from the candidate(s) who have not been selected.
- 17. In case of any inadvertent mistake in the process of recruitment detected at any stage, the Institute reserves the right to modify/withdraw/cancel any communication made to the candidates.
- 18. The appointments to these Non-Teaching Posts are through Third Party Manpower Supply Agency and do not automatically create any right or preference towards appointment made on the rolls of IIIT Nagpur in the future.

- 19. In case of any dispute regarding Recruitment Process, decision of the Director, IIITN shall be final.
- 20. In case of any Legal Dispute regarding the Recruitment Process, the place of jurisdiction shall be Nagpur, Maharashtra (India) only.
- 21. Canvassing in any form or any attempt to influence the Recruitment Process whatsoever will lead to disqualification of candidature.
- 22. Interested candidates are advised to email the scanned copy of their application to: recruitment@iiitn.ac.in latest by 18th March 2021 (2.00 PM).

DIRECTOR

Bill No.	MFN/202309/490342
Total Bill Amount (in Rs.):	5489806
Amount in Words :	Rs. Fifty-Four Lakh Eighty-Nine Thousand Eight Hundred Six only.

Applicable TDS Amount for this bill is Rs.5490 and Net amount payable to DVC is Rs.5484316.

# Differential cost of fuel i.r.o. own generating station for the month of 08'2023. Previous Month Energy Consumption 709680(Kwh) @80.6Paisa/Kwh.

## MVCA for the month of 08'2023, Previous Month Energy Consumption 709680(Kwh) @9Paisa/Kwh.

#### Message to Customer

Hon'ble Supreme Court of India vide order dated 23.11.2022 has directed, "the respondents who are appellants before the Appellate Tribunal to pay the full tariff at the rate as determined by the West Bengal Electricity Regulatory Commission (WBERC) starting from the date the WBERC had passed the impugned orders i.e., from 05.05.2022 and 17.06.2022..." Therefore, energy bill for the consumption month of September, 2023 is being claimed as per tariff orders issued by Hon'ble WBERC on 05.05.2022 and 17.06 2022 respectively. For any query please mail us at samrat.bhowmik@dvc.gov.in & shweta.das@dvc.gov.in. \*\*To avoid any last minute technical glitch, please pay well before due date\*\*

N B.: Please visit https://wberc.gov.in/sites/default/files/APR 106.pdf regarding APR Order of DVC for the period 2017-18 issued by WBERC on 18.09.2023

#### PAYMENT TO BE MADE IN YOUR EXCLUSIVE A/C DETAILS GIVEN BELOW

NAME OF BANK	PUNJAB NATIONAL BANK
DVC A/C TITLE	DAMODAR VALLEY CORPORATION
A/C No for Energy Bill	DVCPNB0501DVC490342
A/C No for Cash Security Deposit	DVCPNB0502DVC490342
IFS CODE	PUNB0008220
MICR No	700027099
BRANCH	NEW MANICKTALA BRANCH
BANK ADDRESS	P-41, CIT SCHEME VII(M), KAKURGACHI, KOLKATA-54

Authorized Signatory

For and on behalf of DVC

#### **DVC Consultancy Services Details**

DVC has three numbers state of art NABL accredited laboratories at Maithon, Dhanbad. Jharkhand - 828207 as per IS/ISO/IEC/17025:2017 and are providing various testing services at very reasonable rates. Consumer may avail these testing services as per their need. For details please visit "https://www.dvc.gov.in/cms-web/details-pages/103" or contact Shri Suman Bhattacharyya, Senior Manager (CTC), Mobile: 8250492972, E-mail: suman.bhattacharyya@dvc.gov.in or Shri Arup Ghosh Dastidar, Mobile. 8210984437.

Copy to : Engineer In Charge, ASP Sub/Stn. GOMD - VI, DVC. Please verify and inform us if there is any error in meter and restriction data.



# DAMODAR VALLEY CORPORATION

दामोदर घाटी निगम



#### Commercial Department, DVC Towers, VIP Road, Kolkata-700054 Monthly Bill for the consumption month of 09'2023

Consumer ID	490342	Bill No.	MFN/202309/490342
Previous Meter Reading Date 01/09/2023		Bill Date	02/10/2023
Present Meter Reading Date	30/09/2023	Due Date of Payment	17/10/2023
Meter No	M1-Q0846559	Contract Demand	2000
NIT, Durgapur, The Registrar, NIT D	urgapur, M. G. Avenue,	Supply Voltage(Volt)	33000
Durgapur - 713209, WB		SupplyPoint	Durgapur
	a .	E-Mail Id	estatehelpdesk@admin.nitdgp.ac.in
		Mobile No	9434788170

Previous Meter Reading (Kwh)	0	Maximum Demand(KVA)	1724
Present Meter Reading (Kwh)	171340	Total Supply Hours	720
Gross Energy Consumption (Kwh)	171340	Total L.S. Hours	3.08
Average/Meter Replacement Adjustment(in Kwh)	544570	Net Restricted Hours	0
LT Adjustment/Other Adjustment (in Kwh)	0	Balance Hours	716.92
Net Energy(Kwh)	715910	Power Factor	0.984
Net KVAH	727420	Load Factor (%)	58.86
PF for LF Calculation	0.984		

Details of Bill(Figures in rupees)		
Energy Charge@474P/Kwh	3393413 P.F. Rebate(-)	135737
Additional Energy charge for Restricted period	0 P.F. Surcharge	0
Demand Charge@384Rs./KVA/month	659184 L.F. Rebate(-)	0
Additional Demand Charge	0 L.F. Surcharge	0
Net Demand Charge	659184 Rental Charge	0
Diff ECR #	572002 Other Charge	0
MVCA ##	63871 Gross Amount(Rs.)	4552733

Arrear Installment (18-19,19-20)	250315	Adjustment	0
WB Electricity Duty @5%	0	Advance Paid	0
WB Electricity Duty @15%	682910	1% Addl. Rebate for e-payment	0
WB Electricity Duty Adjustment	0	Final Rebate	0
Net WB Electricity Duty	682910	Delay Payment Surcharge	3848
		Net Amount(Rs.)	5489806

Bill No.	MFN/202308/490342
Total Bill Amount (in Rs.):	5300768
Amount in Words :	Rs. Fifty-Three Lakh Seven Hundred Sixty-Eight only.

Applicable TDS Amount for this bill is Rs.5301 and Net amount payable to DVC is Rs.5295467.

# Differential cost of fuel i.r.o. own generating station for the month of 07'2023. Previous Month Energy Consumption 590130(Kwh) @79.1Paisa/Kwh.

## MVCA for the month of 07'2023, Previous Month Energy Consumption 590130(Kwh) @10Paisa/Kwh.

#### Message to Customer

Hon'ble Supreme Court of India vide order dated 23.11.2022 has directed, "the respondents who are appellants before the Appellate Tribunal to pay the full tariff at the rate as determined by the West Bengal Electricity Regulatory Commission (WBERC) starting from the date the WBERC had passed the impugned orders i.e., from 05.05.2022 and 17.06.2022..." Therefore, energy bill for the consumption month of August, 2023 is being claimed as per tariff orders issued by Hon'ble WBERC on 05.05.2022 and 17.06.2022 respectively. For any query please mail us at samrat.bhowmik@dvc.gov.in & shweta.das@dvc.gov.in.

#### PAYMENT TO BE MADE IN YOUR EXCLUSIVE A/C DETAILS GIVEN BELOW

NAME OF BANK	PUNJAB NATIONAL BANK		
DVC A/C TITLE	DAMODAR VALLEY CORPORATION		
A/C No for Energy Bill	DVCPNB0501DVC490342		
A/C No for Cash Security Deposit	DVCPNB0502DVC490342		
IFS CODE	PUNB0008220		
MICR No	700027099		
BRANCH	NEW MANICKTALA BRANCH		
BANK ADDRESS	P-41, CIT SCHEME VII(M), KAKURGACHI, KOLKATA-54		



For and on behalf of DVC

#### **DVC Consultancy Services Details**

DVC has three numbers state of art NABL accredited laboratories at Maithon, Dhanbad, Jharkhand - 828207 as per IS/ISO/IEC/17025:2017 and are providing various testing services at very reasonable rates. Consumer may avail these testing services as per their need. For details please visit "https://www.dvc.gov.in/cms-web/details-pages/103" or contact Shri Suman Bhattacharyya, Senior Manager (CTC), Mobile: 8250492972, E-mail: suman.bhattacharyya@dvc.gov.in or Shri Arup Ghosh Dastidar, Mobile: 8210984437.

Copy to : Engineer In Charge, ASP Sub/Stn. GOMD - VI. DVC. Please verify and inform us if there is any error in meter and restriction data.



## DAMODAR VALLEY CORPORATION





#### Commercial Department, DVC Towers, VIP Road, Kolkata-700054 Monthly Bill for the consumption month of 08'2023

Consumer ID	490342	Bill No.	MFN/202308/490342
Previous Meter Reading Date	01/08/2023	Bill Date	01/09/2023
Present Meter Reading Date	31/08/2023	Due Date of Payment	16/09/2023
Meter No	M1-DVCM00308	Contract Demand	2000
NIT, Durgapur, The Registrar, NIT Durgapur, M. G. Avenue, Durgapur - 713209, WB		Supply Voltage(Volt)	33000
		SupplyPoint	Durgapur
		E-Mail Id	estatehelpdesk@admin.nitdgp.ac.in
		Mobile No	9434788170

Previous Meter Reading (Kwh)	39863670	Maximum Demand(KVA)	1861
Present Meter Reading (Kwh)	40573350	Total Supply Hours	744
Gross Energy Consumption (Kwh)	709680	Total L.S. Hours	0.52
Average/Meter Replacement Adjustment(in Kwh)	0	Net Restricted Hours	0
LT Adjustment/Other Adjustment (in Kwh)	0	Balance Hours	743.48
Net Energy(Kwh)	709680	Power Factor	0.984
Net KVAH	721420	Load Factor (%)	52.45
PF for LF Calculation	0.978		

Details of Bill(Figures in rupees)		
Energy Charge@474P/Kwh	3363883 P.F. Rebate(-)	134555
Additional Energy charge for Restricted period	0 P.F. Surcharge	0
Demand Charge@384Rs./KVA/month	714125 L.F. Rebate(-)	0
Additional Demand Charge	0 L.F. Surcharge	0
Net Demand Charge	714125 Rental Charge	0
Diff ECR #	466793 Other Charge	0
MVCA ##	59013 Gross Amount(Rs.)	4469259

Arrear Installment (18-19,19-20)	250317	Adjustment	0
WB Electricity Duty @5%	0	Advance Paid	0
WB Electricity Duty @15%	658753	1% Addl. Rebate for e-payment	38786
WB Electricity Duty Adjustment	0	Final Rebate	38786
Net WB Electricity Duty	658753	Delay Payment Surcharge	11
		Net Amount(Rs.)	5300768

H-4

Bill No.	MFN/202307/490342	
Total Bill Amount (in Rs.):	4466569	
Amount in Words :	Rs. Forty-Four Lakh Sixty-Six Thousand Five Hundred Sixty-Nine only.	

Applicable TDS Amount for this bill is Rs.4467 and Net amount payable to DVC is Rs.4462102.

# Differential cost of fuel i.r.o. own generating station for the month of 06'2023, Previous Month Energy Consumption 529500(Kwh) @73.4Paisa/Kwh.

## MVCA for the month of 06'2023, Previous Month Energy Consumption 529500(Kwh) @1Paisa/Kwh.

#### Message to Customer

Hon'ble Supreme Court of India vide order dated 23 11.2022 has directed, "the respondents who are appellants before the Appellate Tribunal to pay the full tariff at the rate as determined by the West Bengal Electricity Regulatory Commission (WBERC) starting from the date the WBERC had passed the impugned orders i.e., from 05.05.2022 and 17.06.2022..." Therefore, energy bill for the consumption month of July, 2023 is being claimed as per tariff orders issued by Hon'ble WBERC on 05.05.2022 and 17.06.2022 respectively. For any query please mail us at biswajit.mondal@dvc.gov.in & samrat.bhowmik@dvc.gov.in.

#### PAYMENT TO BE MADE IN YOUR EXCLUSIVE A/C DETAILS GIVEN BELOW

NAME OF BANK	PUNJAB NATIONAL BANK		
DVC A/C TITLE	DAMODAR VALLEY CORPORATION		
A/C No for Energy Bill	DVCPNB0501DVC490342		
A/C No for Cash Security Deposit	DVCPNB0502DVC490342		
IFS CODE	PUNB0008220		
MICR No	700027099		
BRANCH	NEW MANICKTALA BRANCH		
BANK ADDRESS	P-41, CIT SCHEME VII(M), KAKURGACHI, KOLKATA-54		
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For and on behalf of DVC

#### **DVC Consultancy Services Details**

DVC has three numbers state of art NABL accredited laboratories at Maithon, Dhanbad, Jharkhand - 828207 as per IS/ISO/IEC/17025:2017 and are providing various testing services at very reasonable rates. Consumer may avail these testing services as per their need. For details please visit "https://www.dvc.gov.in/cms-web/details-pages/103" or contact Shri Suman Bhattacharyya, Senior Manager (CTC), Mobile: 8250492972, E-mail: suman.bhattacharyya@dvc.gov.in or Shri Arup Ghosh Dastidar, Mobile: 8210984437.

Copy to : Engineer In Charge, ASP Sub/Stn, GOMD - VI, DVC, Please verify and inform us if there is any error in meter and restriction data.



# DAMODAR VALLEY CORPORATION

दामोदर घाटी निगम



#### Commercial Department, DVC Towers, VIP Road, Kolkata-700054 Monthly Bill for the consumption month of 07'2023

Consumer ID	490342	Bill No.	MFN/202307/490342
Previous Meter Reading Date	01/07/2023	Bill Date	01/08/2023
Present Meter Reading Date	31/07/2023	Due Date of Payment	16/08/2023
Meter No	M1-DVCM00308	Contract Demand	2000
NIT, Durgapur, The Registrar, NIT Durgapur, M. G. Avenue, Durgapur - 713209, WB		Supply Voltage(Volt)	33000
		SupplyPoint	Durgapur
		E-Mail Id	estatehelpdesk@admin.nitdgp.ac.in
		Mobile No	9434788170

Previous Meter Reading (Kwh)	39273540	Maximum Demand(KVA)	1726
Present Meter Reading (Kwh)	39863670	Total Supply Hours	744
Gross Energy Consumption (Kwh)	590130	Total L.S. Hours	0.17
Average/Meter Replacement Adjustment(in Kwh)	0	Net Restricted Hours	0
LT Adjustment/Other Adjustment (in Kwh)	0	Balance Hours	743.83
Net Energy(Kwh)	590130	Power Factor	0.985
Net KVAH	599120	Load Factor (%)	46.95
PF for LF Calculation	0.979		and the second

Details of Bill(Figures in rupees)			
Energy Charge@474P/Kwh	2797216	P.F. Rebate(-)	111889
Additional Energy charge for Restricted period	0	P.F. Surcharge	0
Demand Charge@384Rs./KVA/month	662633	L.F. Rebate(-)	0
Additional Demand Charge	0	L.F. Surcharge	0
Net Demand Charge	662633	Rental Charge	0
Diff ECR #	388653	Other Charge	0
MVCA ##	5295	Gross Amount(Rs.)	3741908

Arrear Installment (18-19,19-20)	250317	Adjustment	0
WB Electricity Duty @5%	0	Advance Paid	0
WB Electricity Duty @15%	549945	1% Addl. Rebate for e-payment	37805
WB Electricity Duty Adjustment	0	Final Rebate	37805
Net WB Electricity Duty	549945	Delay Payment Surcharge	9
		Net Amount(Rs.)	4466569



NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

An Institute of National Importance under Ministry of Education, Government of India Mahatma Gandhi Avenue, Durgapur-713209, West Bengal, India

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# ANNUAL REPORT 2022-2023

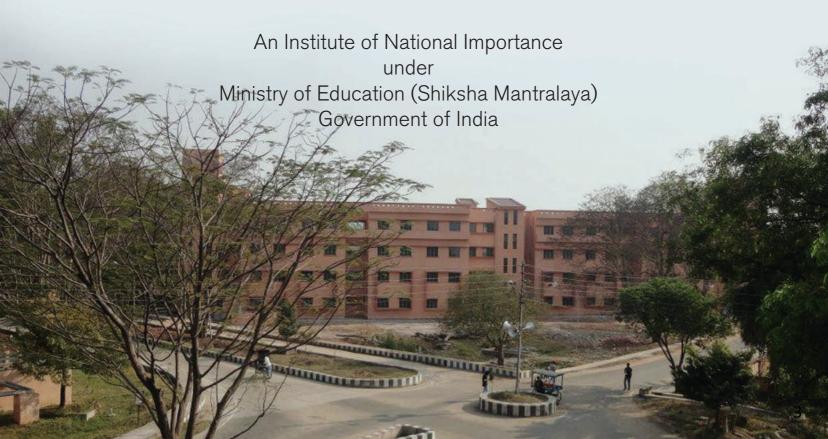
(April 01, 2022 - March 31, 2023)



# राष्ट्रीय प्रौद्योगिकी संस्थान दुर्गापुर

NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

Mahatma Gandhi Avenue, Durgapur-713209 West Bengal, INDIA



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From Director's Desk



It is my pleasure
to publish the 63rd
Annual Report
2022-23 of the
Institute highlighting
the progress made
during the last
financial year

National Institute of Technology Durgapur, an Institute of National Importance fully funded by the Ministry of Education, Government of India, has traditionally been engaged in imparting quality technical education and pursuing active research in cutting edge areas. The students are also encouraged and supported to get initiated to research and innovation early. Curriculum is revised continually to facilitate flexible, multi-disciplinary learning and stimulate pursuance of their passion.

Fourteen Minor programs and eighth semester internship in the industries have been implemented in the B. Tech. program. The revised curriculum and syllabus of all M. Tech. and MBA programs have also been implemented.

The faculty and the students have 637 research articles published/accepted in top peer-reviewed journals in the last year. 66 PhD degrees were awarded. 151 sponsored projects are being executed by the faculty members with sponsored projects from DST, DBT, MEITY, DRDO, MoES, DAE, ICMR, UGC-UKIERI, MNRE, CSIR, ICSSR, etc. It is also a member institute of BRICS Network University Programme under the thematic area "Water Resources and Pollution Treatment". In its pursuit towards strengthening its common research and academic infrastructure and encourage multidisciplinary research, it is setting up Utkarsha Bhavan through HEFA loan and established four new advanced centres of research.

The efforts by the Institute attaining excellence in academics, research and outreach has been recognised by the NIRF-2023, where it was ranked 43rd in Engineering and 9th among all NITs.

The Institute has also made its mark in its outreach activity through participation in Unnat Bharat Abhiyan (UBA) and Rashtiya Avishkar Abhiyan (RAA) programs. 63 workshops/seminars were organized by various departments of the Institute.

I look forward to further strides of the institute to newer heights.

**Prof. Arvind Choubey** 

Director

National Institute of Technology Durgapur



### Progress at a Glance (2022-2023)

- •The faculty members of the Institute have publication 637 research articles/reviews in peer-reviewed journals, and also published 264 papers in proceedings of national and international conferences.
- → 66 PhD degrees were awarded by the Institute.

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- Fourteen Minor programs and eighth semester internship in the industries have been implemented in the B. Tech. program.
- The revised curriculum and syllabus of all M. Tech. and MBA programs have been implemented.
- 151 sponsored projects are being executed by the faculty members during the financial year.
- Faculty members acted as reviewers for 424 peer-reviewed journals.
- 813 UG & PG students were placed through in-campus interviews in the session 2022-23. In addition to that 93 UG & PG students secured more than one job. 187 companies, including most of the global players, visited the campus to recruit UG students while 106 and 10 companies recruited the M Tech & MSW and MBA students respectively.
- ★ 63 online/off-line workshops/seminars were organized by various departments of the Institute.
- 38 new faculty members have been recruited across various disciplines to fill up the vacancies.
- The 18th Convocation of the Institute was held on October 22, 2022. Padma Shri Prof. Sanghamitra Bandyopadhya, Director, ISI Kolkata graced the occasion as the Chief Guest, while Dr. Sibaji Raha, Former Director, Bose Institute was the Guest of Honour. In the 18th Convocation, 726 B. Tech., 281 M. Tech., 29 MBA, 88 MSc, 02 MSW and 71 PhD degrees were awarded.
- Utkarsha Bhavan, a 10-storyed research-academic building, is being constructed with the HEFA loan. It will house four centres of advanced research and central research and common laboratory facilities.
- Under Unnat Bharat Aviyan, NIT Durgapur acts as the Regional Coordinating Institute for West Bengal and Sikkimh with the Perennial Fund Award.
- Construction of two floors of Sarojini Naidu Hall of Residence for girls have been completed resulting an increase in intake from 510 to 750.

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### 1. Introduction

#### 1.1 Vision

To impart quality technical education and focus on research and innovation to cater to the need of the country.

#### 1.2 Mission

- 1. To impart quality technical and scientific education and produce engineers, technologists, scientists and citizens who will contribute meaningfully to the growth and development of the country and excel in various disciplines of knowledge.
- 2. To create a research-oriented teaching-learning environment in the Institute with a focus on excellence and innovation.
- 3. To embark upon an inclusive growth path committed to the uplift of the community.
- 4. To have an increased global presence.

### 1.3 Historical Background

National Institute of Technology Durgapur was established as one of the 17 Regional Engineering Colleges in 1960 as a joint venture of the Government of India and the Government of West Bengal and was registered under the Register of Societies Act. With introduction of cutting-edge technology in the emerging areas, the Institute maintained its momentum with definite mission and vision,9 which enabled it to get the prestigious status of National Institute of Technology under full administrative and financial control of the Government of India with a "Deemed to be University" status with effect from July 03, 2003. The Institute has now been declared as an "Institute of National Importance" by the Govt. of India, vide NIT Act 2007 (29 of 2007) implemented on August 15, 2007.

It started with only four branches of engineering: Civil, Mechanical, Metallurgical and Electrical Engineering for undergraduate studies in 1960. Chemical Engineering was started in 1964. At present, the Institute offers eight B. Tech. programmes and eighteen M. Tech. programmes. Apart from this, two-year MBA programme is also offered. The Institute also runs M. Sc. programmes in Applied Geology and Geo-Informatics, Physics, Chemistry, Life Sciences and Mathematics.

### 1.4 Location

NIT Durgapur is located in the heartland of industrial activities and the mineral-rich region of West Bengal, also known as 'The Ruhr of India'. The city of Durgapur is well connected by rail with Kolkata, 158 km away, and is an important railway station on the main New Delhi-Kolkata route. It is a two and a half hours' drive from Kolkata airport along Durgapur Expressway and NH2, and there is a military airport at Panagarh, only 20 km from Durgapur, in addition there is a Civil Airport, Kazi Nazrul Islam Airport Durgapur, only 15 km from the Institute. The place is only an hour's drive from Tagore's Santiniketan and has quite a few tourist spots nearby. The climate is moderate.

### 1.5 Campus

The Institute campus, spreading over 187 acres, is known for its serene environment. Buildings housing the departments and laboratories, residential blocks for faculty and staff, students' hostels are far outnumbered by the trees in the campus which is self-reliant with facilities like roads, water supply, power distribution network, a market complex, banks and post office.



### 1.6 Notable Achievements

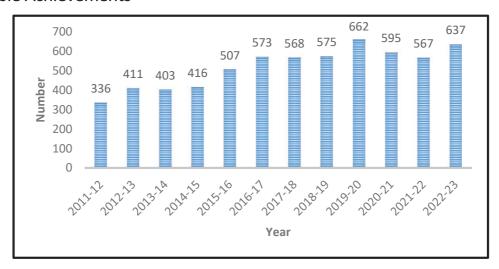
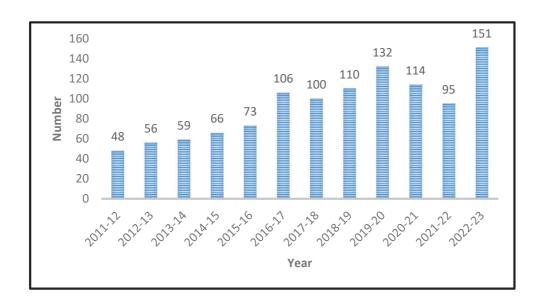


Fig. 1. Publication in journals in the last few years



Fig. 2. Presentation in conferences/symposiums in the last few years



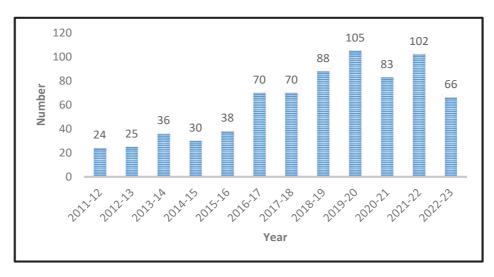


Fig. 4. Number of PhD degrees awarded during the last few

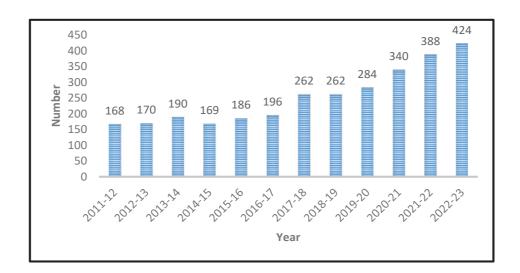


Fig. 5. Reviewers of journals/books during the last few years

### 1.7 International Activities

### 1.7.1 Alumni (Nodal Centre)

Centre for Alumni Affairs & International Relations (CAAIR) is the nodal centre in the National Institute of Technology Durgapur for liaison with REC/NIT Durgapur alumni all across the globe, initiating research/academic collaboration with universities and organizations in India and abroad and other outreach activities.

#### 1.7.2 Eminent Alumni Lecture Series

Date	Alumni Talks (online)
02.04.2022	Sumit Aggarwal (1998, ECE), Sr. Scrum Master, National student clearinghouse Virginia, United States
21.05.2022	Rudra Palash Mukherjee (2011, ChE), Principal Scientist, Pfizer
18.06.2022	Swayamdipta Bhaduri (2010, ME), Instructor at University of Texas, Austin
06.08.2022	Pravesh Tamang (2015, BT), Scientific Assistant, Embassy of India (Berlin, Germany)
13.08.2022	Yogesh Todi (2019, ME), Assistant Consultant, Oracle
10.08.2022	Sanhita Pal (2020, MME), Materials Engineer, Stream-Flo Industries
22.01.2023	Dayeeta Pal (2021, MME), Pursuing Ph.D. at Stanford University



Date	Alumni Talks (online)	
22.01.2023	Sankalp Jain (1999, ME), Vice president at Jefferies, Australia	
15.02.2023	Sanjucta Roy (2019, ECE), Pursuing MSc in Communication Engineering Nanyang Technological	
	University, Singapore. Ex-Software Test Engineer at Qualcomm	

#### 1.7.3 List of International MoUs

Name of the Institute	Year	MoU signed with Foreign Governments/Foreign Institutions and date of signing	Subject	Action Taken
National Institute of Technology Durgapur, West Bengal, India, PIN- 713209	2022- 2023	National University of Science and Technology, Oman 02.10.2022	Co-operate training, short courses, consultancy services, seminars, workshops, staff and student exchange program etc.	MoU signed

#### 1.7.4 Distinguished Alumnus Award

- Prof. Tarasankar Debroy (1969, BE, Met. & Mat. Engineering), Professor, PennState, USA (Excellence in Academic & Research)
- Mr. Subash Menon (1986, BE, Elec. Engineering), Founder, Bannix Co-Founder, CEO and MD, Pelatro Plc, UK., Founder, CEO and Chairman, Bannix Acquisition Corp., USA (Excellence in Entrepreneurial venture)

#### 1.8 List of National MoUs

Name of the Institute	Year	MoU signed with National Institutions/Organizations/Industries and date of signing	Subject	Action Taken
		Sister Nivedita University, Kolkata 16.11.2022	Collaboration in research activities, exchange of visits of faculties, joint organization of events etc.	MoU signed
National Institute of Technology Durgapur, West Bengal, India,	2022- 2023	Haldia Petrochemicals Ltd., Kolkata 30.11.2022	Internship of NIT students and industrial visits, faculty support from NITD, support from technical experts etc	MoU signed
PIN-713209		Indian Oil Corporation Limited, Haldia Refiner 18.11.2022	Utilization each other's facilities as per requirements, joint research, professional consultancy by NITD to solve industry related problems etc.	MoU signed

#### 1.9 Alumni

Centre for Alumni Affairs & International Relations (CAAIR) is the nodal centre in the National Institute of Technology Durgapur for liaison with REC/NIT Durgapur alumni all across the globe, initiating research/academic collaboration with universities and organizations in India and abroad and other outreach activities. NIT Durgapur is proud to have more than 31000 engineers, technocrats, scientists, managers and entrepreneurs as its global brand ambassadors. CAAIR makes all-out efforts to get them involved in the all-round development and growth of the Institute. It supports the Institute's mission by way of continually opening up opportunities that strengthens the mutually beneficial bond between the institute and its alumni. This promotes and encourage the alumni to disseminate professional knowledge through seminars and interaction with the students and faculty. NIT Durgapur is also striving to break the barriers and reach out to the national and international universities and organizations by way of collaborative activities like joint research supervision, publications, projects and student exchange. The Centre initiates all such activities. The Centre also coordinates various outreach activities with the community.

#### 1.9.1 Distinguished Alumnus Award

 Mr. Abhay Kumar Singh (1983, BE, Civil Engineering), Former MD, NHPC Ltd ((Excellence in Entrepreneurial venture)

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 Mr. Gopal Chandra Sikder, (1986, BE, Mech. Engineering), Sr. Executive Vice President, Project Director- Large Complex, Reliance Industries Ltd ((Excellence in Entrepreneurial venture)

#### 1.9.2 Eminent Alumni Lecture Series

Date	Alumni Talks (online)		
09.04.2022	Sourav Sen (1991, ME), MD & CEO, Eirich India		
30.04.2022	Sandipan Das (2015, MME), Scientist SD, ISRO		
04.06.2022	Sanu Kumar Gupta (2016, IT), Founder and CEO, OyeLazy		
25.06.2022	Sarbojit Mallick (2009, EE), Co-founder, Instahyre		
16.07.2022	Rudra Banerjee (2020, ECE), Ex-PwC India, Studying MBA IIM Indore		
10.12.2022	Rupkatha Ghosh (2019, CE), Ex Sr. Civil Engineer at L&T ECC and PMSS Fellow		
15.02.2023	Souvik Sonar (2010, CSE), Scientist 'E' DRDO		

### 1.9.3 Donation Received from Alumni during 2022-2023

- Professor Dilip Kumar Pal (1965, BE, Mechanical Engineering), Ex-professor of Mechanical Engineering Department
  of this institute donated INR 11,80,000 on 22.07.2022 for infrastructural development of Production Engineering
  Laboratory of Mechanical Engineering Department. One Submerged Arc Welding Machine and one Vertical Ram Turret
  Milling Machine are purchased from the donation.
- Professor Tarasankar DebRoy (1969, BE, Metallurgical Engineering), Professor of Materials Science and Engineering,
  The Pennsylvania State University donated INR 17,50,000 on 16.09.2022 for enhancement of the computational facilities
  of the Materials and Metallurgical Engineering Department. One GPU Server with steel Rack for mounting, one
  Workstation with Graphics Card and one Vacuum Oven with Pump are purchased from the donation.

#### 1.10 New Initiatives

### 1.10.1 SMILE ERP

"National Institute of Technology Durgapur adopted the SMILE ERP system in the year 2019. The acronym SMILE stands for Software for Managing Institutes of Learning and Education that was developed by IIT Kharagpur and NIT Durgapur procured it through TEQIP-III under the direct funding of MoE. The available modules need customization to adopt it for various verticals like Academics, Finance, HR and Administration. At first in priority basis Faculty Annual Report data module has been launched by the Honorable Director on 16th August 2022. Other modules would be customized, contingent to availability of suitable manpower for the ERP Cell."

#### 2. Administration

### 2.1 NIT Council (As per Statutes)

- The Minister in charge of the Ministry or Department of the Central Government having administrative control of the technical education, ex officio-Chairman
- The Secretary to the Government of India in charge of the Ministry or Department of the Central Government having administrative control of the technical education, ex officio- Vice-Chairman
- The Chairperson of every Board, ex officio
- The Director of every Institute, ex officio
- The Chairman, University Grants Commission, ex officio
- The Director General, Council of Scientific and Industrial Research, ex officio
- four Secretaries to the Government of India, to represent the Ministries or Departments of the Central Government dealing with biotechnology, atomic energy, information technology and space, ex officio
- The Chairman, All India Council for Technical Education, ex officio

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- Not less than three, but not more than five persons to be nominated by the Visitor, at least one of whom shall be a woman, having special knowledge or practical experience in respect of education, industry, science or technology
- Three members of Parliament, of whom two shall be chosen by the House of the People and one by the Council of States (Provided that the office of member of the Council shall not disqualify its holder for being chosen as or for being, a member of either House of Parliament)
- Two Secretaries to the State Government, from amongst the Ministries or Departments of that Government dealing with technical education where the Institutes are located, ex officio
- Financial Advisor, dealing with the Human Resource Development Ministry or Department of the Central Government, ex officio
- One officer not below the rank of Joint Secretary to the Government of India in the Ministry or Department of Central Government having administrative control of the Technical Education, ex officio Member-Secretary

#### 2.2 BOG

Sl. No.	Nomination Under	Name and Designation of nominated Member	Serve as
01.	Section 11	Prof. (Retd.) Sadanand Sadashiv Gokhale	
	Clause (a)	Chairperson, Board of Governors,	Chairperso
	` '	National Institute of Technology Durgapur	
		Durgapur-713209	
02.	(b)	Prof. Anupam Basu	Member
		Director,	
		National Institute of Technology Durgapur	
		Durgapur-713209	
03.	(c)	Shri Anil Kumar	Member
		Director (Finance)	
		Department of Higher Education	
		Ministry of Education, (Shiksha Mantralaya),	
		Shastri Bhawan, New Delhi	
04.	(c)	Ms. Saumya Gupta	Member
		Joint Secretary,	
		Department of Higher Education,	
		Ministry of Education, (Shiksha Mantralaya),	
		Shastri Bhawan, New Delhi	
05.	(d)	Mr. Sanjay Jhunjhunwala	Member
		Chief Executive Officer,	
		Mani Group, Kolkata	
` '		Dr. D.K. Majumdar	Member
		Former Professor	
		(DIPSAR) University of Delhi,	
		C-8,IDPL Apartments	
		Plot NoGH10	
		Sector 10A	
		Gurgaon-122001	
07.	(e)	Dr. Mitali Mukerji	Member
		Professor and Head,	
		Department of Bioscience & Bioengineering,	
		Faculty, School of Artificial Intelligence and Data Science (AIDE),	
		Indian Institute of Technology Jodhpur, NH – 62, Karwar, Rajasthan – 342037	
08.	(e)	Dr. Jyotsna Dhawan,	Member
		Chief Scientist,	
		CCMB, Hyderabad	
09.	(f)	Prof. Apurba Kumar Patra	Member
		Professor,	
		Department of Chemistry,	
		National Institute of Technology Durgapur	
		Durgapur-713209	



Sl.	Nomination	Name and Designation of nominated Member	Serve as
No.	Under		
10.	(f)	Dr. Jayati Dey	
		Associate Professor,	
		Department of Electrical Engineering	
		National Institute of Technology Durgapur	
		Durgapur-713209	
11.	(g)	Prof. V.K. Tewari	
		Director	
		Indian Institute of Technology, Kharagpur	
		Pin-721302, India	
12	Section 18	Shri Soumya Sen Sharma Secretar	
	Clause (2)	Registrar,	•
	` '	NIT Durgapur	
		Durgapur-713209	

### 2.3 Finance Committee

Sl. No.	Name and Designation	Chairperson/Convenor/Secretary/Membe
1.	Prof. (Retd.) Sadanand Sadashiv Gokhale	Chairperson
1.	Chairperson, Board of Governors,	Chan person
	National Institute of Technology Durgapur	
	Durgapur-713209	
2.	Prof. Anupam Basu	Member
2.	Director,	Weinber
	National Institute of Technology Durgapur	
	Durgapur-713209	
	Durgapui-/13209	
3.	Shri Anil Kumar	Member
	Director (Finance)	
	Department of Higher Education	
	Ministry of Education,	
	(Shiksha Mantralaya), Shastri Bhawan, New Delhi	
4.	Ms. Saumya Gupta	Member
	Joint Secretary,	
	Department of Higher Education	
	Ministry of Education, (Shiksha Mantralaya),	
	Shastri Bhawan, New Delhi	
5.	Prof. Apurba Kumar Patra	Member
	Professor,	
	Department of Chemistry,	
	National Institute of Technology Durgapur	
	Durgapur-713209	
6.	Shri Soumya Sen Sharma	
	Registrar,	Member Secretary
	National Institute of Technology Durgapur	
	Durgapur-713209	

### 2.4 Building and Works Committee

Sl. No.	Name of the Member	Served as
1	Prof. Anupam Basu,	Chairman
	Director,	
	National Institute of Technology Durgapur	
	Durgapur – 713 209	



Sl. No.	Name of the Member	Served as
2.	Shri M.L.Soni	Member
	Directors (NITs)	
	Department of Higher Education	
	Ministry of Education,	
	(Shiksha Mantralaya)	
	Shastri Bhawan	
	New Delhi-110001.	
3.	Shri Anil Kumar	Member
	Director (Finance)	
	Department of Higher Education	
	Ministry of Education,	
	(Shiksha Mantralaya)	
	Shastri Bhawan New Delhi-110001.	
4	Shri Satyaki Sen	Member
-	Ex-Director, M.N. Dastur	
	Nominee of Board of Governors	
	NIT Durgapur	
	CJ 84, Sector – 2, Salt Lake City,	
	Kolkata – 700 091	
	D 427	
5	Prof. Kamal Bhattacharya	Member
	Department of Civil Engineering	
	Chairperson (Maintenance & Campus Facility and Planning)	
	National Institute Technology	
	Durgapur – 713209	
6	Prof. Soumya Bhattacharyya	Member
	Department of Civil Engineering	
	Chairman (Construction)	
	National Institute Technology	
	Durgapur – 713209	
7	Prof. Atul Krishna Banik	Member
,	Department of Civil Engineering	1/10/11/00/1
	Chairman (PMQCC)	
	National Institute Technology	
	Durgapur – 713209	
8	Shri Durga Prasad	Member
	(Nominee of CPWD, Electrical Wing)	
	Superintending Engineer (Electrical),	
	Kolkata Central Electrical Circle – 1,	
	Central Public Works Department (CPWD),	
	234/4, Acharya J. C. Bose Road, Kolkata – 700 020.	
	KOIKata – 700 020.	
9	Shri Ishrar Ahmad	Member
	Executive Engineer	
	CPWD, NIT Durgapur Camp Office	
10	Shri C. P. Sharma,	Member
	(Nominee of CPWD, Civil Wing)	
	Superintendent Engineer (Civil),	
	NIT Durgapur	
11		
11	Shri Soumya Sen Sharma	Member Secretary
	Registrar,	
	National Institute of Technology Durgapur,	
	Durgapur – 713209.	

### 2.5 List of Senate Members

Sl. No.	Name	Chairman / External Member / Member / Invited Member
1.	Prof. Anupam Basu Director	Chairman
2.	Prof. Siddhartha Sen, Professor, Electrical Engg. Dept., IIT Kharagpur	External Member
3.	Prof. Swagata Dasgupta, Professor, Dept. of Chemistry, IIT Kharagpur	External Member
4.	Prof. Ajitava Raychaudhuri, Professor, Dept. of Economics, Jadavpur University Kolkata	External Member
5.	Prof. S. Chattopadhyay	<u>Member</u>
6.	Prof. A. Dey	Member
7.	Prof. Dalia Dasgupta Mandal	Member
8.	Prof. Kaustav Aikat	Member
9.	Prof. Surabhi Chaudhuri	Member
10.	Prof. Sudit Sekhar Mukhopadhyay	Member
11.	Prof. Dipankar Sukul	Member
12.	Prof. Apurba Kr. Patra	Member
13.	Prof. Milan Maji	Member
14.	Prof. Rajnarayan Saha	Member
15.	Prof. Sankar Ch. Moi	Member
16.	Prof. P. Pal	Member
17.	Prof. K.C. Ghanta	Member
18.	Prof. Tamal Mandal	Member
19.	Prof. P. Gupta	Member
20.	Prof. A.K. Sadhukhan	Member
21.	Prof. Susmita Dutta	Member
22.	Prof. Gopinath Halder	Member
23.	Prof. D.K. Singha Roy	Member
24.	1101. D.K. Singha Roy	Member



Sl. No.	Name	Chairman / External Member / Member / Invited
	Prof. P. Ray	Member
25.	Prof. K. Bhattacharya	Member
26.	Prof. A. Das	Member
27.	Prof. S. Saha	Member
28.	Prof. Soumya Bhattacharya	Member
29.	Prof. Atul Krishna Banik	Member
30.	Prof. Amiya Kr Samanta	Member
31.	Prof. Tandra Pal	Member
32.	Prof. Suchismita Roy	Member
33.	Prof. Subrata Nandi	Member
34.	Prof. Debashis Nandi	Member
35.	Prof. Subhrabrata Choudhury	Member
36.	Prof. Tanmay De	Member
37.	Prof. Mousumi Roy	Member
38	Prof. Gautam Bandyopadhyay	Member
39	Prof. Avijan Dutta	Member
40	Prof. A.K. Bhattacharjee	Member
41	Prof. B. Maji	Member
42	Prof. G.K. Mahanti	Member
43	Prof. Sumit Kundu	Member
44	Prof. Rowdra Ghatak	Member
45	Prof. Ashis Kr. Mal,	Member
46	Prof. Rajat Mahapatra	Member
47	Prof. N. K. Roy	Member
48	Prof. S.S.Thakur	Member
49	Prof. Subrata Banerjee	Member
		Member

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Sl. No.	Name	Chairman / External Member / Member / Invited Member
50	Prof. Parimal Acharjee	niemoei
51	Prof. Tapas Kr. Saha	Member
52	Prof. Sankar Narayan Mahato	Member
53	Prof. Chiranjib Koley	Member
54	Prof K. Adhikari	Member
55	Prof. Samarjit Kar	Member
56	Prof Kajla Basu	Member
57	Prof. Seema Sarkar (Mondal)	Member
58	Prof. Indrajit Basak	Member
59	Prof. Amar Nath Mullick	Member
60	Prof. B. Halder	Member
61	Prof. Nilotpal Banerjee	Member
62	Prof. Nirmal Baran Hui	Member
63	Prof. Shibendu Shekhar Roy	Member
64	Prof. Asit Baran Puri	Member
65	Prof. Apurba Layek	Member
66	Prof. K.S. Ghosh	Member
67	Prof. Joydeep Maity	Member
68	Prof. A. K. Meikap	Member
69	Prof. Pathik Kumbhakar	Member
70	Prof. Amit Kr. Chakraborty	Member
71	Sri S. Chatterjee Managing Director Innovative Heat Handling Pvt. Ltd. Kolkata 700 091	Invited Member
72	Mr. B. Bhattacharya (Alumni)	Invited Member
73	Dr. Debjani Dutta HOD, Dept. of Biotechnology	<u>Invited Member</u>

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	Cather Town owners	
Sl. No.	Name	Chairman / External Member / Member / Invited Member
	Dr. Jaya Sikder	Invited Member
74	HOD, Dept. of Chemical Engg.	
	Dr. Diptesh Das	<u>Invited Member</u>
75	HOD, Dept. of Civil Engg.	
	Dr. Kaushik Mandal	Invited Member
76	HOD, Dept. Management Studies	
	Dr. Durbadal Mandal	<u>Invited Member</u>
77	HOD, Dept. of Electronics and Communication Engg.	
70	Dr. Arindam Modak	<u>Invited Member</u>
78	HOD, Dept. Humanities and Social Sciences  Dr. Lakshmi Kanta Dey	Invited Member
<b>79</b>	HOD, Dept. of Mathematics	<u></u>
80	Dr. Sumit Mukhopadhyay	<u>Invited Member</u>
	HOD, Dept. of Mechanical Engg.	
81	Dr. Supriya Bera HOD, Dept. of Metallurgical and Materials Engg.	Invited Member
0.0	Dr. Sukadev Sahoo	7 2 174 1
82	HOD, Dept. of Physics	<u>Invited Member</u>
	Dr. Bibhash Sen	
83	HOC, Computer Centre	<u>Invited Member</u>
84	Shri Soumya Sen Sharma	
	Registrar	Member Secretary

### 2.6 Staff Details

### 2.6.1 List of Officers

Des	ignation	Name		
Re	egistrar	Sri Soumya Sen Sharma		
Joint Registrar		Shri Asit Kumar Dr. Uday Chandra Mukherjee Sri Dhrubajyati Ray		
Deput	y Registrar	Sri Ashutosh Das		
	nt Registrar	Sri Debasish Mondal Sri Amiya Kumar Sardar Sri Sayon Bhattacherjee Sri Ajit Kumar Bhagat Shri Arun Charles Minz		
Execut	ve Engineer	Sri Tanmay Halder		
Librarian		Vacant		
Library	Deputy Librarian	Vacant		

Designation		Name	
Assistant Librarian		Vacant	
Workshop Superintendent		Vacant	
Registrar's Secretariat (Technical Officer)		Shri Santosh Kumar Saha Shri Hirendra Nath Samanta	
Medical Unit-cum-	Senior Medical Officer	Dr. Banhi K	umar Sarkar
Hospital Medical Officers		Dr. Sucharita Patra Dr. G. Prabhavabatl	
Estate Section (Security Officer )		No sanctioned post in RR-2019, however this post got restructure as Assistant Registrar through DPC.	

### 2.6.2 Sanctioned posts of officers and number in position

	Sanctioned	In position	Vacant	Remarks
Registrar	01	01	00	
Joint Registrar	Nil	03	00	Filled through DP
Dy. Registrar	04	01	00	-
Asstt. Registrar	07	05	02	
Dy. Librarian	01	Nil	01	
Assistant Librarian	01	Nil	00	
Principal SAS Officer	00	Nil	00	
Sr. SAS Officer	01	Nil	01	
SAS Officer	01	Nil	01	
Principal Scientific/Technical Officer	02	Nil	02	
Sr. Scientific/Technical Officer	01	Nil	01	
Scientific/Technical Officer	03	02	01	
Superintendent Engineer	01	Nil	01	
Executive Engineer (Elect/Civil)	02	01	01	
Senior Medical Officer	01	01	00	
Medical Officer	02	02	00	
				(Restructured as Assistant
Security Officer	01	Nil	01	Registrar)
*Physical Training Inst.	Nil	00	00	

### 2.6.3 Number of Technical and Administrative staff members

Sl. No.	Name	No.
1.	Sr. Tech. Asstt.	10
2.	Tech. Asstt. (SG-II)	16
3.	Tech. Asstt. (SG-I)	07
4.	Sr. Library Infor. Asstt (SG-II)	01
5.	Sr. Technician	01
6.	Technician (SG-II)	02
7.	Tech. Asstt.	03
8.	Superintendent	02
9.	Sr. Superintendent	03
10.	Superintendent (SG-II)	04
11.	Superintendent (SG-I)	01
12.	Staff Nurse (SG-II)	01
13.	Junior Assistant	01
14.	Sr. Assistant	05
15.	Assistant (SG-II)	10
16.	Assistant (SG-I)	05
17.	Attendant	01
18.	Sr. Attendant	08
19.	Attendant (SG-II)	09



Cante Zerra spare

Sl. No.	Name	No.
20.	Attendant (SG-I)	04
21.	Physical Training Instructor	01 (PTI post is not a sanctioned post)
22.	Asstt. Engg. (SG-I)	01
23.	Pharmacist	01

### 2.6.4 New appointment of staff during the year 2022-23

Sl.No	Name		Department	Designation	Date of Joining
1.		Shri Arun Charles Minz	Director's Secretariat	Asst. Registrar	30-09-2022
2.		Sri Jeet Mazumder	Medical Unit	Pharmacist	11-11-2022

### 2.6.5 Retirement, Resignation, Death and Voluntary Retirement of Staff during the year

Sl. No	Name	Department/Section	Designation	Date of Retirement
1	Sri Brijesh Mahato	Estate	Sr. Attendant	29-04-2022 (Expired)
2	Tusher Kanti Chakraborti	WS(Blacksmith)	Sr. Tech. Asstt.	31-05-2022
3	Dr. Narayan Murmu	CSE	Tech. Asstt.(SG-I)	27-06-2022 (Join as a Assistant Professor)
4	Sri Jiban Krishna Ray	Personnel Sec.	Superintendent(SG-I)	31-07-2022

### 2.6.6 Number of Faculty in position

Name of Department	Professor	Associate Prof	Asstt. Prof. Grade-I	Asstt. Prof. Grade-II	Trainee Teacher
	In position	In-position	In position	In position	In position
Biotechnology	06	05	06	00	-
Chemical Engg	07	04	02	05	-
Chemistry	05	05	01	03	-
Civil Engineering	09	05	02	06	-
Computer Science & Engineering	06	14	13	05	-
Electrical Engg	07	02	08	08	-
Electronics &.Communication Engineering	07	05	03	05	-
Earth & Environmental Science	01	00	01	02	-
Humanities & Social Science	00	03	02	02	-
Management Studies	03	05	00	03	-
Mathematics	02	05	03	00	-
Mechanical Engineering	07	05	09	11	-
Metallurgical & Materials Engg.	02	07	03	02	-
Physics	03	05	02	04	-
Total	65	70	55	56	_



### 2.6.7 New Appointment of Faculty During The Year 2022-23

Sl. No	Name	Department	Designation	Date of Joining
1.	Dr. Paresh Nath Chatterjee	Chemistry	Associate Professor	03-08-2022
2.	Dr. Sujan Kumar Saha	Comp.Sc. & Engg.	Associate Professor	19-09-2022
3.	Dr. Subhas Chandra Sahana	Comp.Sc. & Engg.	Assistant Professor Gr-I	20-07-2022
4.	Dr. Suvadip Batabyal	Comp.Sc. & Engg.	Assistant Professor Gr-I	04-08-2022
5.	Dr. Debayan Das	Chemical	Assistant Professor Gr-II	05-09-2022
6.	Dr.(Ms.) Manisha Bal	Chemical	Assistant Professor Gr-II	11-07-2022
7.	Dr. Sankha Karmakar	Chemical	Assistant Professor Gr-II	26-07-2022
8.	Dr. Sourav Laha	Chemistry	Assistant Professor Gr-II	27-06-2022
9.	Dr. Krishnendu Pal	Chemistry	Assistant Professor Gr-II	27-06-2022
10.	Dr. Bandhan Bandhu Majumdar	Civil Engg.	Assistant Professor Gr-II	03-08-2022
11.	Dr. Sabyasachi Biswas	Civil Engg.	Assistant Professor Gr-II	11-08-2022
12.	Dr.Sushovan Dutta	Civil Engg.	Assistant Professor Gr-II	13-07-2022
13.	Dr.Suman Saha	Civil Engg.	Assistant Professor Gr-II	21-07-2022
14.	Dr. Gilbert Hinge	Civil Engg.	Assistant Professor Gr-II	28-07-2022
15.	Dr. Sanku Konai	Civil Engg.	Assistant Professor Gr-II	05-08-2022
16.	Dr. Ankush Acharyya	Comp.Sc. & Engg.	Assistant Professor Gr-II	20-12-2022
17.	Dr. (Ms.) Shyantani Maiti	Comp.Sc. & Engg.	Assistant Professor Gr-II	01-07-2022
18.	Dr. Narayan Murmu	Comp.Sc. & Engg.	Assistant Professor Gr-II	27-06-2022
19.	Dr.(Ms.) Monalisa Mandal	Comp.Sc. & Engg.	Assistant Professor Gr-II	13-07-2022
20.	Dr. Suman Samui	E.C.E	Assistant Professor Gr-II	07-07-2022
21.	Dr. Nilanjan Biswas	E.C.E	Assistant Professor Gr-II	27-07-2022
22.	Dr.(Ms.) Rajashree Das	E.C.E	Assistant Professor Gr-II	01-08-2022
23.	Dr.(Ms.) Shreya Karmakar	Earth & Env. Std.	Assistant Professor Gr-II	11-07-2022
24.	Dr. (Ms.) Manika Saha	Elect. Engg.	Assistant Professor Gr-II	25-07-2022
25.	Dr. Soumya Chatterjee	Elect. Engg.	Assistant Professor Gr-II	01-08-2022
26.	Dr. Santanu Paul	Elect. Engg.	Assistant Professor Gr-II	31-08-2022
27.	Dr. Omkar Yadav	Elect. Engg.	Assistant Professor Gr-II	07-09-2022
28.	Dr. Angshu Jajodia	Hum. & So.Sc	Assistant Professor Gr-II	27-06-2022
29.	Dr.(Ms.) Rinki Chokhani	Hum. & So.Sc	Assistant Professor Gr-II	04-07-2022
30.	Dr. Umamaheswararao Jada	Management Std	Assistant Professor Gr-II	08-08-2022
31.	Dr. Jayabrata Dhar	Mech. Engg.	Assistant Professor Gr-II	20-09-2022
32.	Dr. Ratnesh Kumar	Mech. Engg.	Assistant Professor Gr-II	18-08-2022
33.	Dr. Saif Akram	Mech. Engg.	Assistant Professor Gr-II	29-08-2022
34.	Dr. Debabrata Gayen	Mech. Engg.	Assistant Professor Gr-II	05-09-2022
35.	Dr. Shashi Kant Verma	Mech. Engg.	Assistant Professor Gr-II	12-09-2022
36.	Dr. Barna Roy	Met.& Mat Eng	Assistant Professor Gr-II	01-08-2022
37.	Dr. Arghya Chatterjee	Physics	Assistant Professor Gr-II	21-07-2022
38.	Dr. Karthikeyan. J	Physics	Assistant Professor Gr-II	29-07-2022

### 2.6.8 Retirement, Resignation, Death and Voluntary Retirement of Faculty 2022-23.

Sl. No	Name	Department/Section	Designation	Date of Retirement/Resignation
1.	Prof. P.P. Sengupta	Hum. & So.Sc	Professor(HAG)	31-08-2022
2.	Prof.(Ms) Kajla Basu	Mathematics	Professor	14-01-2023 (Expired)



Sl. No	Name	Department/Section	Designation	Date of Retirement/Resignation
3.	Prof. Amar Nath Mullick	Mech. Engg.	Professor	31-01-2023

### 3. Academics

#### 3.1 **Education System:**

The National Institute of Technology Durgapur runs four-year Bachelor of Technology programmes in Bio-Technology, Chemical Engineering, Civil Engineering, Computer Science & Engineering, Electronics & Communication Engineering, Electrical Engineering, Mechanical Engineering and Metallurgical & Materials Engineering.

The Institute runs five year B.Tech and M.Tech Dual Degree programme in Biotechnology and Chemical Engineering and also runs five year Integrated M.Sc programme in Chemistry.

The Institute offers two year M. Tech. programme in eighteen specializations and also two-year MBA programme, two-year M. Sc programme in five Departments and two-year MSW programme.

All the Programme offered in the academic year spreading normally over the period from 1st July of the year to 30th June of the next year and is divided into two semesters, which are regular and fulltime in nature.

The Institute also offers PhD programme in fourteen Departments and four Centres.

#### **Programs Offered:** 3.2

### B.Tech / Dual Degree / Integrated M.Sc Programme: Sanctioned intake

Discipli ne	O P	OP- PWD	EW S	EWS- PWD	S C	SC- PWD	S T	ST- PWD	OB N	0BN- PWD	TOTA L	TOTA L
BT	28	02	07	01	13	0	05	0	18	01	75	909
СН	28	02	08	0	11	0	06	0	18	02	75	•
CE	32	0	08	0	11	02	06	0	19	02	80	•
CS	73	03	18	01	25	02	13	01	49	02	187	•
EE	38	02	10	0	14	02	06	01	26	01	100	•
EC	36	02	10	0	14	01	06	01	26	01	97	•
ME	72	04	17	01	27	02	13	01	48	02	187	•
MM	28	02	07	01	11	0	05	01	19	01	75	•
CH-DD	02	0	01	0	01	0	01	0	02	0	07	•
BT-DD	02	0	01	0	01	0	01	0	02	0	07	•
CY-INT	08	0	02	0	03	0	01	0	05	0	19	•

#### Post-Graduate Programmes - Sanctioned intake



### M.Tech

Specialization / Program Name	ОС	OC - PW D	EW S	EW S- PW D	SC	SC P W D	ST	ST- PW D	OB N	OB N- PW D	SP O N	Sancti oned Intak e
Advanced Material Science & Technology	8	0	2	0	3	0	1	1	5	0	2	22
Biotechnology	7	1	2	0	3	0	2	0	5	0	2	22
Chemical Engineering	7	0	1	0	2	0	1	0	4	0	2	17
Energy Resources and Sustainable Environmental Engineering	8	0	1	1	2	1	1	0	6	0	2	22
Computer Science & Engineering	19	1	5	0	7	0	4	0	13	1	5	55
Environmental Science & Technology	8	0	2	0	3	0	1	0	5	1	2	22
Fluid Mechanics and Heat Transfer	8	0	2	0	3	0	2	0	5	0	2	22
Geotechnical Engineering	7	1	2	0	3	0	2	0	5	0	2	22
Machine Design	8	0	2	0	3	0	2	0	5	0	2	22
Metallurgy and Materials Technology	8	0	2	0	3	0	1	0	5	1	2	22
Next Generation Communication and Networks	7	1	2	0	3	0	1	0	6	0	2	22
Operations Research	7	1	2	0	2	1	2	0	5	0	2	22
Power Electronics & Machine Drives	8	0	2	0	3	0	2	0	4	1	2	22
Power Systems	7	1	2	0	3	0	2	0	5	0	2	22
Instrumentation and Control	6	0	2	0	2	0	1	0	4	0	1	16
Structural Engineering	7	1	2	0	3	0	1	0	6	0	2	22
Microelectronics and VLSI	8	0	1	1	3	0	2	0	5	0	2	22
Thermal Engineering	8	0	2	0	3	0	1	0	5	1	2	22
Total	146	7	36	2	54	2	29	1	98	5	38	418

### MBA

DEPTT	OP	OP-PwD	EWS	EWS- PwD	SC	SC-PwD	ST	ST- PwD	OBN	OBN- PwD	Total
MS	20	1	5	0	6	1	4	0	12	1	50

### MSW

DEPARTMENT	OP	OP-PwD	EWS	EWS- PwD	SC	SC-PwD	ST	ST- PwD	OBN	OBN- PwD	Total
HSS (MSW)	6	0	1	1	2	0	1	0	4	0	15

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DEPARTMENT	OP	OP-PwD	EWS	EWS- PwD	SC	SC-PwD	ST	ST- PwD	OBN	OBN- PwD	Total
CY	9	1	2	0	4	0	1	0	7	1	25
MA	10	0	3	0	3	1	2	0	6	0	25
PH	10	0	2	1	4	0	2	0	6	0	25



DEPARTMENT	OP	OP-PwD	EWS	EWS- PwD	SC	SC-PwD	ST	ST- PwD	OBN	OBN- PwD	Total
BT (LIFE SCIENCES)	7	0	1	0	2	0	1	0	4	0	15
EES (APPL GEO & GEOINFO)	7	1	2	0	3	0	2	0	5	0	20
Total	43	2	10	1	16	1	8	0	28	1	110

### 3.2.3 Eligibility

#### **MTECH**

In qualifying degree the candidates should have passed and secured at least 6.5 CGPA (on a 10-point scale) or 60% for OC/OB, whereas 6.0 CGPA (on a 10-point scale) or 55% in case of SC/ST/PwD candidates. The above mentioned CGPA/Percentage should be awarded by a recognized University/Institute.

#### **MSc**

Three-year regular B. Sc. (Hons./ Pass) with minimum 55% marks / 6 CGPA in the relevant discipline. A relaxation of 5% marks or 0.5 CGPA is applicable for SC/ST candidates.

#### **MBA**

Graduates (minimum 10+2+3 format) in any discipline with minimum 55% marks in graduation are eligible with a relaxation of 5 % marks for SC/ST.

#### **MSW**

Graduates (minimum 10+2+3 format) in any discipline with minimum 55% marks in graduation are eligible with a relaxation of 5 % marks for SC/ST.

#### 3.3 Admission Procedure

- UG Programme:
- ➤ The students from Andaman & Nicobar Islands were admitted in Supernumerary Quota as was decided by CSAB 2022.
- > In addition, some seats were filled up by foreign students as nominated by the Government of India under various schemes.
- > 50% of the seats are reserved for candidates from West Bengal and remaining 50% seats are allotted to the candidates from other States based on the JEE Main results in B.Tech / Dual Degree / Integrated M.Sc Programme where 15%, 7.5%, 27% and 10% of the total seats are reserved for SC candidates, ST candidates, OBC candidates and EWS candidates respectively with 5% of the seats are reserved for PwD candidates.
- PG Programme:

Sl No	Types of Student	Mode of Admission
1	Full Time GATE (M. Tech.)	CCMT / Institute level test and
		viva-voce for vacant seats.
2	Full Time Sponsored (M. Tech.)	B. Tech./eqv results, Institute level test and
		viva-voce
3	M. Sc.	CCMN
4	MBA	CAT score and Institute Level GD/PI
5	MSW	Institute level entrance examination



### 3.4 Programme-wise enrolment with gender and caste break-up.

### 3.4.1 Enrolment in B.Tech programmes during 2022-2023 (Gender wise).

### A. Enrolment of Indian students in odd semesters of B. Tech. courses during 2022-2023 Genderwise:

Semester	<u>B</u>	Γ	Ch	ıΕ	C	E	C	<u>SE</u>	EC	<u>E</u>	E	E	ľ	Γ	M	<u>E</u>	MN	<u>1E</u>	To	tal
Semester	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
B.Tech I	52	15	58	14	61	19	151	37	75	22	78	20	0	0	149	37	57	16	681	180
B.Tech III	46	15	54	15	58	19	140	39	72	21	79	17	0	0	142	39	54	13	645	178
B.Tech V	43	15	54	15	54	18	145	35	76	21	77	22	0	0	137	38	47	11	633	175
B.Tech VII	41	18	54	12	53	11	140	31	67	19	70	18	0	0	133	28	50	12	608	149
Total	182	63	220	56	226	67	576	142	290	83	304	77	0	0	561	142	208	52	2567	682

6 4	BT		ChE		CE		CSE		ECE		EE		IT		ME		MME		Tota	ıl
Semester	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
B.Tech II	51	15	57	14	61	21	158	41	75	23	76	22	0	0	145	39	59	16	682	191
B.Tech IV	46	14	54	15	58	19	140	39	72	21	77	18	0	0	142	39	54	13	643	178
B.Tech VI	43	15	54	15	54	18	145	35	76	21	77	22	0	0	137	38	47	11	633	175
B.Tech VIII	41	18	54	12	53	11	140	31	67	19	70	18	0	0	133	28	50	12	608	149
Total	181	62	219	56	226	69	583	146	290	84	300	80	0	0	557	144	210	52	2566	693

## 3.4.2 Enrolment in B. Tech & M. Tech Dual Degree programmes during 2022-2023 (Genderwise)

Semester	В	Γ	Ch	ıΕ	To	otal
·	M	F	M	F	M	F
Dual Degree I	2	4	4	3	6	7
Dual DegreeIII	2	1	4	3	6	4
Dual Degree V	3	0	4	1	7	1
Dual Degree VII	4	0	4	1	8	1
Dual Degree IX	4	1	2	1	6	2
Total	15	6	18	9	33	15



Semester	В	T	Cl	hE	T	otal
	M	F	M	F	M	F
Dual Degree II	2	4	4	2	6	6
Dual Degree IV	2	1	4	3	6	4
Dual Degree VI	3	0	4	1	7	1
Dual Degree VIII	4	0	4	1	8	1
Dual Degree X	4	1	2	1	6	2
Total	15	6	18	8	33	14

#### Enrolment in Integrated M.Sc. programmes during 2022-2023 (Genderwise) 3.4.3

Semester	Che	mistry	To	tal
	M	F	M	F
INT M.Sc. I	13	5	13	5
INT M.Sc. III	10	4	10	4
INT M.Sc. V	7	4	7	4
INT M.Sc. VII	3	3	3	3
INT M.Sc. IX	7	6	7	6
Total	40	22	40	22

Semester	Che	mistry	To	tal
	M	F	M	F
INT M.Sc. II	13	5	13	5
INT M.Sc. IV	10	4	10	4
INT M.Sc. VI	7	4	7	4
INT M.Sc. VIII	3	3	3	3
INT M.Sc. X	6	6	6	6
Total	39	22	39	22

### 3.4.4 Enrolment of Foreign Students in B. Tech programme during 2022-2023 (Genderwise):

Semester	В	Т	Cł	ıE	C	E	CS	SE	E	CE	E	E	ľ	Γ	M	E	MN	ИE	TO	TAL
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
B.Tech I	1	1	0	1	2	2	10	4	2	0	1	2	0	0	3	3	1	0	20	13
B.Tech III	1	2	0	1	1	0	7	2	1	0	2	0	0	0	2	0	0	0	14	5
B.Tech V	0	0	0	0	0	0	6	4	0	0	0	0	0	0	0	0	0	0	6	4
B.Tech VII	0	0	0	0	0	0	12	1	1	0	1	0	0	0	3	1	0	0	17	2
Total	2	3	0	2	3	2	35	11	4	0	4	2	0	0	8	4	1	0	57	24

Semester	В	T	Ch	ıE	C	E	C	SE	E	CE	E	E	ľ	Γ	N	ΙE	MI	ME	To	tal
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
B.Tech II	1	0	0	1	2	2	10	4	2	1	1	2	0	0	3	3	1	0	20	13
B.Tech IV	1	2	0	1	1	0	7	2	1	0	2	0	0	0	2	0	0	0	14	5
B.Tech VI	0	0	0	0	0	0	6	4	0	0	0	0	0	0	0	0	0	0	6	4
B.Tech VIII	0	0	0	0	0	0	12	1	1	0	1	0	0	0	3	1	0	0	17	2
Total	2	2	0	2	3	2	35	11	4	1	4	2	0	0	8	4	1	0	57	24

### 3.4.5 Enrolment in B. Tech. Programme during 2022-2023 (Castewise)

	B.Tech	В.ТЕСН	В.ТЕСН	в.тесн
D e p t .	I Semester	III Semester	V Semester	VII Semester



•	OP	EWS	SC	ST	OBC	TOT	OP	EWS	SC	ST	OBC	TOT	OP	EWS	SC	ST	OBC	TOT	OP	SC	ST	OBC	TOT
BT	17	10	12	5	23	67	19	10	10	5	17	61	15	10	10	2	21	58	21	3	9	5	21
ChE	19	10	10	6	27	72	18	10	11	5	25	69	22	11	10	6	20	69	27	5	9	5	20
CE	25	10	13	6	26	80	22	11	13	6	25	77	16	12	13	6	25	72	21	5	11	5	22
CSE	53	37	27	14	57	188	55	34	23	14	53	179	56	31	24	13	56	180	57	22	27	14	51
ECE	28	15	15	7	32	97	34	12	13	6	28	93	32	16	15	7	27	97	32	10	14	7	23
EE	32	13	16	7	30	98	29	17	17	4	29	96	33	14	16	6	30	99	33	10	15	6	24
IT	0	0	0	0	0	0	0	0	0	0	0	0	00	00	00	00	00	00	00	00	00	00	00
ME	58	24	29	14	61	186	57	27	28	13	56	181	50	28	26	14	57	175	55	20	27	15	44
MME	25	9	11	6	22	73	23	10	9	6	19	67	17	10	9	5	17	58	18	7	9	5	23
Total	257	128	133	65	278	861	257	131	124	59	252	823	241	132	123	59	253	808	264	82	121	62	228

### 3.4.6 Enrolment in B.Tech & M. Tech Dual Degree Programmes during 2022-2023 (Castewise):

D e	D	ual l	Degr	ee			D	ual l	Degr	ee			D	ual l	Degr	ee			Du	al De	gree			Du	al De	egree	
p t		I Sen	neste	r			I	II Se	mest	er			7	V Sei	neste	er			VII	Sem	ester			IX	Sem	ester	
O P	E W	S C	S T	0	T O	0	E W	S C	S T	0	T	O P	E W	S	S T	O B	T O	O	S	S	O B	T	O P	S	S	0	T
Ρ	S	C	1	B C	T	P	S	C	1	B C	O T	r	S	С	1	С	T	P	С	1	С	O T	Р	С	1	B C	O T
B 2 T	1	1	1	1	6	0	1	1	1	0	3	0	1	1	0	1	3	2	0	1	1	0	2	1	1	1	5
C 1 h E	1	1	1	3	7	1	1	1	1	3	7	0	2	1	0	2	5	2	0	1	0	2	1	0	0	2	3
T 3 o t a 1	2	2	2	4	13	1	2	2	2	3	10	0	3	2	0	3	8	4	0	2	1	2	3	1	1	3	8

### 3.4.7 Enrolment in 5 year Integrated M.Sc Programmes during 2022-2023 (Castewise):

D e p t		INT I Sen						INT :						INT :						T M	Sc.					l.Sc.	
О Р	E W S	S C	S T	O B C	T O T	O P	E W S	T O T	O P	E W S	S C	S T	O B C	T O T	O P	S C	S T	O B C	T O T	O P	S C	S T	O B C	T O T			
C 6 h e m	3	3	1	5	18	P W C T B O						2	2	2	0	5	11	2	1	1	0	2	6	0	2	5	13
T 6 o t a l	3	3	1	5	18	4	3	1	1	5	14	2	2	2	0	5	11	2	1	1	0	2	6	0	2	5	13



### 3.4.8 Enrolment in B. Tech. Programme during 2022-2023 (Castewise)

De pt.					В.Т	ech						B.TE	СН						В.Т	ТЕСН				В	.TECH	[
			II Semester								I	V Sem	ester						VI S	emeste	r			VII	I Semes	ter
		OP	E WS	SC	ST	0 7		О (		E WS	SC	ST	OI C		T T	OP	E WS	SC	,	ST	OB C	TO T	OP	SO	C S	В
B T	16	1	0 1	0	5	24	65	18	10	1	0	5	17	60	15	1	10	10	2	21	58	2	21	3	9	5 C
C h E	18	1	0 1	0	6	26	70	18	10	1	1	5	25	69	22	1	11	10	6	20	69	2	27	5	9	5
	24	1	0 1	3	6	26	79	22	11	1	3	6	25	77	16	1	12	13	6	25	72	2	21	5	11	5
C S E	51	3	37 2	8	14	56	186	55	34	2	3	14	53	179	56	3	31	24	13	56	180	) :	57	22	27	14
	27	1	5 1	4	7	32	95	35	11	1	3	6	28	93	32	1	16	15	7	27	97	3	32	10	14	7
	30	1	3 1	5	7	30	95	27	17	1	7	5	29	95	33	1	14	16	6	30	99	3	33	10	15	6
I T	0	-	0 (	)	0	0	0	0	0	(	)	0	0	0	00	C	00	00	00	00	00	(	00	00	00	00
M E	53	2	24 2	.7	14	60	178	57	26	2	8	13	57	181	50	2	28	26	14	57	175	5 5	55	20	27	15
M M E	24	1	0 1	1	6	22	73	23	10	ç	)	6	19	67	17	1	10	9	5	17	58	1	18	7	9	5
	243	1:	29 12	28	65	276	841	255	129	12	24	60	253	821	241	1	32	123	59	253	808	3 2	64	82	121	62

### 3.4.9 Enrolment in B.Tech & M. Tech Dual Degree Programmes during 2022-2023 (Castewise):

D	Γ	Oual 1	Degr	ee			D	ual l	Degr	ee			Γ	Oual 1	Degr	ee			Du	al De	egree			Du	al Do	egree	
e p t		II Sei	neste	er			Ι	V Se	mest	er			1	VI Se	mest	er			VIII	Sen	nester	•		X	Sem	ester	
О Р	E W	S C	S T	O B	T O	Γ S C T							E W	S C	S T	O B	T O	O P	S C	S T	O B	T O	O P	S C	S T	O B	T O
B 2 T	1 1	1	2	0	<u>T</u>	0	1	1	1	0		0	1	1	0	1	T 3	2	0	1	1	T 0	2	1	1	1	<u>T</u>
C 1 h E	1	1	1	3	7	1	1	1	1	3	7	0	2	1	0	2	5	2	0	1	0	2	1	0	0	2	3
T 3 o t a	2	2	3	3	13	1	2	2	2	3	10	0	3	2	0	3	8	4	0	2	1	2	3	1	1	3	8

### 3.4.10 Enrolment in 5 year Integrated M.Sc Programmes during 2022-2023 (Castewise):

D			IN	T M	.Sc.			]	INT	M.Sc	: <b>.</b>			]	INT I	M.S	: <b>.</b>			IN	T M	l.Sc.				INT	M.Sc	·.
p t			II Semester IV Semester					er			7	/I Se	mest	er			VII	I Sen	nester				X Se	meste	er			
	О	Е	S	S	О	T	О	Е	S	S	О	T	О	Е	S	S	О	T	О	S	S	О	T	О	S	S	О	T
	P	W	C	T	В	O	P	W	C	T	В	O	P	W	C	T	В	O	P	C	T	В	Ο	P	C	T	В	O
		S			C	T		S			C	T		S			C	T				C	T				C	T

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C 6	3	3	1	5	18	4	3	1	1	5	14	2	2	2	0	5	11	2	1	1	0	2	6	0	1	5	12
e m T 6	3	3	1	5	18	4	3	1	1	5	14	2	2	2	0	5	11	2	1	1	0	2	6	0	1	5	12
o t																											
a l																											

### 3.4.11 Enrolment in M.Tech. Programmes during 2022-2023 (Genderwise)

Seme ster	BT	СН	CH (E RS)	(SE	( <b>G</b>	CS -	EE (PS	EE (P	EE (IN ST)	EC (N	EC (V	ES (ES T)	OR (M	ME (M	ME (F	ME (T	EC (T	M M	A MS (P	TO TA L
				)	E)		)	M D)		G)	L)		A)	D)	M HT )	E)	EL E)		HY )	
M.Te ch I &II	10 (6)	2 (1)	3 (1)	18 (2)	13 (6)	44 (15 )	9 (2)	10 (3)	8 (2)	16 (3)	19 (3)	6 (1)	14 (5)	12 (1)	6 (1)	11 (0)		2 (0)	2 (0)	205 (52 )
M.Te ch III & IV	16 (9)	7 (6)	5 (2)	16 (3)	19 (7)	43 (13 )	18 (4)	16 (4)	8 (1)		20 (3)	14 (5)	9 (3)	12 (0)	11 (2)	13 (2)	8 (3)	5 (2)	4 (0)	244 (69 )

(Number of female students indicated in parentheses; the total number is inclusive of the number of female students)

#### 3.4.12 Enrolment in M.Sc. Programmes during 2022-2023 (Genderwise)

Semester	M. Sc (CY)	M. Sc (MA)	M. Sc (PH)	M. Sc (Life Science)	M. Sc (Appl Geo & Geoinfo)	TOTAL
M.Sc I &II	23 (13)	24 (4)	23 (5)	13 (6)	20 (6)	103 (34)
M.Sc III & IV	22 (9)	22 (6)	17 (5)	10 (4)	16 (9)	87 (33)

(Number of female students indicated in parentheses; the total number is inclusive of the number of female students)

### 3.4.13 Enrolment in M.Tech Programmes during 2022-2023(Castewise):

Dept. / Year					I &	II					III & I	V	
	OP	GEN (EWS)	SC	ST	OBC	FS	TOTAL	OP	GEN (EWS	SC	ST	OBC	TOTAL
BT	7 (5)	1 (0)	1 (0)	0 (0)	1 (1)	0 (0)	10 (6)	9 (6)	1 (1)	2 (0)	0 (0)	4 (2)	16 (9)
СН	1 (1)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (1)	6 (5)	0 (0)	0 (0)	0 (0)	1 (1)	7 (6)
CH (ERS)	1 (0)	0 (0)	1 (0)	0 (0)	1(1)	0 (0)	3 (1)	4 (2)	0 (0)	0 (0)	0 (0)	1 (0)	5 (2)
CE (SE)	6 (2)	2 (0)	3 (0)	0 (0)	6 (0)	1 (0)	18 (2)	5 (2)	2 (0)	2 (0)	1 (1)	6 (0)	16 (3)



Dept. / Year					I &	II					III & I	V	
	OP OP	GEN (EWS)	SC	ST	OBC	FS	TOTAL	OP	GEN (EWS	SC	ST	OBC	TOTAL
CE (GT)	3 (1)	0 (0)	2 (1)	0 (0)	8 (4)	0 (0)	13 (6)	8 (3)	3 (0)	3 (3)	0 (0)	5 (1)	19 (7)
CS	10 (2)	2 (1)	7 (4)	1 (0)	23 (8)	1 (0)	44 (15)	17 (8)	5 (1)	7 (1)	1 (0)	13 (3)	43 (13)
EE (PS)	3 (1)	1 (0)	1 (0)	0 (0)	4 (1)	0 (0)	9 (2)	11 (2)	0 (0)	3 (0)	0 (0)	4 (2)	18 (4)
EE(PMD)	4 (0)	1 (1)	1 (1)	0 (0)	4 (1)	0 (0)	10 (3)	8 (1)	1 (0)	3 (2)	0 (0)	4(1)	16 (4)
EE (INST)	4 (1)	1 (1)	0 (0)	0 (0)	3 (0)	0 (0)	8 (2)	5 (1)	1 (0)	1 (0)	0 (0)	1 (0)	8 (1)
EC (TE)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	6 (2)	0 (0)	0 (0)	0 (0)	2(1)	8 (3)
EC (VL)	6 (2)	3 (0)	3 (1)	0 (0)	6 (0)	1 (0)	19 (3)	5 (1)	2 (1)	3 (0)	1(1)	9 (0)	20 (3)
EC (NG)	7 (1)	0 (0)	3 (0)	0 (0)	5 (2)	1 (0)	16 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
ES	2 (0)	0 (0)	1 (1)	0 (0)	3 (0)	0 (0)	6 (1)	6 (2)	0 (0)	3 (2)	2(1)	3 (0)	14 (5)
MA (OR)	5 (3)	3 (0)	2 (1)	1 (0)	3 (1)	0 (0)	14 (5)	6 (3)	1 (0)	0 (0)	0 (0)	2 (0)	9 (3)
ME (MD)	4 (0)	0 (0)	0 (0)	1 (0)	7 (1)	0 (0)	12 (1)	7 (0)	1 (0)	0 (0)	0 (0)	4 (0)	12 (0)
ME (FMHT)	2 (1)	1 (0)	0 (0)	0 (0)	3 (0)	0 (0)	6 (1)	3 (0)	2 (1)	2 (1)	0 (0)	4 (0)	11 (2)
ME (TE)	8 (0)	0 (0)	2 (0)	0 (0)	1 (0)	0 (0)	11 (0)	11 (2)	1 (0)	0 (0)	0 (0)	1 (0)	13 (2)
MM (MT)	2 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (0)	4 (2)	0 (0)	1 (0)	0 (0)	0 (0)	5 (2)
PH (AMS)	1 (0)	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	2 (0)	2 (0)	0 (0)	2 (0)	0 (0)	0 (0)	4 (0)
Total	76 (20)	16 (3)	27 (9)	3 (0)	79 (20)	4 (0)	205 (52)	123 (42)	20 (4)	32 (9)	5 (3)	64 (11)	244 (69)

(Number of female students indicated in parentheses; the total number is inclusive of the number of female students)

#### 3.4.14 Enrolment in M.Sc Programmes during 2022-2023 (Castewise)

Dept. / Year			I & II					III & IV	7	
	OP	SC	ST	OBC	TOTAL	OP	SC	ST	OBC	TOTAL
M.Sc (CY)	11 (5)	4(2)	0 (0)	7 (2)	22 (9)	11 (6)	4 (3)	0 (0)	8 (4)	23 (13)
M.Sc MA)	12 (3)	4 (2)	0 (0)	7(1)	23 (6)	5 (1)	4 (0)	0 (0)	12 (4)	21 (5)
M.Sc (PH)	9 (3)	4(1)	0 (0)	5 (1)	18 (5)	9 (1)	4(1)	0 (0)	3 (2)	16 (4)
M.Sc (BT)	5 (2)	1 (0)	1 (0)	4 (2)	11 (4)	5 (3)	2 (1)	0 (0)	4 (2)	11 (6)
M. Sc (EES)	10 (7)	3 (1)	2 (0)	3 (1)	18 (9)	8 (3)	2 (0)	2 (0)	5 (2)	17 (5)
Total	47 (20)	16 (6)	3 (0)	26 (7)	92 (33)	38 (14)	16 (5)	2 (0)	32 (14)	88 (33)

(Number of female students indicated in parentheses; the total number is inclusive of the number of female students)

### 3.4.15 Enrolment in MBA programmes during 2022-2023 (Gender wise)

Master of Business Administration (MBA)	I & II Semester	III & IV Semester

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31 (12)	17 (10)

(Number of female students indicated in parentheses; the total number is inclusive of the number of female students)

#### 3.4.16 Enrolment in MBA Programme during 2022-2023(Castewise):

			M	BA I & I	I				MBA I	II & IV		
	OP	GEN	SC	ST	OBC	TOTAL	OP	GEN	SC	ST	OBC	TOTAL
		(EWS)						(EWS)				
MBA	20 (10)	2 (0)	3 (1)	1 (0)	5 (1)	31 (12)	13 (7)	1(0)	2 (2)	0 (0)	1(1)	17 (10)

(Number of female students indicated in parentheses; the total number is inclusive of the number of female students)

#### 3.4.17 Enrolment in MSW Programme during 2022-2023 (Genderwise)

	I & II Semester	III & IV Semester
Master of Social Work (MSW)	9 (4)	6 (5)

(Number of female students indicated in parentheses; the total number is inclusive of the number of female students)

#### 3.4.18 Enrolment in MSW Programme during 2022-2023 (Castewise)

			MSW I & I	I			]	MSW III &	& IV	
MSW	OP 5 (2)	SC 2 (1)	ST 0 (0)	OBC 2 (1)	TOTAL 9 (4)	OP 5 (4)	SC 0 (0)	ST 0 (0)	OBC 1 (1)	TOTAL 6 (5)

(Number of female students indicated in parentheses; the total number is inclusive of the number of female students)

#### 3.5 Exam and Evaluation:

Performance of a student is assessed throughout the semester and assessment in a course is made based on his/her performance. For each theory paper of any academic semester there is a mid-term and an end-term examination following the regulations.

#### 3.6 Admission Statistics

#### 3.6.1 Admission of Research Scholars for Regular PhD programme during 2022-2023

SL.	Branch of Research Study		Gender		C	aste		Total
NO.	Branen of Research Stady	Male	Female	OP	SC	ST	OBC	Total
1	Biotechnology	4	8	10	1	0	1	12
2	Chemical Engineering	2	5	4	1	0	2	7
3	Chemistry	3	4	4	1	1	1	7
4	Civil Engineering	4	2	4	1	0	1	6
5	Computer Science & Engineering	6	7	10	2	0	1	13
6	Earth & Environmental Studies	0	1	1	0	0	0	1
7	Electrical Engineering	6	3	6	1	0	2	9
8	Electronics & Communications Engineering	2	5	6	0	0	1	7
9	Humanities & Social Sciences	0	3	3	0	0	0	3



SL.	Branch of Research Study		Gender		С	aste		Total
NO.	Brailen of Research Stady	Male	Female	OP	SC	ST	OBC	
10	Management Studies	0	2	2	0	0	0	2
11	Mathematics	11	3	8	1	0	5	14
12	Mechanical Engineering	11	0	6	2	0	3	11
13	Metallurgical & Materials Engineering	5	0	3	1	0	1	5
14	Physics	7	2	7	0	0	2	9
15	Centre for Research on Environment and Water (CREW)	0	1	1	0	0	0	1
16	Centre for Biomedical Engineering & Assistive Technology (BEAT)	0	0	0	0	0	0	0
17	Centre for Advanced Research on Energy (CARE)	0	0	0	0	0	0	0
18	Centre of Excellence on IoT and Intelligent Systems (IoTIS)	0	0	0	0	0	0	0
		61	46	75	11	1	20	107

## 3.6.2 Admission of Research Scholars for Professional PhD programme

SL.		(	Gender	(	Caste			
NO.	Branch of Research Study	Male	Female	OP	SC	ST	OBC	Total
1	Biotechnology	1	0	1	0	0	0	1
2	Chemical Engineering	0	0	0	0	0	0	0
3	Chemistry	0	0	0	0	0	0	0
4	Civil Engineering	1	0	1	0	0	0	1
5	Computer Science & Engineering	1	2	3	0	0	0	3
6	Earth & Environmental Studies	0	0	0	0	0	0	0
7	Electrical Engineering	2	0	2	0	0	0	2
8	Electronics & Communications Engineering	2	0	2	0	0	0	2
9	Humanities & Social Sciences	1	0	1	0	0	0	1
10	Management Studies	1	1	1	0	1	0	2
11	Mathematics	0	2	2	0	0	0	2
12	Mechanical Engineering	0	0	0	0	0	0	0
13	Metallurgical & Materials Engineering	1	0	1	0	0	0	1
14	Physics	1	0	1	0	0	0	1
15	Centre for Research on Environment and Water (CREW)	0	0	0	0	0	0	0



SL.		G	ender	Ca	iste			
16	Centre for Biomedical	0	0	0	0	0	0	0
	Engineering &							
	Assistive							
	Technology (BEAT)							
17	Centre for	0	0	0	0	0	0	0
	Advanced							
	Research on							
	Energy (CARE)							
18	Centre of	0	0	0	0	0	0	0
	Excellence on							
	IoT and							
	Intelligent							
	Systems (IoTIS)							
		11	5	15	0	1	0	16

## 3.6.3 Total strength of Research Scholars for Regular PhD programme in 2022-2023

SL. NO	Branch of Research Study	Ge	ender		С	aste		Tota 1
		Mal e	Femal e	OP	S C	S T	OB C	-
1	Biotechnology	22	30	35	8	1	8	52
2	Chemical Engineering	18	15	22	4	1	6	33
3	Chemistry	12	10	14	4	1	3	22
4	Civil Engineering	20	6	14	4	1	7	26
5	Computer Science & Engineering	39	23	40	5	2	15	62
6	Earth & Environmental Studies	1	3	3	0	0	1	4
7	Electrical Engineering	35	8	24	7	1	11	43
8	Electronics & Communications Engineering	16	11	15	5	1	6	27
9	Humanities & Social Sciences	4	10	10	1	0	3	14
10	Management Studies	4	5	6	1	0	2	9
11	Mathematics	32	15	25	6	1	15	47
12	Mechanical Engineering	35	1	20	6	0	10	36
13	Metallurgical & Materials Engineering	25	1	14	2	0	10	26
14	Physics	23	6	17	4	0	8	29
15	Centre for Research on Environment and Water (CREW)	0	1	1	0	0	0	1



SL. NO	Branch of Research Study	G	Gender		C	aste		Tota 1
•		Mal e	Femal e	OP	S C	S T	OB C	-
16	Centre for Biomedical Engineering & Assistive Technology (BEAT)	0	0	0	0	0	0	0
17	Centre for Advanced Research on Energy (CARE)	0	0	0	0	0	0	0
18	Centre of Excellence on IoT and Intelligent Systems (IoTIS)	0	0	0	0	0	0	0
	Total	286	145	26 0	57	9	105	431

## 3.6.4 Total strength of Research Scholars for Professional PhD programme (2022-23)

SL.	Branch of Research Study	Ge	ender		C	aste		Tota
NO		Mal	Femal	OP	S	S	OB	1
•		e	e		C	T	C	
1	Biotechnology	3	2	4	0	0	1	5
2	Chemical Engineering	11	10	16	2	0	3	21
3	Chemistry	3	3	5	1	0	0	6
4	Civil Engineering	16	2	15	2	0	1	18
5	Computer Science & Engineering	26	14	35	2	1	2	40
6	Earth & Environmental Studies	3	1	4	0	0	0	4
7	Electrical Engineering	17	5	21	0	0	1	22
8	Electronics & Communications Engineering	28	8	33	2	0	1	36
9	Humanities & Social Sciences	8	3	10	0	0	1	11
10	Management Studies	12	5	15	0	1	1	17
11	Mathematics	5	4	7	0	0	2	9
12	Mechanical Engineering	19	1	16	3	0	1	20
13	Metallurgical & Materials Engineering	6	0	5	1	0	0	6
14	Physics	10	5	9	4	0	2	15
15	Centre for Research on Environment and Water (CREW)	0	0	0	0	0	0	0
16	Centre for Biomedical Engineering & Assistive Technology	1	0	1	0	0	0	1
	(BEAT)							
17	Centre for Advanced Research on Energy (CARE)	0	0	0	0	0	0	0
18	Centre of Excellence on IoT and Intelligent Systems (IoTIS)	0	0	0	0	0	0	0
	Total	168	63	196	17	2	16	231

# 3.6.5 Students admitted to B.Tech programmes from various annual income groups during 2022-2023- 1st Year

SL NO.	STATE	BelowRupees1lakh	BetweenRupees1lakh ToRupees5lakhs	Above Rupees5lakhs	TOTAL
1	Andhra Pradesh	48	6	34	88
2	Assam	0	2	0	2
3	Bihar	47	24	32	103
4	Chattishgarh	0	0	1	1
5	Delhi	1	0	2	3
6	Goa	0	0	1	1
7	Gujarat	0	0	2	2
8	Haryana	0	0	3	3
9	Jammu &	0	0	0	0
	Kashmir				
10	Jharkhand	6	8	8	22

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SL NO.	STATE	BelowRupees1lakh	BetweenRupees1lakh ToRupees5lakhs	Above Rupees5lakhs	TOTAL
11	Karnataka	2	0	2	4
12	Madhya Pradesh	0	1	5	6
13	Maharashtra	1	2	4	7
14	Meghalaya	0	0	0	0
15	Mizoram	0	0	0	0
16	Odisha	2	1	5	8
17	Sikkim	1	0	0	1
18	Rajasthan	3	7	2	12
19	Tamil Nadu	1	1	1	3
20	Telengana	4	2	9	15
21	Tripura	1	0	0	1
22	Uttar Pradesh	20	12	19	51
23	Uttaranchal	0	1	2	3
24	West Bengal	72	75	163	310
25	Andaman &	0	3	8	11
	Nicobar				
ТОТ	AL	209	145	303	658

# 3.6.6 The Number Of Candidates Admitted To B.Tech & M.Tech Dual Degree Programme From Various Annual Income Groups During 2022-2023- 1st Year

SLNO.	STATE	BelowRupees1lakh	Between Rupees 1lakhtoRupees5lakhs	Above Rupees5lakhs	TOTAL
1	Andhra Pradesh	1	0	0	1
2	Bihar	1	0	0	1
3	Telengana	0	0	0	0
4	Uttar Pradesh	2	0	0	2
5	West Bengal	2	0	2	4
	TOTAL	6	0	2	8

# 3.6.7 The Number Of Candidates Admitted To Integrated M. Sc. Programme From Various Annual Income Groups During 2022-2023- 1st Year

SLNO.	STATE	Below Rupees 1lakh	Between Rupees 11akh to Rupees 51akhs	Above Rupees5lakhs	TOTAL
1	Andhra	0	0	1	1
	Pradesh				
2	Bihar	0	0	2	2
3	Jharkhand	0	0	1	1
4	Maharashtra	0	0	0	0
5	Orissa	0	0	1	1
6	Telengana	0	0	0	0
7	Uttar Pradesh	0	0	1	1
	TOTAL	0	0	6	6

### 3.6.8 The Details Of Admission To The PG Programmes During 2022-2023 -1st Year

Department	PG Program	OPE	EW	OB			F	TOTA
		N	S	C			S	L
Physics	Advanced Material Science & Technology	1	0	1	0	0	0	2
Biotechnology	Biotechnology	7	1	1	1	0	0	10
Chemical	Chemical Engineering	1	1	0	0	0	0	2
Engineering								
Chemical	Energy Resources and Sustainable Environmental	1	0	1	1	0	0	3
Engineering	Engineering							



Department	PG Program	OPE N	EW S	OB C			F S	TOTA L
Computer Science &	Computer Science & Engineering	10	2	23	7	1	1	44
Engineering								
Earth and Environmenta 1 Studies (Coordinating	Environmental Science & Technology	2	0	3	1	0	0	6
Mechanical	Fluid Mechanics and Heat Transfer	2	1	3	0	0	0	6
Engineering								
Civil	Geotechnical Engineering	3	0	8	2	0	0	13
Engineering								
Mechanical	Machine Design	4	0	7	0	1	0	12
Engineering								
Metallurgical	Metallurgy and Materials Technology	2	0	0	0	0	0	2
and Materials								
Engineering								
Electronics	Microelectronics & VLSI	6	3	6	3	0	1	19
and								
Communicati								
on								
Engineering								
Mathematics	Operations Research	5	3	3	2	1	0	14
Electrical	Power Electronics & Machine Drives	4	1	4	1	0	0	10
Engineering	Tower Electronies & Machine Diffes	7	1	7	1	U	U	10
Electrical	Davisar Cristania	3	1	4	1	0	0	9
	Power Systems	3	1	4	1	U	U	9
Engineering	T	4	1					0
Electrical	Instrumentation and Control	4	1	3	0	0	0	8
Engineering								
Civil	Structural Engineering	6	2	6	3	0	1	18
Engineering								
Electronics	Next Generation Communication And Networks	7	0	5	3	0	1	16
and Communicati								
on Engineering								
Engineering	The arms 1 First in a series	Ω.		1	2		0	11
Mechanical	Thermal Engineering	8	0	1	2	0	0	11
Engineering		= -	1.0	<b>5</b> 0				205
Total M.		76	16	79	27	3	4	205
Tech.	200 1 00							
Chemistry	MSc in Chemistry	10	2	8	3	0	0	23
Physics	MSc in Physics	10	3	6	4	0	0	23
Mathematics	MSc in Mathematics	9	3	6	4	2	0	24
EES	MSc in Applied Geology & Geoinformatics	8	2	5	3	2	0	20
Biotechnolog y	MSc in Life Sciences	6	1	3	2	1	0	13
Management	MBA	20	2	5	3	1	0	31
Studies	MDA	20	2	5	5	1	J	<i>J</i> 1
HSS	MSW	5	0	2	2	0	0	9
1100		144	29	114	48	9	4	348
	Total Admission	144	29	114	48	y	4	348

## 3.6.9 The Details Of Admission Of Students Under EWS To The Different Programmes During 2022-2023 -1st Year

Department	PG Program / Specialization	F	EWS	TOTAL
		Male	Female	
Physics	Advanced Material Science & Technology	0	0	0

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Biotechnology	Biotechnology		0	1
Chemical Engineering	Chemical Engineering		0	1
Chemical Engineering	Energy Resources and Sustainable Environmental Engineering	0	0	0
Computer Science & Engineering	Computer Science & Engineering	1	1	2
Earth and Environmental Studies (Coordinating)	Environmental Science & Technology	0	0	0
Mechanical Engineering	Fluid Mechanics and Heat Transfer	1	0	1
Civil Engineering	Geotechnical Engineering	0	0	0
Mechanical Engineering	Machine Design	0	0	0
Metallurgical and Materials Engineering	Metallurgy and Materials Technology	0	0	0
Electronics and Communication Engineering	Microelectronics & VLSI	3	0	3
Mathematics	Operations Research	3	0	3
Electrical Engineering	Power Electronics & Machine Drives		1	1
Electrical Engineering	Power Systems		0	1
Electrical Engineering	Instrumentation and Control		1	1
Civil Engineering	Structural Engineering		0	2
Electronics and Communication Engineering	Telecommunication Engineering		0	0
Mechanical Engineering	Thermal Engineering	0	0	0
	Total M. Tech.	13	3	16
Chemistry	MSc in Chemistry	1	1	2
Physics	MSc in Physics	3	0	3
Mathematics	MSc in Mathematics	3	0	3
EES	MSc in Applied Geology & Geoinformatics		0	2
Biotechnology	MSc in Life Science	1	0	1
Management Studies	MBA	2	0	2
HSS	MSW	0	0	0
	Total Admission	25	4	29

SL.	SL. Branch of Research Study		EWS	Total
NO.		Male	Female	
1	Biotechnology	2	1	3
2	Chemical Engineering	0	0	0
3	Chemistry	1	1	2
4	Civil Engineering	1	1	2
5	Computer Science & Engineering	1	0	1
6	Earth & Environmental Studies	0	0	0
7	Electrical Engineering	1	0	1
8	Electronics & Communications Engineering	0	1	1
9	Humanities & Social Sciences	1	0	1
10	Management Studies	0	0	0
11	Mathematics	1	2	3
12	Mechanical Engineering	1	0	1
13	Metallurgical & Materials Engineering	1	0	1



SL.	Branch of Research Study EWS		Total	
NO.		Male	Female	
14	Physics	0	0	0
15	Centre for Research on Environment and Water (CREW)	0	0	0
16	Centre for Biomedical Engineering & Assistive Technology (BEAT)	0	0	0
17	Centre for Advanced Research on Energy (CARE)	0	0	0
18	Centre of Excellence on IoT and Intelligent Systems (IoTIS)	0	0	0
	Total	10	6	16

Name of the programme	EWS		Total	
	Male	Female		
Bachelor of Technology in Biotechnology	8	2	10	
Bachelor of Technology in Chemical Engineering	8	2	10	
Bachelor of Technology in Computer Science & Engineering	29	8	37	
Bachelor of Technology in Civil Engineering	8	2	10	
Bachelor of Technology in Electronics & Communication Engineering	11	4	15	
Bachelor of Technology in Electrical Engineering	11	2	13	
Bachelor of Technology in Metallurgical & Materials Engineering	7	2	9	
Bachelor of Technology in Mechanical Engineering	17	7	24	
B.Tech & M.Tech Dual Degree in Biotechnology	1	0	1	
B.Tech & M.Tech Dual Degree in Chemical Engineering	0	1	1	
5 year integrated M.Sc in Chemistry	2	1	3	
Total	102	31	133	

## 4. Departments

#### 4.1 Department of Biotechnology

#### 4.1.1 Department at a Glance:

The Department of Biotechnology, NIT Durgapur was established in 2005 with the B. Tech Biotechnology Program. The M.Tech program was subsequently introduced in 2009. In the year 2020, the department introduced a MSc in Life Sciences program. The department consists of 17 faculties with diverse research backgrounds, engaged in teaching and research in applied biological sciences and biomedical engineering. Faculty members are actively involved in projects, publishing high quality research articles, patents and have established collaborations with various national and international laboratories. The department frequently receives grants from various central funding agencies such as DST, DBT, CSIR to support research activities. It is equipped with extensive research facilities and infrastructure to develop cutting-edge technology through interdisciplinary research, training, and technical innovation. From past few years, the department has steadily emerged as a leader in providing excellent education at both the undergraduate and postgraduate levels with strong emphasis on modern biotechnology skills and on extensive laboratory training. The department also hosts international students. The curriculum and syllabi have been framed to meet the challenges of the growing demand of the Biotechnology sector in India. The department aims to provide a holistic education by means of innovative teaching, extracurricular activities and frequently organised seminars and workshops.

#### 4.1.2 Mission & Vision

#### Mission

- To produce highly qualified, well-rounded and motivated graduates and postgraduates possessing adequate basic and technical knowledge and understanding in Biotechnology, who can provide service and eventually leadership to the nation and to the world.
- To pursue creative research and develop new technologies in the field of Biotechnology, which can contribute to the industry and to academia.

Vision



• To focus on quality teaching and research and foster innovation in the field of Biotechnology to cater to the needs of society and of the country.

### 4.1.3 Faculty

Name	Designation	<b>Email-id</b>
Apurba Dey	HAG Professor	apurba.dey@bt.nitdgp.ac.in
Sudip Chattopadhyay	HAG Professor	sudip.chattopadhyay@bt.nitdgp.ac.in
Sudit Sekhar Mukhopadhyay	Professor	sudit.mukhopadhyay@bt.nitdgp.ac.in
Surabhi Chaudhuri	Professor	surabhi.chaudhuri@bt.nitdgp.ac.in
Kaustav Aikat	Professor	kaustav.aikat@bt.nitdgp.ac.in
Dalia Dasgupta Mandal	Professor	dalia.dasgupta@bt.nitdgp.ac.in
Debjani Dutta	Associate Professor	debjani.dutta@bt.nitdgp.ac.in
Kazy Sufia Khannam	Associate Professor	sufia.kazy@bt.nitdgp.ac.in
Monidipa Ghosh	Associate Professor	monidipa.ghosh@bt.nitdgp.ac.in
Subhankar Roy Barman	Associate Professor	subhankar.roybarman@bt.nitdgp.ac.in
Ashish Bhattacharjee	Associate Professor	ashish.bhattacharjee@bt.nitdgp.ac.in
Nibedita Mahata	Assistant Professor	nibedita.mahata@bt.nitdgp.ac.in
Oindrilla Mukherjee	Assistant Professor	oindrilla.mukherjee@bt.nitdgp.ac.in
Sougata Saha	Assistant Professor	sougata.saha@bt.nitdgp.ac.in
Debojyoti De	Assistant Professor	debojyoti.de@bt.nitdgp.ac.in
Sudipta Mondal	Assistant Professor	sudipta.mondal@bt.nitdgp.ac.in
Amita Barik	Assistant Professor	amita.barik@bt.nitdgp.ac.in

## 4.1.4 Equipments (Newly Added)

Sl. No.	Name of the equipment	Date of Purchase	Amount
1	Water Purifier	08.07.2022	52300
2	Projector	27.05.2022	142860
3	Desktop Computer	25.08.2022	211604
4	CO2 Cylinder	10.02.2023	15222
5	UPS	11.10.2022	18000
6	UPS	10.10.2022	7785
7	Freezer	03.11.2022	104000
8	Ultralow Deep Freezer	01.03.2023	741880
9	Cooling Centrifuge	06.03.2023	299720
10	Motor for Centrifuge	02.02.2023	53373
11	Microwave Oven	16.11.2022	6586
12	Weighing Balance	07.12.2022	95000
13	PH Meter	22.12.2022	59750
14	Stabilizer	28.01.2023	10030
15	Magnetic Stirrer	18.01.2023	11800
16	Bacteriological Incubator	18.01.2023	108500
17	Refrigerator	21.01.2023	24998
18	Pipette	03.02.2023	5500
19	PH Meter	14.02.2023	55000
20	Magnetic Stirrer	11.02.2023	8333
21	Probe Sonicator	16.02.2023	123000
22	Non Refrigerated Centrifuge	13.02.2023	39847.61
23	Industrial Oven	13.02.2023	21059.22
24	UV-Transilluminator	21.02.2023	59000
25	Bacteriological Incubator	22.02.2023	108300
26	Biosafety Cabinet	14.02.2023	284500
27	Microscope	13.03.2023	223610
28	Double Door Refrigerator	03.03.2023	30887
29	Stabilizer	23.02.2023	18830



#### 4.1.5 Labs

Sl. No.	Name of Laboratory	Major equipment
1	UG Lab 1	NA
2	UG Lab 2	NA
3	PG Lab	Spectrophotometer
4	CIF I	Spectrophotometer, Gel documentation system
5	CIF II	Flow cytometer; Flurimeter, Sonicator, - 80 freezer
6	Bioinformatics	Computational facility
7	Microscopy Room	Fluorescet Microscopes
8	Cell culture facility	Cell culture facility
9	Molecular Plant Pathogen Interactions (SRB)/Microbial products ,Drug delivery systems and Ecotoxicology(DDG)	Spectrophotometer, Refrigerated centrifuge, PCR machine. Incubator shaker, UV-Vis Spectrophotometer, Microscope
10	Microbial Biotechnology (SC/KA)	GC, UV Vis Spectrophotometer
11	Inflammation Biology and Cancer cell Signaling (AB)/Genomic instability and Protein Engineering (SSM)	Real time PCR, Cold centrifuge, Semi confocal microscope etc.
12	Immunbiology Lab (MG)	Biosafety cabinet Level 3, Sonicator, Centrifuge, Free Radical Analyser, Ph meter, Vortex, Gel rocker.
13	Plant Developmental Biology (SCH)	Incubator shaker, PCR machine, Centrifuge machine, gel electrophoresis apparatus
14	Bioprocess Engineering (AD/SM)	UV Vis Spectrophotometer
15	Food and Environmental Biotechnology (SK/DD)	Incubator shaker, UV-Vis Spectrophotometer, PCR machine, GC, - 20 freezer, gel electrophoresis
16	Cellular and molecular Immunology (NM)	CO2-Incubator, Biosafety Cabinet-II, ELISA reader
17	Infection Biology laboratory (OM)	Dual gas incubator; Nanopore sequencer system
18	Laboratory of Cellular Differentiation (SS/DDE)	2D gel electrophoresis, Real Time PCR Machine with HRM, -80 Freezer
19	Chemical Biology Laboratory (SM)	Chemical fume hood; Rotary evaporator, Solid Phase Peptide Synthesizer

### 4.1.6 PhD Degree awarded till 2022-23

Fifty.

#### 4.1.7 Specialization

- Environmental Toxicology, and Microbial bioprocess, Drug delivery system
- · Infection Biology
- Immunology
- Cell signaling
- · Biochemistry
- Environmental Biotechnology
- · Food Biotechnology
- Plant Biology
- Bioinformatics, Computational Biology
- Molecular Biology of Cancer and Protein engineering
- Bioprocess Engineering and Environmental Biotechnology
- Immunology, Infection Biology
- Cellular and molecular biology, Cancer cell signaling



- · Stem Cell and Chemical Biology
- · Data Science
- · Computational Genomics
- · Cell and Molecular Biology
- Biochemical Engineering, Microbial Fermentation
- · Environmental Microbiology and Biotechnology, Microbial Genomics and Metagenomics
- Host-pathogen interaction and biosensor development
- · Bionanotechnology, Chemical Biology
- · Plant Biotechnology and Molecular Plant Pathogen Interactions
- · Biochemistry, Food Biotechnology

#### 4.1.8 Proposed Plan for Research

- · Bionanotechnology
- Encapsulation of bioactive compounds
- · Immunoinformatics
- · Immunology and cell signalling
- · Antimicrobial food packaging
- · Nanoremediation of pollutants
- · Signal transduction
- · Bio-delignification and LCB Valorization
- Computational study on intrinsic disordered proteins
- 1.DNA damage repair and cancer 2. Engineering of Cellulase enzymes
- Nitrogenous waste material degradation by Annamox bacteria
- · Microbiome; Host pathogen interaction; Antimicrobials
- Monocyte/macrophage activation, Cancer progression
- · Bioplymer for Designing Drug delivery system
- Use of Systems Biology approach to understand Metabolic disorder
- Study of regulation of physiological processes at the cellular, tissue and organism level by post-translational protein arginylation
   Research on Human Microbiome
- 1. "Identification of anti-leishmanial molecules, acting as novel inhibitors against intracellular lipid signalling machinery in Leishmania donovani" 2. Devising strategies to overcome Multi Drug resistance in Staphylococcus aureus.
- Production of biofuel and other value-added products from microorganisms; Microbial production of lactic acid; Microbial Production of Polyhydroxyalkanoates (PHA) and its application as bioplastic
- · Development of peptide based self-assembly modules for diverse application
- · Understanding amyloid aggregation from structural perspective
- Plant defense response and mechanisms of pathogenesis in rice-blast pathosystem
- Metabolomics

#### 4.1.9 Area of Research Interest

- · LCB Valorization
- · Drug delivery system design
- Immunotherapy
- · Bionanotechnology
- Immunoinformatics
- · Immunology and cell signalling
- · Microbial Biotechnology
- · signal transduction
- Macromolecular interactions, RNA biology
- Understanding the mechanism of Fanconi anemia, a cancer susceptible disorder. Development of engineered Cellulase
  for the Industrial work
   Bioprocess engineering and Environmental Engineering
- · Infection Biology, Microbiome
- · Inflammatory diseases, Biomarker identification for targeted therapy
- · Metabolic Disorder
- · Inflamation, stress response.
- Petroleum Microbiology, Groundwater Microbiology, Microbiology of deep biosphere, Microbial carbon dioxide capture and conversion to value added products



- Immunologybiology, Biosensor, Nanomedicine
- Biofuels, Bioplastics
- Peptide self-assembly, Bionanotechnolgy, Protein folding
- Plant defense response and mechanisms of pathogenesis in rice-blast pathosystem
- Functional Food, Nanobiotechnology, Food Biochemistry

### 4.1.10 Institute Industry Collaboration

Collaborating Institute Organization	Areas of collaboration	Collaboration Activities
Fortis India Pvt. Ltd.	Development of recombinant	Consultancy and research
	human proteins	

#### 4.1.11 Collaboration with Academic and Research Institutions

Collaborating Institute Organization	Areas of collaboration	<b>Faculty Members Involved</b>	Collaboration Activities
Central Mechanical Engineering Research Institute, Durgapur	Research projects on Biopolymer Development and its Applications	Dr. Nripen Chanda	Research
National Institute of Cholera and Enteric Diseases, Kolkata	Research on stability and functional characterization of IpaD	Dr. Hemanta Koley	Research
Central Institute of Technology Kokrajhar	Food Biotechnology	Surabhi Chaudhuri	Research
NIPGR, New Delhi	Research Grant	Dr. Alok K. Sinha	Research
IIT GUWAHATI	Research	Prof. Tapas Mandal	Publication in Journal of Environmental Chemical Engineering
SRM Institute of Science and Technology	antimicrobials	Dr. Priyadip Das	Joint Research
IIT Patna	antimicrobial polymers	Dr. Subrata Chattopadhyay	Joint Research
Bose Institute, Kolkata	Research	Prof. Kaushik Biswas	In vivo experiments in the field of Cancer Biology
Sungkyunkwan University School of Medicine, South Korea	Animal Experiments	Prof. Kyeong Kyu Kim	Use of their experimental facilities, jointly working on research problems and coauthoring papers and patents
Indian Institute of Science Bangalore	Systems Biology	Dr. Mohit Kumar Jolly	Student exchange
IIT Indore	Computational Biology	Parimal Kar	Research
Tezpur University	Computational Biology	Venkata Satish Kumar Mattaparthi	Research
Indian Institute of Technology Kharagpur	Microbiology of Deep Biosphere	Prof P Sar, Biotechnology Department, IIT KGP	Joint Sponsored Research Project
Borehole Geophysics Research Laboratory, MoES- GOI, Karad, MH	Deep Biosphere Microbiology	Dr. S Roy	Sample Collection for research project
Central Manufacturing Technology Institute, The Ministry of Heavy Industries & Public Enterprises, Gov. of India	Sensor reseach	Dr. Monidipa Ghosh, Prof. Chiranjib Koley, Mrs. Megha Agrawal	Development of point of care device for cancer detection.



Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
University of Illinois at Chicago	Joint Reserach	Petr Kral	Joint Publication
IIT Bombay	Rice blast fungus	Dr. Rajesh Patkar	Research
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram	Functional Food	Dr. Debjani Dutta	Research

## 4.1.12 Innovations and Technology Transfer (Patents filed during)

Title	Inventors	<b>Application Nos</b>	Date of Filling
NIL	NIL	NIL	2023-08-07
Piezoelectric peptide-based materials and piezoelectric devices containing same	Ehud Gazit, BERA Santu, Yu Chen, Sharon Gilead, Kai Tao, Sigal Lazar, Rusen Yang, Sudipta Mondal, Vasantha Basavalingappa	17 /442,765	2022-06-06

## 4.1.13 Workshops/Seminars Organized

Name of Key Speaker(s)	Name of the Programme	Date of the Programme
Prof. Partha P. Majumder	Karyashala Program funded by SERB, Govt. of India	2022-12-12
Prof. Partha P Majimder	Karyashala, SERB	2022-12-12
Prof. Partha Chakraborty	Karyashala, SERB	2022-12-13
Dr Kolli Sarath, CEO, Boltzmann	Karyashala, SERB	2022-12-14
Prof. Kaushik Biswas, Bose institute Kolkata	Karyashala, SERB	2022-12-15
Prof. Zhumur Ghosh, Bose institute Kolkata	Karyashala, SERB	2022-12-15
Prof. Mrinal Kanti Ghosh, IICB kolkata	Karyashala, SERB	2022-12-13
Dr. Paritosh Parashar, Director, Sarsuag Discovery	Karyashala, SERB	2022-12-14
Dr. Biswapriya B. Misra, Director, Nveda Biosciences	Karyashala, SERB	2022-12-16
Prof. Saikat Chakrabarti, IICB Kolkata	Karyashala, SERB	2022-12-17
Prof. Dr. Oishee Chakrabarti, SINP Kolkata	Karyashala, SERB	2022-12-17
Prof. Dr. Shilpak Chatterjee, Senior Scientist, IICB Kolkata	Karyashala, SERB	2022-12-18
Dr. Sudipto Saha, Bose institute Kolkata	Karyashala, SERB	2022-12-18
Dr. Swapan K Jana, Director -R&D and Manufacturing at Serum Institute of India Limited, Prof. Uday Bandyopadhyay, Director, Bose Institute, Prof. Anupam Basu, Director, NIT Durgapur.	Industry Academia Research Interaction BIOTECHNOLOGY 2022: A Confluence of Science and Technology	2022-09-21

#### 4.1.14 Journal: Published in 2022-2023

Author(s) Name	Paper Name	Journal Name	Others Info
P. Sarkar, M. Maji, M. Ghosh, A. Dey.	2. Kinetic modelling of high concentration 4-Nitrophenol	Biocatalysis and	Volume:41 Issue No: Page No:102316. Year:2022 Month:



Author(s) Name	Paper Name	Journal Name	Others Info
	biodegradation by an isolated	Agricultural	
	bacterial consortium and	Biotechnology.	
	posttreatment ecotoxicity analysis.		
SR Dodda, M	Comparative Biochemical and	Applied	Volume:58 Issue No:5
Hossain, P Jain, K	Structural Properties of an	Biochemistry	Page No:564-574
Aikat, SS	Industrially Important Biocatalyst	and	Year:2022
Mukhopadhyay	Cellobiohydrolase Cel7A from	Microbiology	Month:Sep
Wakiiopaanyay	Thermophilic Aspergillus fumigatus	Microsiology	Woman.sep
Sudipta Mondal,	Linear One-Dimensional	Acs Nano	Volume: 16 Issue No:
Sudipia Wondar,	Elifedi One-Dimensional	71CS I Vallo	Page No:18307
Pavel Rehak, Nandita	Assembly of Metal		-18314 Year:2022
	•		Month:Nov
Ghosh, Petr Král, and Ehud Gazit	Nanostructures onto an Asymmetric		Month: Nov
	Peptide Nanofiber with High		
	Persistence Length		
Samadarsi, Rohini & Augustin, Linus	1. In-silico and in-vitro studies on the	BMC	Volume:16 Issue
& Kumar, Chandan &	efficacy of mangiferin against	Chemistry	No:42 Page No:
Dutta, Debjani	colorectal cancer		Year:2022 Month:Aug
Subhasish Majee,	Bio-organic fertlizer production from	Journal of	Volume:325 Issue
Kalyan Kumar	industrial waste and	Environmental	No:116378 Page
Sarkar, Rwiddhi	insightful analysis on release	Management	No:12 Year:2023
Sarkhel, Gopinath Halder, Dalia	kinetics		Month:Jan
Dasgupta Mandal, Navanietha			
Krishnaraj Rathinam,			
Tamal Mandal			
Dalia Dasgupta	Challenges in developing strategies	Environmental	Volume:30 Issue
Mandal, Gaurav	for valorization of	Science and	No:11119-11140 Page
Singh, Subhasree	lignin- A major pollutant of paper	Pollution	No:22
Mazumdar, Protik Chanda	mill industry	Research	Year:2022 Month:Dec
Subhasree	Chitosan based micro and	International	Volume:222 Issue No
Mazumdar, Tamal Mandal, Dalia	nanoparticulate delivery systems for	Journal of	Page No:10 Year:2022
Dasgupta Mandal	bacterial prodigiosin:	Biological	Month:Dec
8-r	Optimization and toxicity in animal	Macromolecul	Wonth.Dec
	model system	es	
Indrani Paul, Tamal	Assessment of bacterial biosurfactant	Environmental	Volume:28 Issue No:
Mandal, Dalia	production and application in	Technology	Page No:16 Year:2022
	Enhanced Oil	and Innovation	Month:Jun
Dasgupta Mandal	Recovery (EOR)—A green approach	and innovation	Month:Jun
Tania Paul, Abhijit	Downstream Process	Applied	Volume:194 Issue No
Mondal, Tarun KantiBandyopadhyay,	Development for Extraction of	Biochemistry	Page No:5403–5418
		and	_
Nibedita Mahata,	Prodigiosin: Statistical		Year:2022
Biswanath Bhunia	Optimization, Kinetics, and	Biotechnology	Month:Jul
B' 1 C' 1 N	Biochemical Characterization	D.,	T7 1 1 // *
Pinku Chandra Nath,	Optimization and kinetic study of	Biomass	Volume:https://doi.org
Tarun Kanti	ultrasonic-mediated	Conversion	/10.1007/s13399-022
Bandyopadhyay,	phycoerythrin extraction from	and Biorefnery	03329-9
Nibedita Mahata,	Anabaena sp.		Issue No: Page No:
Sunil Pabbi, Onkar			Year:2022 Month:Oc
Nath Tiwari, Mikkili			
Indira, Biswanath Bhunia			
Ria Majumdar,	Delignification kinetics, colloidal	Biomass	Volume:https://doi.org
Umesh Mishra,	behaviour, and cost-benefit	Conversion	/10.1007/s13399-022
Nibedita Mahata*,	analysis of cellulose nanofiber from	and Biorefnery	03450-9
Abhijit Mondal,	Imperata cylindrica.	and Dioremery	Issue No: Page No:
Biswanath Bhunia	1		Year:2022 Month:Oc
	Cloning, improved expression and	Biotechnology	
	Cioning, improved expression and		Volume:https://doi.org
Sudeshna Halder,	purification of invasion	and Cameric	/10 1000/03/4073/ 34
Namita Jaiswal,	purification of invasion	and Genetic	
	purification of invasion plasmid antigen D (IpaD): an effector protein of enteroinvasive	and Genetic engineering reviews	/10.1080/02648725.20 23.2184027



Author(s) Name	Paper Name	Journal Name	Others Info
	Escherichia coli (EIEC)		Issue No: Page No:
			Year:2023 Month:Man
Ojha, M., Verma, D., Chakraborty, N., Pal, A., Bhagat, P.K., Singh, A., Verma, N., Sinha, A.K. and Chattopadhyay, S.	MKKK20 works as an upstream triple-kinase of MKK3-MPK6-MYC2 module in Arabidopsis seedling development.	iScience	Volume:26 Issue No:https://doi.org/10. 016/j.isci.2023.10604 Page No:106049 Year:2023
N 1		T 1	Month:Feb
Mazumdar Subhasree, Tamal Mandal, and Dalia Dasgupta Mandal	Comparative performance evaluation of chitosan based polymeric microspheres and nanoparticles asdelivery system for bacterial beta-carotene derived from planococcus sp. TRC1.	International Journal of Biological Macromolecul es	Volume: 195 Issue No Page No:13 Year: 202 Month: Jan
Sarkar Priyanka, Mazi Moumita, Ghosh Monidipa and Dey Apurba	Kinetic modeling of high concentration 4-nitrophennol biodegradation by an isolated bacterial consortium and post treatment ecotoxicity analysis	Biocatalysis and agricultural biotechnology	Volume:41 Issue No: Page No: Year:2022 Month:
Swamini Saini , Puranjan Mishra , Mansi Balhara , Debjani Dutta Shamik Ghosh , Surabhi Chaudhuri	Antimicrobial potency of Punica granatum peel extract: Against multidrug resistant clinical isolates	Gene Reports	Volume:30 Issue No Page No: Year:2023 Month:Mar
Debasmita Dutta · Anamika Nayak · Debjani Dutta	Reconnoitring the Usage of Agroindustrial Waste in Carotenoid Production for Food Fortification: a Sustainable Approach to Tackle Vitamin A Deficiency	Food and Bioprocess Technology	Volume:16 Issue No Page No:467–491 Year:2023 Month:Feb
Amita Mondal, Abhijit Hazra, Mohit Kumar Chattopadhyay, Debojyoti Kundu, Swarup Kumar Tarai, Pritam Biswas, Ashish Bhattacharjee, Sukdeb Mandal, Priyabrata Banerjee	Explicating the recognition phenomenon of hazardous nitroaromatic compound from contaminated environmental and cellular matrices by rationally designed pyridine-functionalized molecular probes	Heliyon	Volume:9 Issue No: Page No:e13620 Year:2023 Month:Mar
Samhita De, Sourav	Phenolic Phytochemicals for	Cancers	Volume:15 Issue No:
Paul, Anirban Manna, Chirantan Majumder, Koustav Pal, Nicolette Casarcia, Arijit Mondal, Sabyasachi Banerjee, Vinod Kumar Nelson, Suvranil Ghosh, Joyita Hazra, Ashish Bhattacharjee, Subhash Chandra Mandal, Mahadeb Pal and Anupam Bishayee	Prevention and Treatment of Colorectal Cancer: A Critical Evaluation of In Vivo Studies (Review)		Page No:993 Year:2023 Month:Mar
Pritam Biswas, Surbhi Swaroop, Naibedya Dutta, Aditi Arya, Suvranil Ghosh, Sukhamoy Dhabal, Payel Das, Chirantan Majumder, Mahadeb Pal, Ashish Bhattacharjee	IL-13 and the hydroperoxy fatty acid 13(S)HpODE play crucial role in inducing an apoptotic pathway in cancer cells involving MAO-A/ROS/p53/p21 signaling axis.	Free Radical Biology and Medicine	Volume:195 Issue No Page No:309–328 Year:2023 Month:Jan
Swarup Kumar Tarai, Saikat Mandal, Rituparna Bhaduri,	Bioactivity, molecular docking and anticancer behavior of	Spectrochimic a Acta Part A:	Volume:287 Issue No Page No:122059. Year:2023 Month:



Author(s) Name	Paper Name	Journal Name	Others Info
Angana Pan, Pritam	pyrrolidine based Pt(II) complexes:	Molecular and	
Biswas, Ashish	Their kinetics, DNA and BSA	Biomolecular	
Bhattacharjee, Sankar Ch. Moi	binding study by pectroscopic methods.	Spectroscopy	
Tithli Sadhu, Sandip	Optimization of frying process for	J Multi-Crit	Volume:30 Issue No:
K. Lahiri, Jagannath	maintaining nutritional quality to	Decis Anal.	Page No:44-61
Roy, Ashish	satisfy consumers' sensory attributes:		Year:2022 Month:
Bhattacharjee,	A novel application of multi-criteria decision-making		
Jitamanyu	approach		
Chakrabarty	<u> </u>	T 1 0	77.1
Tithli Sadhu, Sandip	Application of artificial neural	Journal of	Volume:46 Issue
K. Lahiri, Ashish	network with metaheuristic optimization for improving the	Food	No:12 Page
Bhattacharjee,	nutritive value of fried fish	Processing and Preservation	No:e17190 Year:2022 Month:Dec
Jitamanyu Chakrabarty	nutritive value of fried fish	Preservation	Month:Dec
Pritam Biswas,	Fatty acids and their lipid mediators	Prostaglandins	Volume:160 Issue No
Chandreyee Datta,	in the induction of cellular apoptosis	and Other	Page No:106637
Parul Rathi, Ashish	in cancer cells (Review)	Lipid	Year:2022
Bhattacharjee	,	Mediators	Month:Jun
Fernandes GS, Singh RD, De D, Kim	Strategic Application of Epigenetic	Int J Stem	Volume:16(2) Issue
KK	Regulators for	Cells	No:30 Page No:156-
KK	Efficient Neuronal	Cons	167 Year:2023
	Reprogramming of Human		Month:Mar
	Fibroblasts.		14101141114141
S Dutta, T Natoli, D	A Network based Efficient Drug	Genes &	Volume:10(2) Issue
Chanda, Sindhuja R, D De*	Repurposing Strategy for Targeting	Diseases	No: Page No:340–343
, <b>,</b>	Diabesity		Year:2023
	•		Month:Mar
Jana, A., Naga, R.,	3D QSAR pharmacophore based lead	Journal of	Volume: Issue No:
Saha, S. and	identification of G9a lysine	Biomolecular	Page No:1-19
Banerjee, D.R.	methyltransferase towards epigenetic	Structure and	Year:2022 Month:Oct
	therapeutics.	Dynamics	
Mandal S, Bose H,	Depth wide distribution and	Frontiers in	Volume:13 Issue
Ramesh K, Sahu R, Saha A, Sar P and	metabolic potential of	Microbiology	No:1018940 Page
Kazy SK.	Chemolithoautotrophic		No:1-23
	microorganisms reactivated from		Year:2022 Month:Dec
	deep continental granitic crust		
	underneath the Deccan Traps at		
2. Sahu R, Kazy SK, Bose H, Mandal S,	Koyna, India.	E ' . 1	77.1 24.1 N. /
Dutta A, Saha A, Roy S, Dutta Gupta S,	Diversity and function of microbial life in deep crystalline basement	Environmental Microbiology	Volume:24 Issue No:6 Page No:2837-2853
Mukherjee A, and Sar P	beneath the Deccan Traps explored	Microbiology	Year:2022
Winnierjee 11, und Sur 1	through a 3 km scientific borehole at		Month:Aug
	Koyna,		Wonth.Aug
	western India		
S.Saha, S.Vashishtha, B. Kundu, M.	In-silico design of an	BMC	Volume:23 Issue No:
Ghosh	immunoinformatics based	Bioinformatics	Page No:103617-29
	multiepitope vaccine against		Year:2022 Month:
	Leishmania donovani.		
M. Maji, P.Kivale, M.Ghosh	A novel therapy to combat nonsmall	Journal of	Volume:75 Issue No:
	cell lung carcinoma (A549) using	Drug Delivery	Page No:1-12
	platinum (IV) and barium titanate	Science and	Year:2022 Month:
	conjugate.	Technology	
T. Chatterjee, M.	Study of microstructural and	Materials	Volume:31 Issue No:
	electrical properties of silver	Today	Page No:1-14
Ghosh, M. Maji, M.		•	
Ghosh, M. Maji, M. Ghosh, S.K. Pradhan, A.K.Meikap	substituted hydroxyapatite for drug delivery applications.	Communicatio	Year:2022 Month:



Author(s) Name	Paper Name	Journal Name	Others Info
T. Chatterjee, M. Maji, S. Paul, M.	Microstructural, electrical and	Materials	Volume:296 Issue No:
Ghosh, SK Pradhan,	mechanical characterizations of	Chemistry and	Page No:12724-5
A. K.Meikap	green-synthesized biocompatible	Physics	Year:2023 Month:
	calcium phosphate		
	nanocomposites with morphological		
	hierarchy		
Sandip Mondal, Kaustav Aikat,	Sorptive uptake of Ranitidine	Results in	Volume:8 Issue No:
	hydrochloride by Parthenium	Surfaces and	Page No:100071
		Interfaces	Year:2022
			Month:Aug
Author(s) Name	Paper Name	Journal Name	Others Info
Gopinath Halder	hysterophorus based chemically		
	treated N-biochar in static bed		
	continuous flow system		
Surabhi Chaudhuri	Antimicrobial potency of Punica	Gene reports	Volume:30 Issue
Swamini Saini,	granatum peel extract: Against		No:March Page
Puranjan Mishra,	multidrug resistant clinical isolates		No:101744 Year:2023
Mansi Balhara,			Month:Mar
Debjani Dutta,			
Shamik Ghosh			
Ritu Ningthoujam, Banishree Sahoo,	Green production of zero-valent iron	Nanotechnolog	Volume:8 Issue
Poulomi Ghosh, A. Shivani, Parna	nanoparticles using	y for	No:March Page
Ganguli & Surabhi Chaudhuri	pomegranate peel extracts and its use	Environmental	No:581-589 Year:2023
	in lindane degradation	Engineering	Month:Mar
Susmita Devi, Avik	Carnauba wax-based sustainable	Sustainable	Volume: Issue No:1
Mukherjee, Debjani	coatings for prolonging postharvest	Food	Page No:415
Dutta, Santosh	shelf-life	Technology.	Year:2023 Month:Mar
Kumar	of citrus fruits	RSC	

## 4.1.15 Journal: Accepted for Publication in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Santosh Kumar, Annapureddy Rama Linga Reddy, Indr Bhusan Basumatary, Anamika Nayak, Debjani Dutta, Jyotismita Konwar, Manashi Das Purkayastha, Avik Mukherjee	Recent progress in pectin extraction and their applications in developing films and coatings for sustainable food packaging: A review	International Journal of Biological Macromolecules	Volume:239 Issue No: Page No: Year:2023 Month:Feb
Arpan Dasgupta, Sourav Saha, Parna Ganguli, Ishita Das, Debojyoti De & Surabhi Chaudhuri	Characterization of pumilacidin, a lipopeptide biosurfactant produced from Bacillus pumilus NITDID1 and its prospect in bioremediation of hazardous pollutants.	Archives of Microbiology	Volume:205 Issue No:274 Page No: Year:2023 Month:

## 4.1.16 Journal: Published in Others in 2022-2023

Author(s) Name	Paper Name	Journal Name	Others Info
S. R. Dodda, M. Hossain, P. Jain, K. Aikat, and S. S. Mukhopadhyay	Comparative Biochemical and Structural Properties of an Industrially Important Biocatalyst Cellobiohydrolase Cel7A from Thermophilic Aspergillus fumigatus	Applied Biochemistry and Microbiology	Volume:58 Issue No:5 Page No:564-574 Year:2022 Month:





Author(s) Name	Paper Name	Conference Name	Others Info
Anamika Nayak, Debjani Dutta	Green packaging technology using active jujube seed powder	International e-conference on Biopolymers APA BIOFORUM-2022	DOI/ISBN: nil Volume: Issue No: Page No: Year:2022 Month:Jul Presenter:CO- AUTHOR
Dutta Debasmita, Das Manisha and *Dutta Debjani	Characterization studies of provitamin A carotenoid β-cryptoxanthin encapsulated liposomes	2nd Virtual International Conference on Carotenoids (VICC)	DOI/ISBN: nil Volume: Issue No: Page No: Year:2022 Month:Apr Presenter:CO- AUTHOR
Saha Sanhita, *Dutta Debjani	Impact of carbon sources on βcryptoxanthin production and study of its anti-microbial effect on E. coli	2nd Virtual International Conference on Carotenoids (VICC)	DOI/ISBN: Nil Volume: Issue No: Page No: Year:2022 Month:Apr Presenter:CO- AUTHOR
Pinkan Sadhukhan, Dharmendra Kumar, Nibedita Mahata*	The impact of linker residues on the structural stability of an EGFP- fused Novel E3 ubiquitin ligase with Bacillary Dysentery vaccine application.	Industry Academia Research Interaction BIOTECHNOLOGY 2022: A Confluence of Science and Technology	DOI/ISBN: NA Volume: Issue No: Page No: Year:2022 Month:Sep Presenter:CO- AUTHOR
Namita Jaiswal, Nibedita Mahata, and Nripen Chanda	An antifouling gold nanorod- protein bifunctional conjugate for targeted delivery of therapeutic RNase A in colon cancer cell spheroids	Industry Academia Research Interaction BIOTECHNOLOGY 2022: A Confluence of Science and Technology	DOI/ISBN: NA Volume: Issue No: Page No: Year:2022 Month:Sep Presenter:CO- AUTHOR
Namita Jaiswal, Nibedita Mahata, and Nripen Chanda	Protein based therapeutics for cancer management	Collaborative research Sakura Science Program for eight (08) days in November 2022 (12.11.2022 – 19.11.2022) funded by Japan Science and Technology (JST) organisation.	DOI/ISBN: NA Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:CO- AUTHOR
Pinkan Sadhukhan, Nibedita Mahata*	The impact of linker residues on the structural stability of an EGFP- fused Novel E3 ubiquitin ligase following Bacillary Dysentery vaccine application	5TH REGIONAL SCIENCE & TECHNOLOGY CONGRESS (REGION 7), 2022-23 [RSTC (R7), 2022-23]	DOI/ISBN: MS09 Volume: Issue No: Page No: Year:2023 Month:Jan Presenter:CO- AUTHOR
Sudeshna Halder, Nibedita Mahata*	ENGINEERING OF IpaD (INVASION PLASMID ANTIGEN D) FROM ENTEROINVASIVE Escherichia coli (EIEC) FOR TRACKABLE EXPRESSION, ENHANCED SOLUBILITY AND THERMAL STABILITY	12 th Annual International Conference & Exhibition [SPER 2023] [March 24-25, 2023] In Collaboration with Dr. B. C. Roy College of Pharmacy and AHS, Durgapur, (West Bengal) India on Theme: Current Pharmaceutical Industry Needs: A Key Focus on Customer-Centric Digital Transformation	DOI/ISBN: NA Volume: Issue No: Page No: Year:2023 Month:Mar Presenter:CO- AUTHOR



Author(s) Name	Paper Name	Conference Name	Others Info
Gaurav Singh, Kunal Das, Dalia Dasgupta Mandal	A biorefinery approach for conversion of Hazardous kraft Lignin into versatile Lignin Nanoparticles	Current Issues in Agricultural, Biological, and Applied Sciences for Sustainable Development	DOI/ISBN: NA Volume: Issue No: Page No:50 Year:2022 Month:May Presenter:CO- AUTHOR
Abhishek Verma, Roshan Jaiswal, Dalia Dasgupta Mandal	Studies on the potential of Planococcus sp TRC1 in Decolorization and Detoxification of Indigo carmine, a lignin- mimicking Dye	Current Issues in Agricultural, Biological, and Applied Sciences for Sustainable Development	DOI/ISBN: NA Volume: Issue No: Page No:49 Year:2022 Month:May Presenter:CO- AUTHOR
Abhishek Verma, Dalia Dasgupta Mandal	Comparative decolorization of textile industry dye Methylene blue by potential dignifying bacterial species	National symposium: Recent trends in Sustainable technologies/tecno/commercial development	DOI/ISBN: 978-93- 5636245-1 Volume: Issue No: Page No:89-92 Year:2022 Month:Sep Presenter:CO- AUTHOR
Gaurav Singh, Dalia Dasgupta Mandal	A cleaner approach for Lignin nanoparticle formulation from Paper mill effluent by- product	National symposium: Recent trends in Sustainable technologies/tecno/commercial development	DOI/ISBN: 978-93- 5636245-1 Volume: Issue No: Page No:85-88 Year:2022 Month:Sep Presenter:CO- AUTHOR
R P Sahu, P Sar, S K Kazy, S Sarkar, and D Mukherjee	Extremotolerant acetogenic microorganisms from deep crystalline subsurface show promise in efficient CO2 capture and conversion processes	International Conference on Biotechnology, sustainable bioresources and Bioeconomy XIX Annual convention of the Biotech Research Society, India, BSB2 - 2022	DOI/ISBN: NIL Volume: Issue No: Page No:NA Year:2022 Month:Dec Presenter:CO- AUTHOR
R P Sahu, P Sar, S Mandal, S K Kazy, H Bose	Diversity and functionality of deep life within the Archaean granitic crust underneath the Deccan Traps, India	American Geophysical Union (AGU) fall meeting 2022 Science Leads the Future	DOI/ISBN: nil Volume: Issue No: Page No:na Year:2022 Month:Dec Presenter:CO- AUTHOR

## 4.1.18 Conference: Published in Others in 2022-2023

Author(s) Name	Paper Name	Conference Name	Others Info
Sandip Mahato, Kaustav Aikat	A brief review on the different aspects of the application of Bio- co-polymers	62nd Annual International Conference of Association of Microbiologists of India	DOI/ISBN: NA Volume: Issue No: Page No: Year:2022 Month:Sep Presenter:CO- AUTHOR



Reshmi Verma and	PLA as a promising choice for	62nd Annual International	DOI/ISBN: NA
Kaustav	production of alternative to single	Conference of Association of	Volume:
Aikat	use plastic: bioplastic	Microbiologists of India	Issue No: Page No:
			Year:2022 Month:Sep
			Presenter:CO-
			AUTHOR
Prakash Kumar, Hari	Chromium Bioremediation of	9th International Conference on	DOI/ISBN: NA
Govind, Nijendra	tannery effluent by Indigenous	"Interdisciplinary Approaches in	Volume:
Pratap	microbes from Kanpur North India	Life Sciences for Translational	Issue No: Page No:
Singh, Kaustav Aikat		Research"	Year:2022 Month:Nov
			Presenter:CO-
			AUTHOR
Sudhir Kumar Barik,	Optimizing Biomass Production	First International Interdisciplinary	DOI/ISBN: NA
Uma Jyoti Pal,	And Lipid Extraction Methods For	Conference on Energy,	Volume:
Kaustav Aikat	<b>Biofuel Production From</b>	Nanotechnology and Internet of	Issue No: Page No:
	Indigenously Isolated	Things (ENT 2023)	Year:2023 Month:Feb
	Heterotrophic Marine Protist		Presenter:CO-
			AUTHOR

## 4.1.19 Conference: Accepted in Others in 2022-2023

Author(s) Name	Paper Name	Conference Name	Others Info
Sandip Mahato, Kaustav Aikat	A brief review on the different aspects of the application of Bio- co-polymers	62nd Annual International Conference of Association of Microbiologists of India	DOI/ISBN: NA Volume: Issue No: Page No: Year:2022 Month:Sep Presenter:CO- AUTHOR
Reshmi Verma and Kaustav Aikat	PLA as a promising choice for production of alternative to single use plastic: bioplastic	62nd Annual International Conference of Association of Microbiologists of India	DOI/ISBN: NA Volume: Issue No: Page No: Year:2022 Month:Sep Presenter:CO- AUTHOR
Prakash Kumar, Hari Govind, Nijendra Pratap Singh, Kaustav Aikat	Chromium Bioremediation of tannery effluent by Indigenous microbes from Kanpur North India	9th International Conference on "Interdisciplinary Approaches in Life Sciences for Translational Research"	DOI/ISBN: NA Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:CO- AUTHOR
Sudhir Kumar Barik, Uma Jyoti Pal, Kaustav Aikat	Optimizing Biomass Production And Lipid Extraction Methods For Biofuel Production From Indigenously Isolated Heterotrophic Marine Protist	First International Interdisciplinary Conference on Energy, Nanotechnology and Internet of Things (ENT 2023)	DOI/ISBN: NA Volume: Issue No: Page No: Year:2023 Month:Feb Presenter:CO- AUTHOR

### 4.1.20 Books Authored

<b>Author Name</b>	Co-Author	Title of the Book	Title of the Chapter	<b>Publication Details</b>
Debjani Dutta	Debasmita Dutta	Emerging Technologies in Food Preservation	Food Preservation by Microwave Heating	Publisher: CRC Press (Taylor and Francis group) Publication Date: 2023-0302



Author Name	Co-Author	Title of the Book	Title of the Chapter	<b>Publication Details</b>
Debjani Dutta	Debasmita Dutta	Handbook of Nutraceuticals and Natural Products: Biological, Medicinal, and Nutritional Properties and	Lycopene as Nutraceuticals	Publisher: CRC Press (Taylor and Francis group) Publication Date: 2022-0825
Debjani Dutta	Sahoo, K.K., Datta, S., Nayak, A., Pranaw, K., Dutta, D., Goswami, G.	Industrial Microbiology and Biotechnology	Biological Production of Succinic Acid: State of the Art and Future Perspectives.	Publisher: Springer Publication Date: 2022-0714
Debjani Dutta	Daiji Brahma, Sibabrta Mukherjee	Industrial Microbiology Based Entrepreneurship	Mass Production of Valuable Pro-Vitamin a Pigment from a Microbe, Cost Analysis and Targeting It for Health Benefiting Purpose	Publisher: Springer Publication Date: 2022-1221
Debjani Dutta	Anamika Nayak	Handbook of Microbial Nanotechnology	Nanotechnology based Pathogen identification through surface marker identification	Publisher: Academic Press Publication Date: 2022-0818
Debjani Dutta	Samadarsi R.	Biotechnological advances for microbiology, Molecular Biology, and nanotechnology	Protein-based Nanosystems as emerging bioavailability enhancers for nutraceuticals	Publisher: Academic Press Publication Date: 2022-0814
Nibedita Mahata	Biswanath Bhunia, Muthusivaramapandian Muthuraj and Ramesh Kumar	Recent Trends and Innovations in Sustainable Treatment Technologies for Heavy Metals, Dyes and Other Xenobiotics	Bottlenecks in Sustainable Treatment of Wastewaters Using Physico- Chemical Processes and Future Prospects	Publisher: Bentham Science Publishers. Publication Date: 2022-06-22
Oindrilla Mukherjee	Bivash Sinha, Chirantana Sengupta, Praneet Kumar Sahoo, Titas Nath,	A complete guidebook on Biofilm study	Genetic regulations of microbial biofilm	Publisher: Elsevier Publication Date: 2022-0629
Maithili Adhikary, Raunak Banerjee, Surabhi Chaudhuri, Anindya Chanda		Emerging Technologies in Food Preservation	Food Preservation by Ozonation	Publisher: CRC Press Publication Date: 2023-0314

## 4.1.21 Seminars, Summer/Winter Schools, Short Term Courses Attended

Name of the Programme	Organized By	From Date	To Date	Organizing Country
Current Issues in Agricultural, Biological and Applied Sciences for Sustainable Development	Kalimpong Science Centre, AEDS, ICAR(NAHEP)-IG	2022-06-11	2022-06-13	India



Name of the Programme	Organized By	From Date	To Date	Organizing Country
National symposium: "Recent trends in Sustainable technologies/tecno/commmercial development"	HIT KOLKATA	2022-09-08	2022-09-10	India
A two days' workshop on outcome based accreditation: Challenges and opportunities.	NIT Durgapur	2022-06-23	2022-06-24	India
SIR U N BRAHMACHARI Award of Excellence" by Professor Simon Croft, London School of Tropical Medicine & Hygiene	IICB Kolkata	2023-03-14	2023-03-14	India
High End Workshop "Machine learning based approach for the identification of biomarkers and for drug discovery" Under the KARYASHALA Scheme	SERB supported, NIT DGP, Dept. of Biotech.	2022-12-12	2022-12-18	India
A one-day conclave on Science, philosophy and Education	NIT Durgapur in collaboration with Tagore Centre for Natural Sciences & Philosophy, Kolkata	2022-08-04	2022-08-04	India

## 4.1.22 Ph.D. Supervisor

Topic Name	Scholar	Supervisor	Status	Status Date
Enhanced β-cryptoxanthin production using Kocuria marina DAGII through medium modulation and comparative metabolome profiling	Sanhita Saha	Debjani Dutta	ONGOING	-
Mangiferin as an active packaging ingredient for the preparation of a biodegradable food packaging system	Anamika Nayak	Debjani Dutta	ONGOING	-
Investigating the role of beta- cryptoxanthin in oxidative stress and its application in nutricosmeceutics	Daiji Brhma	Debjani Dutta	ONGOING	-
Investigation and Development to stabilize health benefits of fortified β-cryptoxanthin in milk	Debasmita Dutta	Debjani Dutta	ONGOING	-
Exploring the mechanism of action for delignification by selected bacterial strains	Abhishek Verma	Prof. Dalia Dasgupta Mandal	ONGOING	-
Bacterial and Enzymatic bioconversion of Lignin from lignocellulosic biomass into value added products	Gaurav Singh	Prof. Dalia Dasgupta Mandal	ONGOING	-
Studies on role of biosurfactant on bacterial delignification	Indrani Paul	Prof. Dalia Dasgupta Mandal	DEGREE AWARDED	2022-12- 12
Nanoscale Delivery Systems for improved Immuno-Therapy in Cancer Management	NAMITA JAISWAL	Dr. NIBEDITA MAHATA, Dr. Nripen Chanda, CSIR – CMERI	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status Date
The impact of linker residues on the structural stability of an EGFP- fused Novel E3 ubiquitin ligase following Bacillary Dysentery vaccine application	PINKAN SADHUKHAN	Dr. NIBEDITA MAHATA	ONGOING	-
Deciphering the role of IpaD as a novel E3 ubiquitin ligase in pathogenesis of Escherichia coli	AISHWARYA MALLICK	Dr. NIBEDITA MAHATA	ONGOING	-
Computational Study of structured and disordered proteins	Prachi Bhargava	Amita Barik	ONGOING	-
Studies on valuable Bioactive compounds characterization, extraction and application	Subhasree Mazumdar	Prof. Dalia Dasgupta Mandal	DEGREE AWARDED	2023-02- 17
Studies on biodegradation of 4- nitrophenol by a bacterial consortium isolated from a pesticide contaminated agricultural soil	Priyanka Sarkar	Apurba Dey	DEGREE AWARDED	2023-01-23
Riboregulation of Helicobacter pylori oncoprotein CagA	Bivash Sinha	Oindrilla Mukherjee	ONGOING	-
Insilico screening and validation of phytocompounds from native Indian medicinal plants to utilize it for the development of therapy against Helicobacter pylori	Arghyadeep Bhattacharjee	Oindrilla Mukherjee	ONGOING	-
Development of ultra-short peptides with broad spectrum antimicrobial properties	Arpita Halder	Oindrilla Mukherjee	ONGOING	-
Role of the gut microbiome in Helicobacter pylori mediated gastritis	Somasree Pandit	Oindrilla Mukherjee	ONGOING	-
Study of Bacteriocin from Probiotic Bacteria Isolated from Indigenous Fermented Foods of North-East India	Sourav Saha	Surabhi Chaudhuri	ONGOING	-
Preclinical Studies of TheranosticAgent based on Carbon Nanocapsules and PDMS Nanoparticles and its Drug Loading Efficacy	Madhu Verma	Surabhi Chaudhuri, Debjani Dutta, Sri Sivakumar	ONGOING	-
Study of pomegranate peel extract as an alternative source of therapy for skin infections caused by drug resistant microbes	Swamini Saini	Surabhi Chaudhuri, Debjani Dutta, Shamik Ghosh	ONGOING	-
Characterization and application of Pumilacidin, a lipopeptide biosurfactant from Bacillus pumilus NITID1	Arpan Dasgupta	Surabhi Chaudhuri, Debojyoti De	ONGOING	-
Green Synthesis of Bimetallic Nanoparticles and their Application in the Development of Antibiofouling Architectural Coatings	Parna Ganguli	Surabhi Chaudhuri	ONGOING	-
Role of (AMP)-activated protein kinase [AMPK] in controlling the expression and function of	Mr. SAMEEP GEHLOT	Dr. Surabhi Chaudhuri, Dr. Ashish Bhattacharjee	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status Date
Monoamine Oxidase A (MAOA) in response to IL-13				
Activation of monocytes and cancer cells by interleukin 13 (IL-13) and its effect on cellular function	Mr. Pritam Biswas	Dr. Ashish Bhattacharjee	DEGREE AWARDED	2022-08- 29
Improvement of Nutritional Quality of Fish during Conventional Frying Process: A Novel Approach Using Artificial Intelligence	Ms. TITHLI SADHU	Dr. Jitamanyu Chakrabarty and Dr. Ashish Bhattacharjee	DEGREE AWARDED	2022-05- 10
Regulation of 15-lipoxygenase gene expression and function in monocytes and A549 lung cancer cells.	Ms. Surbhi Swaroop	Dr. Ashish Bhattacharjee	ONGOING	-
Elucidating the role and deciphering the molecular mechanism of Fatty acid-induced Monoamine Oxidase-A (MAO-A) expression in cancer cells	Ms. Suchandra Pal	Dr. Ashish Bhattacharjee; Dr. Debojyoti De	ONGOING	-
Compositions comprising BAM15 for exhibiting anticancer activity in cancer cells	Mr. Sourav Paul	Dr. Ashish Bhattacharjee	ONGOING	-
Protein and other biochemical component of fish and their nutritional effect.	Ms. Indrani Banerjee	Dr. Jitamanyu Chakrabarty, Dr. Ashish Bhattacharjee	ONGOING	-
Investigation of the concerted role of MYB4 and HY5 in Arabidopsis seedling development	Abhideep Pal	Sudip Chattopadhyay	ONGOING	-
Investigation of the Functional Interconnection Between ARA4 and HY5 in Arabidopsis Seedling Development	Riya Basu	Sudip Chattopadhyay	ONGOING	-
Dysbiosis of gut microbial community in Obesity	Deep Chanda	Debojyoti De	ONGOING	-
Topological properties of gut microbial coabundance network structure community in Type 2 Diabetes	Jayeeta Chatterjee	Debojyoti De	ONGOING	-
A systemic approach towards understanding Polycystic ovary syndrome	Sindhuja Rajavelu	Debojyoti De	ONGOING	-
Characterization of pumilacidin, a lipopeptide biosurfactant produced from Bacillus pumilus NITDID1 and its applications	Arpan Dasgupta	Prof. Surabhi Chaudhuri	ONGOING	-
Structure and function analysis of human ATE1 isoforms (Proposed topic)	Rahul Naga	Sougata Saha	ONGOING	-
Exploring the diversity and metabolic potential of cultivable chemolithoautotrophic microorganisms from deep continental crust beneath the Deccan Traps, India	Plaban Kumar Saha	Kazy Sufia Khannam	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status Date
Molecular and Functional characterization of a Pt(IV) based Pro-drug for targeted antinon-small cell lung carcinoma immunotherapy.	Miss. Moumita Maji	Dr. Monidipa Ghosh	SUBMITTED	2023-04- 19
Devising strategies to overcome  Multi Drug resistance in  Staphylococcus aureus.	Suvadip Saha	Dr. Monidipa Ghosh	ONGOING	-
Integrative Analysis of miRNA and mRNA Expression Profiles in Macrophages, Infected with Staphylococcus aureus	Miss. Harshita Tiwari	Dr. Monidipa Ghosh	ONGOING	-
Exploring microbial communities and metabolic processes in deep subsurface continental crust underneath the Deccan Traps at Koyna region, Western India	Sunanda Mandal	Dr. Kazy Sufia Khannam	ONGOING	-
Characterization of deep subsurface rock dwelling microbial communities	Abhisek Sahu	Dr. Kazy Sufia Khannam	ONGOING	-
Characterization of deep subsurface microorganisms	Mouli Bhattacharyya	Dr. Kazy Sufia Khannam	ONGOING	-
Exploration of mechanistic understanding of amyloid aggregation and study of interactions of amyloid fibrils with biological systems.	Bodhisattwa Das Gupta	Sudipta Mondal	ONGOING	-
Development of Functional Short Self-Assembling Helical Peptide Building Blocks	Nandita Ghosh	Sudipta Mondal	ONGOING	-
Production of biofuel and other value-added products from oleaginous microorganisms in a biorefinery approach	Sudhir Kumar Barik	Kaustav Aikat	ONGOING	-
Bioremediation & Biosorption of Heavy metals from tannery Effluent	Prakash Kumar	Kaustav Aikat	ONGOING	-
Microbial production of lactic acid using whey and rice straw as substrates	Reshmi Verma	Kaustav Aikat	ONGOING	-
Production, Characterization and Application (as Bioplastic) of Polyhydroxyalkanoates (PHA) produced by Halophilic Microorganism, isolated from Bay of Bengal	Sandip Mahato	Kaustav Aikat	ONGOING	-
to be decided (scholar just joined)	Kirti Jyoti	Kaustav Aikat	ONGOING	-
Functional genomics of GPCRs in Magnaporthe oryzae	Nazmiara Sabnam	Dr. S. Roy-Barman	DEGREE AWARDED	2018-04- 02
LaeA – its role in molecular pathogenesis in Magnaporthe oryzae	Pallabi Saha	Dr. S. Roy-Barman	DEGREE AWARDED	2021-02- 05



Topic Name	Scholar	Supervisor	Status	Status
		D 0 D D	DEGREE	Date
RNAi-based resistance to rice blast	Atrayee Sarkar	Dr. S. Roy-Barman	DEGREE	2021-04-
fungus: Transformative and Non- transformative			AWARDED	22
Peptide self-assemby as nanobiotechnological platform	Ranik Koanr	Sudipta Mondal	ONGOING	-
Developement of novel antimicrobial peptide	Rahul Kuiri	Sudipta Mondal	ONGOING	-
De	Samiran Hazra	Sudit Sekhar	ONGOING	-
		Mukhopadhyay,		
		Sudipta Mondal		
Fungal beta glucosidase	Shalini Das	Sudit S.	ONGOING	-
		Mukhopadhyay		
		& Kaustav		
		Aikat		
Molecular cloning, expression,	Ms. SUDESHNA	Dr. NIBEDITA	ONGOING	-
characterization and thermostability enhancement of effector protein,	HALDER	MAHATA		
IpaD (Invasion plasmid antigen D)				
from Enteroinvasive Escherichia				
coli (EIEC)				
Encapsulation and application of	Maithili Adhikary	Surabhi Chaudhuri	ONGOING	-
probiotic consortia isolated from	· ·			
indigenous				
fermented foods				

## 4.1.23 Ongoing Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Amount(in Rs.)	Starting Year
Technological frontier towards sustainable treatment of coal bed Methane produced Water via Integrated Desalination Contrivance	Prof. Gopinath Haldar, Dr. Jaya Sikdar, Prof. Dalia Dasgupta Mandal	DST/TMD/EWO/WTI /DM	7400000.0	2022
Studies on the effect of anammox group of bacteria for the treatment wastewater containing nitrogenous contaminants	Prof. Apurba Dey, Prof. Tamal Mandal, Prof. Dalia Dasgupta Mandal	SERB DST	3700000.0	2021
Role of FANCD2 in mitochondria and its association with the mtDNA repair mechanism	Sudit S. Mukhopadhyay	DBT, Govt of India	6411000.0	2022
Understanding the mechanism of ICL (Inter crosslink) mediated replication collapse: involvement of Fanconi anemia proteins	Sudit S. Mukhopadhyay	SERB, Govt of India	5059945.0	2023
Cloning,Expression,Purification and Characterization of the Auxillary enzymes Lytic PolysaccharideMonoxygnases (LPMOs) and Xylanases from the genome of the thermophilic fungus Aspergillus fumigatus NITDGPKA3	Sudit S. Mukhopadhyay	DBT, Govt of India	49.11	2023



Title of the Project	Investigator	Sponsor Authority	Amount(in Rs.)	Starting Year
Investigating the role of Therapeutic compounds in Fermented foods and ethnic Beverages used by the tribal Population of west bengal as a Novel therapy for Helicobacter pylori and H.pylori mediated gastric ulcer.	Oindrilla Mukherjee	DST-SERB	2800000.0	2023
Role of adenosine monophosphate activated protein kinase (AMPK) activators in reducing cancer cell aggressiveness	P.I.: Dr. Ashish Kumar Bhattacharjee Co P.I: Dr. Surabhi Chaudhuri, Dr. Suparna Chatterjee	Department of higher education, Science & Technology and Biotechnology, Govt. of West Bengal.	2076000.0	2019
Developing a machine learning based platform for defining and mechanistic understanding of chemo-drug response/resistance biomarkers for lung cancer and subsequent validation with patient data from TCGA database	PI: Dr. Ashish Kumar Bhattacharjee CO- PI: Dr. Debojyoti Dey	Indian Council of Medical Research (ICMR), New Delhi, Govt. of India	2239932.0	2022
Role of FANCD2 in mitochondria and its association with the mtDNA repair mechanism	PI: Dr. Sudit Mukhopadhyay CO-PI: Dr. Ashish Kumar Bhattacharjee	Dept. of Biotechnology, Govt. of India	6486600.0	2022
Investigation of CAM7 multi-protein complex and its role in light signaling and thermomorphogenesis during plant growth and development	Sudip Chattopadhyay	SERB	4644992.0	2022
Developing a machine learning based platform for defining and mechanistic understanding of chemo-drug response/resistance biomarkers for lung cancer and subsequent validation with patient data from TCGA database	Asish Bhattacharjee, Debojyoti De	ICMR, GOI	2200000.0	2022
Deciphering the metabolic and microbial diversity signature in the fecal microbiota of obese patients to find their correlation with brown versus white adipogenesis pathway	Dr. Oindrila Mukherjee (PI), Debojyoti De (Co- PI)	ICMR, GOI	2900000.0	2021
Role of protein arginylation in the regulation of IL-lβ expression and inflammatory response in macrophages and airway epithelial cells.	Sougata Saha	SERB	5500000.0	2022
"Identification of anti-leishmanial molecules, acting as novel inhibitors against intracellular lipid signalling machinery in Leishmania donovani"	Ghosh M. (PI)	ICMR, Gov. of India	5300000.0	2023
Introducing protein folding paradigm in misfolding diseases: An attempt to redefine the structural understanding of amyloid aggregation following	Sudipta Mondal	SERB-DST	4642000.0	2021



Title of the Project	Investigator	Sponsor Authority	Amount(in Rs.)	Starting Year
nucleated conformational conversion pathway			,	
Chemical sensors cum inhibitors of Histone PTM	Dr. Deb Ranjan Banerjee (P.I.) Sudipta Mondal (CoP.I.)	SERB-DST	3650000.0	2022
Carbon and energy metabolism in deep life within the granitic basement of Koyna seismogenic zone.	Kazy SK and P Sar, IIT KGP	MoES, GOI	6494841.0	2022
Functional inter-connection between WISH and cell-wall biosynthesis / remodelling pathway in rice blast fungus	Dr. S. Roy-Barman, Dr. U Adhikari and Dr. N. Sabnam	SERB, DST	6000000.0	2022
Microbial production of Lactic Acid using wastes (dairy waste & rice straw) as substrates, for the production of bioplastic	Aikat, K. and Adhikari, U. (Dept. of Chemistry)	Department of Science & Technology and Biotechnology, Govt. Of West Bengal	1370000.0	2019
Cloning, expression, purification, and characterization of the auxiliary enzymes Lytic Polysaccharide Monooxygenases (LPMOs) and xylanases from the genome of the thermophilic fungus Aspergillus fumigatus NITDGPKA3 (sanctioned in 2022)	Mukhopadhyay, S.S. and Aikat, K.	DBT-Govt. of India	4761600.0	2022

## 4.1.24 Completed Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Complete Year
Structural and functional analysis of disordered regions in unbound and bound protein-protein and protein-nucleic acid complexes	Dr Amita Barik	DST-SRG	2023
Determining the role of the gastric Microbiota in helicobacter pylori Infection to utilize it for the development of a probiotic therapy	Oindrilla Mukherjee	DST-SERB	2022
Isolation and identification of novel bacteriocin producing probiotic microbial species from Northeast region, exploration of probiotic traits and application of purified bacteriocin in food preservation.	Surabhi Chaudhuri, Sucharita Sen Maiti	Department of Biotechnology, Government of India	2022
Regulation of MCP-1-induced calcium- independent phospholipase A2 (iPLA2)- dependent monocyte migration	P.I.: Dr. Ashish Kumar Bhattacharjee Co P.I: Dr. Monidipa Ghosh	Dept. of Biotechnology (DBT), Govt. of India	2022
Molecular characterization of a small-molecule based reprogramming of non-adipocyte cells to brown adipocytes for its potential use as anti-obesity drug.	Debojyoti De	SERB, DST, GOI	2022



Title of the Project	Investigator	Sponsor Authority	Complete Year
Design of modular peptide nanotubes platforms by the selfassembly of shortest helical building blocks for application as ion channel mimic	Sudipta Mondal	SERB-DST	2022
Isolation and characterization of Magnaporthe oryzae mutants to study early events of pathogenesis	Dr. S. Roy-Barman and Prof. B. B. Chattoo	DBT	2014
Functional genomics of G-protein coupled receptors (GPCRs) in	Dr. S. Roy-Barman	DST-SERB	2014
RNAi-based resistance to rice blast fungus	Dr. S. Roy-Barman	DBT	2017
Pathogenesis of rice blast fungus	Pathogenesis of rice blast fungus	DBT	2016
Investigation of functional connection between cAMPdependent signaling pathway and MoWISH, a gene encoding a novel GPCR in rice blast fungus	Investigation of functional connection between cAMP dependent signaling pathway and MoWISH, a gene encoding a novel GPCR in rice blast fungus	DST-SERB	2021

## 4.1.25 Testing & Consultancy Services Rendered

Sponsoring Industry / Institute Name	Title of the Project	Total Amount (in Rs.)	Remarks
Fertis India Pvt. Ltd.	Expression of human proteins in P pastoris	4200000.0	ongoing

## 4.1.26 Reviews of Manuscripts for Publication in Journal

Reviewer	Name of the Journal	Publisher	Date of Final Review
Debjani Dutta	International Journal of Food Science & Technology	Wiley	2022-09-21
Debjani Dutta	Journal of Functional Food	Elseiver	2022-04-08
Debjani Dutta	Preparative Biochemistry & Biotechnology	Taylor &Francis	2022-04-22
Debjani Dutta	Journal of Food Bioscience	Elsevier	2023-01-06
Dalia Dasgupta (mandal)	Chemosphere	Elsevier	2023-06-28
Amita Barik	Journal of Biomolecular Structure & Dynamics	Taylor and Francis Ltd.	2023-02-17
Amita Barik	Phytomedicine	Elsevier	2023-03-13
Oindrilla Mukherjee	Gut Pathogens	Biomed central	2022-11-22
Surabhi Choudhuri	Indian Journal of Microbiology	Springer Nature	2022-07-25
Ashish Kumar Bhattacharjee	PLOS ONE	PLOS	2022-12-15
Sougata Saha	Cancers	MDPI	2022-12-13



Sougata Saha	BioChem	MDPI	2022-10-20
Kaustav Aikat	Bioenergy Research	Springer	2022-06-26
Kaustav Aikat	Industrial Crops and Products	Elsevier	2022-06-30

## 4.1.27 Participation in National Committees/Visits

Name of the Faculty	Name of the Committee	Place of Visit	From Date	To Date
Sudit Sekher	expert member in UGC Selection Committee-1	on line	2022-11-	2022-11-24
Mukhopadhyay	(Biological Sciences)		23	
Sudip Chattopadhyay	CSIR Grants review	on line mode	2020-06-	2023-08-08
			01	
Sudip Chattopadhyay	STARS grants review (MoE)	online mode	2020-07-	2023-08-08
			08	
Sudip Chattopadhyay	Member of the Joint Science and Education	IISc Bangalore	2022-05-	2023-08-08
	Panel (SEP) for IASc, INSA and NASI.		01	
Sudip Chattopadhyay	Fellowship Scrutiny Committee (Life Sciences),	NASI,	2015-06-	2023-08-08
	NASI	Allahabad	01	

## 4.1.28 Invited Examiners/Paper-Setters/Board of Studies

Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Debjani Dutta	B. Tech	Integral University	2022-07-07	2023-02-15
Debjani Dutta	Phd Thesis Examined	VIT, Vellore	2022-07-07	2023-01-19
Debjani Dutta	M. Tech examiner	Jadavpur University	2022-09-01	2022-09-18
Amita Barik	University Examination of BT Semester III (M.Sc.)	P P Savani University	2022-11-18	2022-11-18
Dalia Dasgupta (mandal)	Anvishna: Grant-in-Aid Minor Research Project, RGPV Best Project and RGPV Best Paper	RGPV	2023-01-18	2023-01-18
Sudit Sekher Mukhopadhyay	Advanced Cell Biology & Immunotechnology	Heritage Institute of Technology Kolkata	2023-03-06	2023-03-06
Sudit Sekher Mukhopadhyay	M.Sc. Semester-II Practical Examination 2022 in Molecular Biology Paper- MSMHG 206	Burdwan University	2022-10-26	2022-10-26
Surabhi Choudhuri	PhD Defence	Jadavpur University	2022-05-19	2022-05-19
Surabhi Choudhuri	PhD defence	Jadavpur University	2022-06-17	2022-06-17
Ashish Kumar Bhattacharjee	Acted as the Indian examiner of the thesis entitled "novel Molecular mechanism of probiotics in Alcoholic liver disease" and also acted as an external expert for the viva voce exam.	D. Patel Institute of Applied Sciences C Charotar University of Sciences and Technology, CHARUSAT Campus, Gujrat, India	2022-04-15	2022-06-15
Ashish Kumar Bhattacharjee	Acted as the Indian examiner of the thesis entitled "Investigation of inflammation-induced macrophage foam cell formation and its involvement in adipocyte insulin	TEZPUR University (A Central University) Napaam, Sonitpur - 784028, Assam,	2022-07-18	2022-09-15



Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
	resistance" and also acted as an external expert for the viva voce exam.	INDIA		
Ashish Kumar	Acted as the Indian examiner of the thesis	VIT University,	2022-07-20	2022-11-15
Bhattacharjee	entitled "protective effect of hesperidin in	Vil Olliversity, Vellore,	2022-07-20	2022-11-13
Bhattacharjee	Arecoline-mediated cell death in nih/3t3	Vellore Dt. PIN:		
	Fibroblasts" and also acted as an external	632014.		
	expert for the viva voce exam	INDIA		
Debojyoti De	End Term Examination paper setter	Saveetha Institute of	2022-09-22	2022-09-22
		Medical and		
		Technical Sciences,		
		Chennai.		
Sudip	Board of Studies	Burdwan University	2021-04-12	2023-08-08
Chattopadhyay				
Kaustav Aikat	M.Tech. in Agricultural Biotechnology	Indian Institute of	2022-05-04	2022-05-04
	(project & viva voce)	Technology		
		Kharagpur		

## 4.1.29 Invited Expert in Selection Committees

Name of the Faculty	Discipline	University/Institute	From Date	To Date
Apurba Dey	Biochemical Enginering	NIT Agartala	2022-05- 07	2022-05- 07
Surabhi Choudhuri	Project Fellow Selection	Jadavpur University	2022-08- 10	2022-08- 10
Ashish Kumar	Meeting of the Technical Specifications	Bose Institute,	2022-11-	2022-11-
Bhattacharjee	Committee for Procurement of Flow Cytometer Analyser and Sorter	Kolkata	14	14

#### 4.1.30 Invited Lectures

Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Dalia Dasgupta	Refresher course on	UGC-Human	Bilaspur	2022-08-	2022-09-
(mandal)	Life Sciences	Resource		22	05
		Development Centre,			
		Guru			
		Ghasidas			
		Vishwavidyalaya,			
		Bilaspur			
Sudit Sekher	Mitochondrial role in	International	Kolkata	2022-12-	2022-12-
Mukhopadhyay	Genomic Instability	Conference		05	06
	and Cancer: Special	Zoospectra2022			
	reference to Fanconi				
	anemia				
Debojyoti De	Smart Technologies	Lecture on World	The Institution of	2022-05-	2022-05-
	towards creating Age-	Telecommunication	Engineers (India),	17	17
	friendly Community.	& Information	Durgapur Local		
		Society Day	Centre		
Monidipa Ghosh	Immune invasion by	FDP at Kamraj	Online	2022-07-	2022-07-
•	Antigen Presenting	College Of Eng.		04	09
	Cells in host pathogen	Chennei.			
	infection				



#### 4.2 Department of Civil Engineering

#### 4.2.1 Dept at a glance

The Department of Civil Engineering is one of the oldest Departments of this institute. Presently, the department offers B.Tech., M.Tech. and PhD. programs. The Department is actively engaged in research activities in all branches of Civil Engineering and other contemporary fields of interdisciplinary research. In addition to handling R&D projects funded by the institute as well as external funding agencies, the department also offers testing and consultancy services to various government departments and organizations from the public and private sectors. Besides, the Department conducts seminars, short term training programmes and conferences etc. from time to time for the benefit of personnel from academia, research institutions and industries.

#### 4.2.2 Misson and Vision

#### Mission:

- To provide quality education with ethical values in commensuration with balanced curriculum.
- To provide advanced skills and knowledge in design, construction, consultancy and develop the state-of-theart research facilities.
- To serve as a knowledge base and create professional expertise for the community
- To promote innovative and original thinking in the minds of civil engineering graduates

#### Vision:

- To impart knowledge, advanced skills, excellence in scientific and technical education and research with global perspectives in infrastructural developments with modern trends.
- To encourage students to imbibe the engineering ethics to serve India and World.
- To serve as a valuable resource for societal needs and economic growth of the country.

#### 4.2.3 Faculty

Name	Designation	Email-id
Dr. Amiya Kumar Samanta	Professor	aksamanta.ce@nitdgp.ac.in
Dr. Amlan Das	Professor	adas.ce@nitdgp.ac.in
Dr. Atul Krishna Banik	Professor	akbanik.ce@nitdgp.ac.in akbanik@gmail.com
Dr. Dilip Kumar Singha Roy	Professor	dsingharoy.ce@nitdgp.ac.in dsr_rec_dgp@yahoo.com dilip.sroy@gmail.com
Dr. Kamal Bhattacharya	Professor	kbhattacharya.ce@nitdgp.ac.in
Dr. Purnendu Ray	Professor	pray.ce@nitdgp.ac.in
Dr. Showmen Saha	Professor	ssaha.ce@nitdgp.ac.in
Dr. Soumya Bhattacharyya	Professor	sbhattacharyya.ce@nitdgp.ac.in
Dr. Vijay Kumar Dwivedi	Professor	vkdwivedi.ce@nitdgp.ac.in vkdwivedi10725@yahoo.co.in
Dr. Aloke Kumar Datta	Associate Professor	akdatta.ce@nitdgp.ac.in
Dr. Diptesh Das	Associate Professor	ddas.ce@nitdgp.ac.in d_diptesh@yahoo.com
Dr. Pijush Topdar	Associate Professor	ptopdar.ce@nitdgp.ac.in topdar72@yahoo.co.uk
Dr. Radhikesh Prasad Nanda	Associate Professor	rpnanda.ce@nitdgp.ac.in rpnanda@gmail.com
Dr. Supriya Pal	Associate Professor	spal.ce@nitdgp.ac.in supriya070478@gmail.com
Dr. Bandhan Bandhu Majumdar	Assistant Professor	bbmajumdar.ce@nitdgp.ac.in
Dr. Gilbert Hinge	Assistant Professor	ghinge.ce@nitdgp.ac.in
Dr. Pronab Roy	Assistant Professor	proy.ce@nitdgp.ac.in



Name Designation		Email-id
		pronabroy07@gmail.com
Dr. Sabyasachi Biswas	Assistant Professor	sbiswas.ce@nitdgp.ac.in
Dr. Sanku Konai	Assistant Professor	skonai.ce@nitdgp.ac.in
Dr. Somnath Karmakar	Assistant Professor	Skarmakar.ce@nitdgp.ac.in structure.som07@gmail.com
Dr. Suman Saha Assistant Professor		sumansaha.ce@nitdgp.ac.in
Dr. Sushovan Dutta	Assistant Professor	sdutta.ce@nitdgp.ac.in

## 4.2.4 Equipments

Sl. No.	Name of the equipment	Date of Purchase	Amount		
Environmen	Environmental Engineering Laboratory				
1	Conductivity meter	27. 02. 2023	23,317.00		
2	Spectrophotometer	27. 02. 2023	24,999.00		
3	Bench Top Turbidity meter	06. 03. 2023	22,908.00		
4	Manual pH meter	06. 03. 2023	19,050.00		
5	Water quality meter	05. 03. 2023	18,390.00		
6	Jar Test Apparatus	15. 03. 2023	23,500.00		
Transportat	on Engineering Laboratory				
1	200 T Compression Testing Machine	07. 06. 2022	1,75,000.00		
2	Automatic Speed Radar Gun	03. 02. 2023	18,000.00		
3	Motorized Bitumen Extractor	22. 02. 2023	24,995.00		
4	Thin Film Oven	22. 02. 2023	53,100.00		
5	Particle Charge Apparatus	22. 02. 2023	14,160.00		
6	Storage Stability Tester	22. 02. 2023	12,980.00		
7	Digital Thermometer	22. 02. 2023	1,298.00		
8	MAKITA Electric Drill (800Watt)	14. 03. 2023	8,850.00		
Surveying L	aboratory				
1	AI based moving object capturing device with 60 fps with different level mounting capacity	09. 03. 2023	1,25,995.00		

## 4.2.5 Labs

Sl. No.	Name of Laboratory	Major equipment
1.	Strength of Materials Laboratory	• 20& 100 Ton UTM
		<ul> <li>Torsion Testing Equipment</li> </ul>
		Hardness testing Equipment
		<ul> <li>Charpy Impact Tester Equipment</li> </ul>
2.	Soil Mechanics and Foundation	Soil Tri-axial test apparatus
	Engineering Laboratory	Rock Tri-axial Test Apparatus
		<ul> <li>Direct Shear Test Apparatus</li> </ul>
		<ul> <li>Large Scale Direct Shear Test Apparatus</li> </ul>
		CBR test Apparatus
		<ul> <li>Automatic Compaction Test Apparatus</li> </ul>
		<ul> <li>Point load test Apparatus</li> </ul>
		Brazilian Tensile Test Apparatus
		Slake Durability Apparatus
		• DCPT, SCPT, Relative Density Test Apparatus
3	Computer Laboratory	Computers and its allied accessories with
		centralized software like ANSYS, ABAQUS
		etc.
4	Concrete Structure Laboratory (UG)	<ul> <li>Digital balance Capacity</li> </ul>
		<ul> <li>Le-Chatelier Mould</li> </ul>
		<ul> <li>Vicat Needle apparatus with accessories</li> </ul>



Sl. No.	Name of Laboratory	Major equipment
	·	200 Tonne Compression Testing Machine
		Flexural Testing Apparatus
		Humidity Cabinet
		Accelerated Curing tank
		Constant Temperature Water Bath
		Compacting factor apparatus
		Hardness test machine for concrete & tones
		Workability Test apparatus
		Bar Bending Machine
5	PG Structural Engineering Laboratory	• UTM 200, CTM 300T,
J	1 6 Structural Engineering Euroratory	<ul><li>LOADING FRAME 100T,</li></ul>
		Mortar Pan Mixture, Incubator,     Hat Water Park.
		• Hot Water Bath,
		• Flexure Test Machine,
		<ul> <li>Ultrasonic Pulse VelocityTester,</li> </ul>
		<ul> <li>Rebar Locator,</li> </ul>
		<ul> <li>Digital Schmidt Hammer</li> </ul>
		<ul> <li>Corrosion Testing Machine,</li> </ul>
		<ul> <li>Resistivity Meter, Multimeter,</li> </ul>
		<ul> <li>Core Cutter, Surface Grinder,</li> </ul>
		Metal Cutter
6	Survey Engineering Laboratory	Plane table with stand
Ü	Survey Engineering Lucerucery	Total Station
		Prismatic Compass
		Levelling Instrument (Dumpy)
		Theodolite
		Linen Tape
		Surveyor's compass with stand
		Land measuring Chain
		Levelling Staff
7	Environmental Engineering	pH meter
,	Laboratory	Conductivity meter
	,	Turbidity meter
		COD digester
		Autoclave
		BOD incubator
		Muffle furnace
		Incubator (ambient)
		Hot Air Oven
8	Transportation Engineering	Flakiness gauge
O	Laboratory	Elongation gauge
	Datellatory	Aggregate Impact Testing Machine
		Aggregate Crushing test setup including
		Compression testing machine
		Los Angeles abrasion testing machine.
		Bitumen softening point test apparatus (Ring ball)
		Apparatus)
		Bitumen Penetration value test apparatus
		(penetrometer)
		Bitumen Ductility value testing apparatus
		Centrifuge for Bitumen Extraction Test.
		Marshall test apparatus
		<ul> <li>Mechanical Soil compactor for Proctor and CBR</li> </ul>
		<ul> <li>CBR (Lab and Field) test apparatus.</li> </ul>
		Benkelman Beam
9	Structural Health Monitoring	Impact Hammer
,	Laboratory	UPVM
	Lacolatory	
		<ul> <li>Acoustic Emission System</li> </ul>



Sl. No.	Name of Laboratory	Major equipment
		Rebar Locator

#### 4.2.6 PhD degree awarded till 2022-23

Twenty Six.

#### 4.2.7 Specialization

- · Mechanics of Solids/ Structural Engineering
- · Water Resources Engineering
- · Structural Engineering
- Construction Technology and Management
- · Structural Health Monitoring and Earthquake Engineering
- · Geotechnical Engineering
- · Geotechnical Engineering
- · Transportation Engineering
- · Structural Engineering
- Civil Engineering (Transportation Engineering)
- · Geotechnical and Geo-environmental Engineering
- · Structural Engineering
- · Structure and Earthquake
- · Soil Mechanics and Foundation Engineering; Earthquake Engineering
- · Civil Engineering
- · Environmental Engineering
- Structural Engineering
   Structural Engineering
- Structural Engineering
- · Hydraulics and Water Resources Engineering
- Structures
- Water Resources Engineering
- Structural Engineering

#### 4.2.8 Proposed Plan for Research

- Sustainable materials, Earthquake vulnerability assessment, Earthquake resistant non engineering buildings
- · Alternative Construction Materials towards Sustainability
- · Advanced Concrete Technology
- Development of smart fault detection AI model in railway track, Seismic structural health monitoring using AI,
   Development of cost effective Earthquake resistant structural design using AI
- Ground Movements Resulting from Deep Excavation.
- Stabilization of Intermediate Plastic Soft Clay by Fly Ash and Granulated Blast Furnace Slag (GGBFS) Based Geopolymers and its Application through Laboratory Model Studies for the Design of Steep Slopes on Varying Subgrade Conditions: Environmentally Friendly Approach
- · Ground Improvement Techniques
- Model Studies on Geocell Reinforced and Geopolymer Stabilized Fly Ash Embankments Overlying Subgrades of Varying Stiffness
- Effect of deep excavation on the behavior of neighboring existing foundations under dynamic loading conditions
- Investigation of Reinforcing Effect on the Performance of Stone Columns filled with Recycled Materials
- Prediction of Soil Liquefaction under Seismic Condition Using Artificial Intelligence Techniques
- Detection of Leakage in Pipe Distribution Network using Remote sensing
- Rain water harvesting for Drought prone areas
- · Remote sensing of Precipitation in Ungauged Basin
- Mapping of soil using remote sensing, Machine learning and field approach
- Planing to R& D projects and consultancy
- A novel Artificial Intelligence (AI) based Pre-Crash Warning System for road segments using Surrogate Safety Measures (SSM)
- Understanding the role of the electric vehicles as a last mile cargo delivery mode for a sustainable transportation solution: Indian and Argentine experience and potential



- Investigating the Potential and Infrastructure of Sustainable Shared Personal Mobility Services: Lessons Learned from Korea and Ways Forward for India
- · Development of AI-based Smart Pre-Bicycle Crash Warning System (SPBCWS) for Indian Scenario
- I am involved as PI or co-PI of a number of research projects funded by DST SERB, MHRD-SPARC, GCRF-UK, AIA-Hyderabad and BITS Pilani in the area of Road safety, Congestion pricing, Electric mobility, Pedestrian Infrastructure improvement and public transportation access planning by non-motorized transportation modes respectively. Further, I would like to carry out socially relevant research specifically in the area of Safe and Sustainable Transportation to generate novel knowledge for improving the quality of life of commuters. Electric Vehicles (EV) can help decarbonize transport in Indian cities, improve the overall quality of life of urban commuters. In this perspective, I would like to carry out a detailed investigation on prospective users' choice decisions and plan for adequate infrastructure for EV to promote EV as an attractive alternative compared to the conventional vehicles in Indian context. I would also like to formulate cost-effective strategies aimed at crash mitigation at rural roads, urban areas and national highways using both reactive and pro-active approaches.
- Development of protype scale constructed wetland system to decontaminate wastewater; Development of nanocomposite jute geotextile for its application on pavement, railway embankment and over burden dump slopes of mines;
  Development of alternate materials from idustrial waste products for application in flexible pavement systems; Research
  on technical textiles:
- Investigation of Damage using Acoustic Emission Technique, Composite Structures, Experimentation and FE Modelling.
- · Dynamics on Structure; Earthquake Engineering
- · Floating Breakwaters.
- Heat Resistant Concrete with Recycled Aggregate
- Composite /confined structures
- · Biomedical Engineering
- · Modelling effect of Climate change on water resources systems
- Design and Development of Hydrogen Storage Tank

#### 4.2.9 Area of Research Interest

- Composite Structures, Structural Health Monitoring, FE modelling
- · Hydrological modelling
- Hydroclimatology
- · Soil Science
- · Remote Sensing of Rainfall
- · Soil Science
- Concrete and structures
- · Alternative Construction Materials towards Sustainability
- Advanced Concrete Technology
- · Structural Health monitoring, Earthquake resistant design, seismic structural health monitoring
- Ground Improvement, Soil Stabilization, Numerical Modelling, Reinforced earth and Geosynthetics, Green and Sustainable approaches in Geotechnical Engineering, Pavement Engineering, Soil Dynamics, Environmental Geomechanics
   Earth Retaining Structures
- · Ground Improvements
- · Soil Liquefactions
- Traffic Control
- · Road Safety
- Pavement Design and Analysis
- Impact (Blast & wind) and construction management
- Travel behavior Analysis Non-motorized Transport Safe and Sustainable Transportation Electric Mobility
- · Geotechnical and geo-environmental engineering
- Structural Dynamics, Earthquake Engineering, Passive, Semi-,active and Hybrid Vibration Control, Non-linear Analysis
  of Structures, Soil-Structure Interaction, Machine Learning Artificial Intelligence and Soft Computing, Offshore
  Structural Engineering, Bridge Engineering, Masonry Structures
- Earthquake resistant building, Seismic vulnerability and risk analysis, sustanable materials for road and buildings Earthquake Engineering
- Applications of Remote Sensing & GIS in environmental studies
- · Nonlinear Dynamics & Control, Progressive Collapse Analysis, Floating Offshore Wind Turbine, Floating Breakwaters
- · Construction Materials
- · Design of steel and concrete structures





- Hydrological Modelling, Modelling effect of Climate change on water resources systems Structural Reliability
- Machine Learning Based Reliability Analysis

# 4.2.10 Institute Industry Collaboration

Collaborating Institute Organization	Areas of collaboration	Collaboration Activities
Different Govt and Private Organization	Structural Engineering	Consultancy and Research
Eastern Coalfields Limited, Essar Oil Pvt. Ltd., Ministry of Textiles,GoI; National Rural Infrastructure Development Agency, MoRD, GoI; National Highway Authority of India; CPWD;Military Engineering Services;	Scientific study on mines slopes, Geotechnical testing on sub-surface rock samples at CBM blocks, Research works on technical textiles, Proof checking of DPRs n rural roads, Proof checking of DPRs on NH, Third party quality checking of infrastructures.	Scientific study of coal mine slopes at Kajora area,ECL
NRIDA	Road project	Scrutinizing and vetting, road DPR
NRCP, Min of Jal Shakti	Pollution abatement	Independent Appraisal of DPR
Mahanadi Water Disputes Tribunal (MWDT), Ministry of Jal Shakti, Govt. of India	Deputed as an Assessor to MWDT	Developing hydrological model for spatiotemporal yield of River Mahanadi

# 4.2.11 Collaboration with Academic and Research Institutions

Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
Dr. B.C. Roy College of Engineering, Durgapur	Research	Dr. S. Sengupta, Dept. of Civil Engineering	Joint research publication
CSIR-CMERI Durgapur	Research and Development	Dr. A. Mukherjee, Principal Scientist, Dept. of Robotics and Automation	Joint Research Project, Joint Publication
United Arab Emirates University	Research- Water Resource and Remote sensing	Prof. Mohamed Hamouda	Data sharing and Joint research publication
Indian Institute of Technology Roorkee	Research	Dr. Ashutosh Sharma	Joint research publication
CMERI	System development related to Structural Health Monitoring	Dr. Aloke Kumar Datta and Dr. Pijush Topdar	Development of AE system related to structural health monitoring
National Institute of Technology Jamshedpur	Pavement Engineering	Dr Sabyasachi Biswas and Prof. A.K. Sinha	Guiding a PhD student and research work
West Bengal police	Road safety awareness program	Dr Sabyasachi Biswas and Dr Bandhan Bandhu Majumdar	Expert lecture and tanning program on Road safety Audit
IIT Kharagpur and IIT Bhubaneswar	FEM-SPH coupling and Traffic Engineering with road Safety	Dr. Amit Shaw and Dr. Partha pratim Dey	Research and Consultancy
La Trobe University, Australia	E-Bike Mobility	Dr Bandhan Bandhu Majumdar	Working on joint project on e-bike health benefits funded by ASCRIN
Cardiff University, UK	Congestion Pricing and Management	Dr Bandhan Bandhu Majumdar	Working on SPARC project
University of Birmingham UK	Congestion Pricing and Management	Dr Bandhan Bandhu Majumdar	Working on SPARC project



Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
BITS Pilani	Writing research proposals, manuscripts, guiding students jointly	Dr Bandhan Bandhu Majumdar and Dr Sabyasachi Biswas	Writing research proposals, manuscripts, guiding students jointly
University of Namibia	Road Safety	Dr Bandhan Bandhu Majumdar	VREF Proposal Submission
NIT Calicut	Freight Transportation	Dr Bandhan Bandhu Majumdar	Submitted joint research proposal in ICSSR
University of San Marino, Argentina	Electric Mobility	Dr Bandhan Bandhu Majumdar and Dr Sabyasachi Biswas	Submitted joint research proposal
University of Hiroshima, Japan	Electric Mobility	Dr Bandhan Bandhu Majumdar	Submitted joint research proposal
Central Mechanical Engineering Research Institute, Durgapur	Structural Engineering, Structural Dynamics, Earthquake Engineering, Wind Engineering, Soil- Structure Interaction, Masonry Structures	Diptesh Das and Pijush Topdar	PhD guidance and Research
IIEST Shibpur	Structural Engineering, Structural Dynamics, Non- linear Analysis of Structures, Earthquake Engineering, Passive, Semi- ,active and Hybrid Vibration Control, Soil-Structure Interaction, Machine Learning Artificial Intelligence and Soft Computing	Diptesh Das	PhD guidance and Research
Adamas University	Joint PhD Supervision	Dr. Abhisek Santra	PhD Guidance

# 4.2.12 Innovations and Technology Transfer (Patents filed during)

Title	Inventors	<b>Application Nos</b>	Date of Filling
Recycling of plastics waste into construction material for road in the form of crushed	RP Nanda and D Banerjee	202331003483	2023-01-08
plastic aggregates			

# 4.2.13 Workshop/ Seminars Organized

Name of Key Speaker(s)	Name of the Programme	Date of the
		Programme
Prof Krishanu Roy, University of Waikato, Hamilton, New Zealand	One day lecture on Advance Steel Structure	2023-01-10
Shri. B.C. Pradhan Consultant Director (Technical) National Rural Infrastructure Development Agency, Govt. of India; Dr. Umesh Chandra Sahoo Professor, IIT Bhubaneswar; Shri. Rajib Chattaraj Chief	One day seminar on Promotion of green technology in rural road construction	0033-02-11
Engineer,P. W. (Roads) Dte., GoWB; Shri. Hemanta Dutta (Bitchem) and Dr. Supriya Pal		

(NITD); Dr. Tapas Kumar Roy Professor, IIEST Shibpur

Mr. Samir Kumar Jana, Ex-CGM, ONGC	Expert Lecture	2023-03-29
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# 4.2.14 Journal: Published in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Bittu Ghosh and Somnath Karmakar	The conventional construction scenario and the emergence of advance technologies in bridge construction: implementation, impediments, and case study	Journal of Institute of Engineers India Series A	Volume:104 Issue No:3 Page No:709-720 Year:2023 Month:April
Saikat Deb, Gilbert Hinge	Passenger's perception about city buses in the aftermath of COVID 19: Experience from Guwahati city, India	International Journal of Disaster Risk Reduction	Volume:85 Issue No: Page No:103489 Year:2022 Month:Dec
Gilbert Hinge, Jay Piplodiya, Ashutosh Sharma, Mohamed A Hamouda, Mohamed M Mohamed	Evaluation of Hybrid Wavelet Models for Regional Drought Forecasting	Remote Sensing	Volume:14 Issue No:24 Page No:6381 Year:2022 Month:Dec
Aissam Gaagai, Hani Amir Aouissi, Selma Bencedira, Gilbert Hinge, Ali Athamena, Salim Heddam, Mohamed Gad, Osama Elsherbiny, Salah Elsayed, Mohamed Hamdy Eid, Hekmat Ibrahim	Application of Water Quality Indices, Machine Learning Approaches, and GIS to Identify Groundwater Quality for Irrigation Purposes: A Case Study of Sahara Aquifer, Doucen Plain, Algeria	Water	Volume:15 Issue No:2 Page No:289 Year:2023 Month:Jan
Kumar, M., Roy, P. and Khan, K.	New Empirical Equations for Determining Plastic Collapse Moment of Initially Imperfect Pipe Bends Under Internal Pressure and In-plane Closing Bending Moment	Journal of the Brazilian Society of Mechanical Sciences and Engineering (BMSE) (Springer	Volume:44 Issue No:3 Page No: Year:2022 Month:Mar
Kumar, M., Roy, P. and Khan, K.	Evaluation of Collapse Moment of Pressurized 300 to 1800 Bend Pipes Subjected to Out-of-Plane Bending Moment	Journal of Mechanical Engineering Science (JMES) (SAGE Publication)	Volume:236 Issue No:10 Page No:5545–5555 Year:2022 Month:May
Avishek Adhikary, Debasmita Datta, Supriya Pal, Kalyan Adhikari, Sudipta Ghosh,	Assessment of subsurface migration and simultaneous removal of Carbendazim in simulated constructed wetland through physical and numerical modeling	Journal of Water Process Engineering	Volume:50 Issue No: Page No: Year:2022 Month:Dec
Raja, R., Pal, S., & Karmakar, A.	In-situ remediation of heavy metal contaminated sites through mechanical stabilization using industrial waste products	Journal of Environmental Engineering and Landscape Management	Volume:30 Issue No:2 Page No: 301-307 Year:2022 Month:Jun



Author(s) Name	Paper Name	Journal Name	Others Info
Avishek Adhikary, Sandeep Kumar, Supriya Pal, Sudipta Ghosh, Hirok Chaudhuri,	Efficacy Evaluation of Silty-Sandy Soil and Chrysopogon zizanioides to Attenuate Doxycycline from Wastewater in a Constructed Wetland System	Journal of Environmental Engineering, ASCE	Volume:149 Issue No:06 Page No: Year:2023 Month:Mar
Mrinal Kanti Mandal Sarkar, G. and Roy, P.	Generalised analytical solution for determining natural frequency of free span offshore pipelines considering nonhomogeneity of seabed soil	Ocean Engineering, Elsevier	Volume:266 Issue No:5 Page No: Year:2022 Month:Dec
Ashutosh Sharma, Anupal Baruah, Nikunj Mangukiya, Gilbert Hinge, Biswadeep Bharali	Evaluation of Gangetic dolphin habitat suitability under hydroclimatic changes using a coupled hydrological- hydrodynamic approach	Ecological Informatics	Volume:69 Issue No: Page No:101639 Year:2022 Month:Apr
Gilbert Hinge, Mohamed A Hamouda, Di Long, Mohamed M Mohamed	Hydrologic utility of satellite precipitation products in flood prediction: A meta-data analysis and lessons learnt	Journal of Hydrology	Volume:612 Issue No: Page No:128103 Year:2022 Month:Jun
Anupal Baruah, Arup Kumar Sarma, Gilbert Hinge	A Semicoupled Shallow-Water Model for Vertical Velocity Distribution in an Open Channel with Submerged Flexible Vegetation	Journal of Irrigation and Drainage Engineering	Volume:148 Issue No:9 Page No: Year:2022 Month:Jun
Gilbert Hinge, Biswadeep Bharali, Anupal Baruah, Ashutosh Sharma	Integrated groundwater quality analysis using Water Quality Index, GIS and multivariate technique: a case study of Guwahati City	Environmental Earth Sciences	Volume:81 Issue No:16 Page No:412 Year:2022 Month:Aug
Nanda, R.P, Damarla, R., Nayak, K.A.,	Android application of rapid visual screening for buildings in Indian context,	Structure, Elsevier	Volume:46 Issue No:12 Page No:1823-32 Year:2022 Month:
Behera, B., Nanda, R.P.,	Geogrid Reinforced Brick buildings for Earthquake Disaster Mitigation	Case Studies in Construction Materials, Elsevier	Volume:16 Issue No: Page No: e01113 Year:2022 Month:
Dutta, S. Nanda, R.P.,	Waste Rubber–Soil Mat for Protection of Structures from Earthquake- Induced Liquefaction	Int. Journal of Geosynthetic and Ground Engg.	Volume:8 Issue No:57 Page No:1-8 Year:2022 Month:
Tamal Kundu, Aloke Kumar Datta, Pijush Topdar, Sanjay Sengupta	Optimal location of acoustic emission sensors for detecting rail damage	Proceedings of the Institution of Civil Engineers - Structures and Buildings	Volume: Issue No: Page No: Year:2022 Month:Oct
MK Diptikanta Rout, Surya kant Sahdeo, Sabyasachi Biswas, Krishanu Roy, Abdhesh Kumar Sinha	Feasibility Study of Reclaimed Asphalt Pavements (RAP) as Recycled Aggregates Used in Rigid Pavement Construction	Materials	Volume:16 Issue No:4 Page No:1-19 Year:2023 Month:Feb
MK Diptikanta Rout, Sabyasachi Biswas, Kumar Shubham, Abdhesh Kumar Sinha	A systematic review on performance of reclaimed asphalt pavement (RAP) as sustainable material in rigid pavement construction: Current status to future perspective	Journal of Building Engineering	Volume:76 Issue No:6 Page No:1-25 Year:2023 Month:Jul



Author(s) Name	Paper Name	Journal Name	Others Info
Anupam Kumar Biswas, Aloke Kumar Datta, Pijush Topdar, Sanjay Sengupta	Acoustic Emission-based Damage Detection and Classification in Steel Frame Structure Using Wavelet Transform and Random Forest	Periodica Polytechnica Civil Engineering	Volume:66 Issue No:4 Page No:1183-1198 Year:2022 Month:Sep
Puja Haldar and Somnath Karmakar	State of the Art Review of Aerodynamic Effects on Bridges,	Journal of Institute of Engineers India Series A,	Volume:103 Issue No:3 Page No:943-960 Year:2022 Month:September
Atrayee Bandyopadhyay; Anwesha Saha; Diya Ghosh; Bomba Dam; Amiya K. Samanta; Susmita Dutta	Microbial Repairing of Concrete & its role in CO2 Sequestration- A Critical Review.	Beni-Suef University Journal of Basic and Applied Sciences	Volume:12 Issue No:7 Page No: Year:2023 Month:Jan
Puja Haldar and Somnath Karmakar	Wind Response on RC Trapezoidal Box Girder Bridge using Computational Fluid Dynamics	Sadhana Journal	Volume:48 Issue No: Page No:74 Year:2023 Month:
Swarnadip Dey & Atul Krishna Banik	Stability and performance analysis of hybrid braceless emisubmersible platform installed in real seas	Wind Engineering	Volume:47 Issue No:1 Page No:49-73 Year:2023 Month:Feb
Biswas, A. K., Datta, A. K., Topdar, P., & Sengupta, S.	Acoustic Emission-based Damage Detection and Classification in Steel Frame Structure Using Wavelet Transform and Random Forest	Periodica Polytechnica Civil Engineering	Volume:66(4) Issue No:4 Page No:1183- 1198 Year:2022 Month:
Tamal Kundu, Parikshit Roy, Aloke Kumar Datta, Pijush Topdar	Health monitoring of Indian rail section using ae technique combined with upvm: an experimental study	Journal of Structural Engineering (Madras)	Volume:49 Issue No:1 Page No:47-58 Year:2022 Month:Aug
Arijit Kumar Banerji, Pijush Topdar, Aloke Datta	Effect of Axle Overloading on Pavement Structural Behaviour with Improved Clayey Subgrade Using PET Fibres	Civil Engineering and Architecture	Volume:10 Issue No:6 Page No:2410-2425 Year:2022 Month:Sep
Arijit Banerji, Aloke Kumar Datta, Pijush Topdar	Structural Performance of Cement- treated Base Layer by Incorporating Reclaimed Asphalt Material and Plastic Waste	Jordan Journal of Civil Engineering	Volume:17 Issue No:2 Page No:259-271 Year:2022 Month:Dec
Banerji, A.K., Topdar, P. & Datta, A.K.	Structural Performance of Cement- treated Base Layer by Incorporating Reclaimed Asphalt Material and Plastic Waste	Jordan Journal of Civil Engineering	Volume: Issue No: Page No: 259-271 Year:2023 Month:Mar
Das, D.P., Das, D., Topdar, P., Biswas, R.K. & Ghosh, B.B.	Effect of Partial Opening on Responses of Plan Asymmetric Multistoried Building with Soil–Structure Interaction: A Case Study	Journal of The Institution of Engineers (India): Series A	Volume: Issue No: Page No: Year:2023 Month:Mar
MK Diptikanta Rout, Kumar Shubham, Sabyasachi Biswas, Abdhesh Kumar Sinha	An integrated evaluation of waste materials containing recycled asphalt fine aggregates using central composite design	Asian Journal of Civil Engineering	Volume:32 Issue No:6 Page No:1-17 Year:2023 Month:Jul
Tamal Kundu, Parikshit Roy, Aloke Kumar Datta, and Pijush Topdar	Health Monitoring of Indian Rail Section Using AE Technique Combined with upvm: An Experimental Study	Journal of Structural Engineering (Madras)	Volume:49 Issue No:1 Page No:47-58 Year:2022 Month:Nov



Author(s) Name	Paper Name	Journal Name	Others Info
Sil G., Dutta A, Jena A, and Majumdar B.B.	An investigation on Travel mode preferences of university students travelling to home during vacation: An Indian experience	European Transport - Trasporti Europei	Volume:92 Issue No: Page No:1-18 Year:2023 Month:
Jayakumar.M., Majumdar B.B., Sahu PK and Pani A.	Analysis of Travel Satisfaction with Commuting in Developing Economy: A Case of New Delhi, India	Transportation in Developing Economies	Volume:9 Issue No: Page No:1-14 Year:2023 Month:
Koramati S., Mukherjee A, Majumdar B.B., and Kar A	Development of Crash Prediction Model using Artificial Neural Network (ANN): A Case Study of Hyderabad, India March 2023	J. Inst. Eng. India Ser. A	Volume:104 Issue No: Page No:63-80 Year:2023 Month:Mar
Saha, S., Rajasekaran, C., Ganiger, M. S., and Sajjan, S.	Experimental investigations on the properties of concrete containing pre-soaked recycled fine aggregate	Indian Concrete Journal	Volume:96 Issue No:9 Page No:1-12 Year:2022 Month:Sep
Roy, P., and Samanta, A. K.	The behavior of different RCC joints under various loading conditions-A review	The Indian Concrete Journal,	Volume:96 Issue No:7 Page No:28-34 Year:2022 Month:Jun
Das, D. P., Das, Diptesh, Topdar, P. and Ghosh, B.B.	Study of A Steam Turbo Generator Foundation Structure under Dynamic Load On Pile Support	Water and Energy International	Volume:65/RNI Issue No:9 Page No:45-50 Year:2022 Month:
Das, D. P., Das, Diptesh, Topdar, P. and Ghosh, B.B.	Estimate of Responses of Multistoried Building under Earthquake Ground Motion to Prevent Failure	Civil Engineering and Architecture	Volume:11 Issue No:2 Page No:668-674 Year:2023 Month:
Das, D. P., Das, Diptesh, Topdar, P., Biswas, R.K. and Ghosh, B.B.	Effect of partial opening on responses of plan asymmetric multistoried building with soil structure interaction- A case study.	Journal of The Institution of Engineers (India): Series A	Volume:104 Issue No:2 Page No:467-472 Year:2023 Month:
Das, D. P., Das, Diptesh, Topdar, P. and Ghosh, B.B.	Dynamic Performance of L- Shaped Asymmetric Building with Soil Structure Interaction	Annals of Forest Research	Volume:65 Issue No:1 Page No:1539-1550 Year:2022 Month:
Banerji, A. K., Topdar, P., & Datta, A.	Effect of axle overloading on pavement structural behaviour with improved clayey subgrade using PET fibres	Civil Engineering and Architecture	Volume: 10 (6) Issue No:6 Page No:2410- 2425 Year:2022 Month:
Soumya Mukherjee, Ujjal Mondal, and, Dilip Kr. Singha Roy	Wind-structure interaction analysis of empty cylindrical silos for various slenderness ratio	Materials Today: Proceedings (Elsevier)	Volume:65 Issue No:2 Page No:1582-1588 Year:2022 Month:Apr
Soumya Mukherjee, Dilip Kr. Singha Roy, and, Amiya Kr. Samanta	Wind induced oscillation on a tall circular storage shell for various terrains	Materials Today: Proceedings (Elsevier)	Volume:65 Issue No:2 Page No:1575-1581 Year:2022 Month:May
Avishek Adhikary, Pradyumna Konar, Tapabrata Chakraborty, Supriya Pal, Sudipta Ghosh	Efficacy Assessment of Silty– Sandy Soil as Bed Material in Constructed Wetland to Treat Naphthalene-Laden Wastewater: Physical and Numerical Modeling	Journal of Hazardous, Toxic, and Radioactive Waste (ASCE)	Volume:26 Issue No:2 Page No:04021064. Year:2022 Month:Apr



Author(s) Name	Paper Name	Journal Name	Others Info
Yadav, N.K., Mitra S. S., Santra Abhisek, Samanta, A.K.	Understanding responses of spatio- temporal variability of atmospheric pollution to contradicting nexus of urbanisation-industrial emission control in Haldia, an industrial city of West Bengal	Journal of the Indian Society of Remote Sensing	Volume:51 Issue No: Page No:625–646 Year:2023 Month:Jan

## 4.2.15 Journal: Accepted for Publication in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Kundu, T., Datta, A.	Optimal location of acoustic	Proceedings of the Institution of	Volume: Issue No:
K., Topdar, P., &	emission sensors for detecting rail	Civil Engineers-Structures and	Page No: Year:2022
Sengupta, S.	damage	Buildings	Month:
Marazi N, Majumdar	Traffic Congestion Assessment	ASCE, Journal of Transportation	Volume:In press Issue
B.B.,	Tool for	Engineering, Part A: Systems	No:In press Page
Sahu P.K., Panda S	Urban Roads Based on Traffic and		No:In press Year:2023
and Koramati S	Geometric Characteristics: A Case		Month:Jul
	of Hyderabad, India		
Saha, S., and	Influence of the Mix Parameters on	Australian Journal of Civil	Volume: Issue No:
Rajasekaran, C.	Shrinkage Properties of	Engineering	Page No:
	Environment-		Year:2023 Month:Feb
	Friendly Mortar		

# 4.2.16 Journal: Published in Others in 2022-2023

Author(s) Name	Paper Name	Journal Name	Others Info
Kundu, T., Pal, A.,	On the application of UPV in	NDT.net	Volume:27 Issue
Roy, P., Datta, A. K.,	health monitoring of Indian Rail		No:11 Page No:1-16
& Topdar, P.	section using AE Technique		Year:2022 Month:

## 4.2.17 Conference: Published in 2022-2023 DOI/ISBN

Author(s) Name	Paper Name	<b>Conference Name</b>	Others Info
Tamal Kundu,	Application of UPV-	12th Structural	DOI/ISBN: DOI: 10.38208/acp.v1.673
Apurba Pal,	Instrument in	<b>Engineering Convention</b>	Volume: Issue No: Page No:1429-1439
Parikshit Roy,	Health Monitoring of	2022	Year:2022 Month: Dec Presenter:CO-
Aloke Kumar	Indian Rail		AUTHOR
Datta, Pijush	Section Using AE		
Topdar	Technique		
Sudha Das	A Fuzzy Synthetic	Advanced Engineering	DOI/ISBN: https://doi.org/10.1007/978981-19-
Khan, Pijush	Evaluation	Optimization Through	9285-8_30 Volume: Issue No: Page
Topdar & Aloke	Approach for Condition	Intelligent Techniques	No:319-330 Year:2023 Month: Jan
Kumar Datta	Rating of RC Bridge		Presenter:CO-AUTHOR
	Decks		
Sudha Das	Application of Soft	Data Science and	DOI/ISBN: DOI: 10.1007/978-981-199285-
Khan, Pijush	Computing Techniques	Intelligent Computing	8_30 Volume: Issue No: Page No:
Topdar & Aloke	in Bridge Health	Techniques	Year:2023 Month:Jan Presenter:CO-
Kumar Datta	Assessment: A Review		AUTHOR
Arijit Kumar	Study on the Effect of	ASMA 2021: Advances	DOI/ISBN: DOI: 10.1007/978-3-031-
Banerji,	Wheel Load and	in Structural Mechanics	05509-6_17 Volume: Issue No: Page
Pijush Topdar &	Temperature on Rutting	and Applications	No:202-212 Year:2022 Month:Jul
Aloke	Damage of Composite		Presenter:CO-AUTHOR
K. Datta	Flexible Pavement		
	Using Finite Element		
	Method		



Author(s) Name	Paper Name	Conference Name	Others Info
Soumyadip Das, Aloke Kumar Datta, Pijush Topdar & Sanjay Sengupta	Damage Localization in Reinforced Concrete Slab Using Acoustic Emission Technique	ASMA 2021: Advances in Structural Mechanics and Applications	DOI/ISBN: DOI: 10.1007/978-3-031- 05509-6_13 Volume: Issue No: Page No:162- 170 Year:2022 Month:Jul Presenter:CO-AUTHOR
Parikshit Roy, Sanjay Sengupta, Pijush Topdar & Aloke Kumar Datta	On the Applicability of Wavelet Transform in Localising Defect in a Small Plate Using AE Technique: An Experimental Study	ASMA 2021: Advances in Structural Mechanics and Applications	DOI/ISBN: DOI: 10.1007/978-3-031- 05509-6_19 Volume: Issue No: Page No:226-237 Year:2022 Month:Jul Presenter:CO-AUTHOR
Sheersha Karmakar, Parikshit Roy, Pijush Topdar & Aloke Kumar Dutta	Optimal Locations of Sensor for Structural Health Monitoring of a Steel Truss Using Acoustic Emission Technique: An Experimental Investigation	ASMA 2021: Advances in Structural Mechanics and Applications	DOI/ISBN: DOI: 10.1007/978-3-030- 98335-2_24 Volume: Issue No: Page No:364-375 Year:2022 Month:Jun Presenter:CO-AUTHOR
Mohammed Mumtaj, Loka Venkata Krishna Reddy, Pronab Roy	Seismic Response of Multistorey Building with Varying Stiffness Modifiers	17th Symposium on Earthquake Engineering (17 SEE)	DOI/ISBN: DOI:https://doi.org/10.1007/978-981-99- 1608-5 Volume: Issue No: Page No:335349 Year:2022 Month:Nov Presenter:SELF
Balsukuri Mahesh, Pronab Roy	Analysis of underground R.C.C. bunker subjected to blast load	UKIERI Concrete Congress Conference 3 (Reinforced Concrete and Precast Concrete for Sustainable Infrastructure)	DOI/ISBN: https://doi.org/10.1016/j.matpr.2023.07.027 Volume: Issue No: Page No: Year:2023 Month:Mar Presenter:CO-AUTHOR
Mohamed Hamouda; Gilbert Hinge; Mohamed Mostofa	Performance of satellite rainfall estimates for flood and drought monitoring	European Geosciences Union	DOI/ISBN: https://doi.org/10.5194/egusphere-egu22294 Volume: Issue No: Page No:EGU22294 Year:2022 Month:May Presenter:CO- AUTHOR
MK Diptikanta Rout, Sabyasachi Biswas, Abdhesh Kumar Sinha	Mechanical and Durability Properties of Alccofine Used in Reclaimed Asphalt Concrete Pavements (RACP)	Advances in Sustainable Construction Materials	DOI/ISBN: https://doi.org/10.1007/978981-33- 4590-4_14 Volume: Issue No: Page No:131-142 Year:2021 Month:Apr Presenter:CO-AUTHOR
MK Diptikanta Rout, Sabyasachi Biswas, Abdhesh Kumar Sinha	Evaluation of Mechanical Properties of Rigid Pavement with High RAP Content	Recent Advances in Transportation Systems Engineering and Management	DOI/ISBN: https://doi.org/10.1007/978981-19- 2273-2_20 Volume: Issue No: Page No:285-298 Year:2022 Month:Nov Presenter:CO-AUTHOR
Kundu, T., Pal, A., Roy, P., Datta, A. K., & Topdar, P.	Application of UPV- Instrument in Health Monitoring of Indian Rail Section Using AE Technique	12th Structural Engineering Convention 2022	DOI/ISBN: 10.38208/acp.v1.673 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR
Tamal Kundu, Apurba Pal, Parikshit Roy,	On the application of UPV in health monitoring of Indian Rail section using AE Technique	ICINDE 2022	DOI/ISBN: 10.58286/27467 Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:CO-AUTHOR



Author(s) Name	Paper Name	<b>Conference Name</b>	Others Info
Aloke Kumar Datta, and Pijush Topdar.			
Sudha Das Khan, Aloke Kumar Dutta and Pijush Topdar	Application of Fuzzy Set Theory in Decision-making of Highway Concrete Bridge.	Advances in Data-driven Computing and Intelligent Systems (ADCIS 2022) at BITS Goa Campus	DOI/ISBN: 978-981-99-0981-0 Volume: Issue No: Page No: Year:2022 Month:Sep Presenter:CO-AUTHOR
Manhanpally, N., Nagarajan, P., Saha, S. and Y. Raja.	Mechanical and Durability Characteristics of GGBS-Dolomite Geopolymer Concrete Using Recycled Coarse Aggregate	Second International Conference on Construction Materials and Structures (ICCMS2022)	DOI/ISBN: https://doi.org/10.1016/j.matpr.2023.04.217 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR
Naik, B. V., Kishor, Y., Saha, S., and Goudar, S. K.	Performance Studies on Three Types of Prestressed Concrete Railway Sleepers using Finite Element Model	Second International Conference on Construction Materials and Structures (ICCMS2022)	DOI/ISBN: https://doi.org/10.1016/j.matpr.2023.03.147 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR
Debasree Roy, Kalyan Adhikari, Supriya Pal	. In Situ Remediation of Arsenic From Arsenic Infested Soil Through Electrokinetic Technique	3 rd International Conference on Advanced Technologies for Industrial Pollution Control (ATIPC-2022) held at Civil Engineering Department, IIEST, Shibpur	DOI/ISBN: 978-93-5768-118-6 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR
Pravin Lal, Supriya Pal	Electrokinetic Remediation of Total Chromium from Contaminated Soil	3 rd International Conference on Advanced Technologies for Industrial Pollution Control (ATIPC-2022) held at Civil Engineering Department, IIEST, Shibpur	DOI/ISBN: 978-93-5768-118-6 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR
Chandrima Bhadra, Avishek Adhikary, Supriya Pal, Kalyan Adhikari	Modeling Migration of Cr(VI) Contaminant Through Clay Liner Using HYDRUS-3D	3 rd International Conference on Advanced Technologies for Industrial Pollution Control (ATIPC-2022) held at Civil Engineering Department, IIEST, Shibpur during December 21 - 23, 2022	DOI/ISBN: 978-93-5768-118-6 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR
Patra, S. and Das, D	Semi-active Groundhook Control of Offshore Tension Leg Platforms Using TMD with Optimized Parameters and MR Damper Under Regular waves	12th Structural Engineering Convention (SEC2022) at MNIT Jaipur	DOI/ISBN: https://doi.org/10.38208/acp.v1.716 Volume: Issue No: Page No:1765-1772 Year:2022 Month:Dec Presenter:SELF



Author(s) Name	Paper Name	Conference Name	Others Info
Matia, S. and	Non-Linear Visco-	12th Structural	DOI/ISBN:
Das, D	elastic Pounding in	Engineering	https://doi.org/10.38208/acp.v1.544 Volume:
	Multi-span Simply	Convention (SEC2022)	Issue No: Page No:529-536
	Supported Isolated	at MNIT Jaipur	Year:2022 Month:Dec Presenter:SELF
	Bridges	·	
Ghosh, D.,	Passive Vibration	17th Symposium on	DOI/ISBN: https://doi.org/10.1007/978981-99
Banerjee, T.	Control of Bridges: A	Earthquake	1608-5_19 Volume: Issue No: Page
and Das, D	State-of-the-art Review	Engineering (17SEE) at	No:257-271 Year:2022 Month:Nov
,		IIT Roorkee	Presenter:CO-AUTHOR
S. Banerjee and	Soil-Structure	17th Symposium on	DOI/ISBN: 978-981-99-1578-1 Volume:
K. Bhattacharya	Interaction Effect on a	Earthquake Engineering	Issue No: Page No:667-679 Year:2022
•	Multi-storied Building	(Vol. 3)	Month:Nov Presenter:CO-AUTHOR
	with Pile Foundation	( - /	
	Considering Linear		
	Approach .		
Charity	Response of a Nuclear	17th Symposium on	DOI/ISBN: 978-981-99-1578-1 Volume:
Marbaniang and	Containment with Soil	Earthquake	Issue No: Page No:695-708 Year:2022
Kamal	Underneath Under	Engineering (Vol. 3)	Month:Nov Presenter:CO-AUTHOR
Bhattacharya	Earthquake Excitation	SPRINGER	
Sourav	Nonlinear Seismic	17th Symposium on	DOI/ISBN: 978-981-99-1603-0 Volume:
Bhattacharjee	Analysis of Nuclear	Earthquake Engineering	Issue No: Page No:529-540 Year:2022
and Kamal	Containment with Soil–	(Vol. 2)	Month:Nov Presenter:CO-AUTHOR
Bhattacharya	Structure Interaction:	,	
,	Study on Stresses and		
	Damage Criteria		
Kinshuk	Graphene based	UKIERI Concrete	DOI/ISBN: 606 Volume: Issue No: Page
Mukherjee, A K	Concrete: Potential and	Congress,	No:UCC-2023-606 Year:2023 Month:Mar
Samanta	utilization in 3D printing	Sustainable Concrete	Presenter:CO-AUTHOR
	applications,	Infrastructure	
		2023 14-17 March 2023,	
		Jalandhar, India.	
Kapildeo P.	Use of waste refractory	UKIERI Concrete	DOI/ISBN: 129 Volume: Issue No: Page
Yadav,	brick in sustainable	Congress, Sustainable	No:[UCC-2023-129] Year:2023
Sudipta Ghosh	concrete: A review on	Concrete Infrastructure	Month:Mar Presenter:CO-AUTHOR
and A K Samanta	mechanical and	2023 14-17 March 2023,	
	durability properties	Jalandhar, India.	
Sudipta Ghosh,	Utilization of Recycled	2nd International	DOI/ISBN:
Amiya K.	Refractory Brick as	Conference on	https://doi.org/10.1016/j.matpr.2023.03.712
Samanta	Fine Aggregate on	Construction Materials	Volume: Issue No: Page No: Year:2022
	various Properties of	and Structures 14-18th	Month:Dec Presenter:CO-AUTHOR
	Sustainable Concrete.	December 2022 (ICCMS	
		2022) NIT Calicut,	
		Kerala.	
Subhrajit Sinha,	Influence of waste	2nd International	DOI/ISBN:
Sudipta Ghosh	refractory brick on the	Conference on	https://doi.org/10.1016/j.matpr.2023.03.508
and Amiya K.	destructive and non-	Construction Materials	Volume: Issue No: Page No: Year:2022
Samanta	destructive properties of	and Structures 14-18th	Month:Dec Presenter:CO-AUTHOR
	sustainable eco-friendly	December 2022 (ICCMS	
	concrete.	2022) NIT Calicut,	
		Kerala.	
45. Prakash	Study on the flexural	2nd International	DOI/ISBN:
Mondal, Amiya	and ductility behaviour	Conference on	https://doi.org/10.1016/j.matpr.2023.04.685
K. Samanta,	of plate reinforced	Construction Materials	Volume: Issue No: Page No: Year:2022
Dilip K. Singha	concrete beam - a	and Structures 14-18th	Month:Dec Presenter:CO-AUTHOR
Roy	review.	December 2022 (ICCMS	
	•	. (	
		2022) NIT Calicut,	



Author(s) Name	Paper Name	Conference Name	Others Info
Kapildeo Prasad Yadav and Amiya K. Samanta	Characterization and Development of Alccofine-based Sustainable Concrete: A Review	2nd International Conference on Construction Materials and Structures 14-18th December 2022 (ICCMS 2022) NIT Calicut, Kerala.	DOI/ISBN: https://doi.org/10.1016/j.matpr.2023.05.331 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR
N. Aravind and Amiya K. Samanta	Application of GFRP Composites in Flexural Strengthening of RC Beams in terms of Strength to the Weight Ratio: A way forward	2nd International Conference on Construction Materials and Structures 14-18th December 2022 (ICCMS 2022) NIT Calicut, Kerala	DOI/ISBN: https://doi.org/10.1016/j.matpr.2023.04.210 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR
Kingshuk Mukherjee, Amiya K. Samanta (2022)	A critical review on the fresh properties, mechanical and durability performance of graphene-based cement composites	2nd International Conference on Construction Materials and Structures 14-18th December 2022 (ICCMS 2022) NIT Calicut, Kerala	DOI/ISBN: https://doi.org/10.1016/j.matpr.2023.04.500 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR
Amgoth Rajender, Amiya K. Samanta	Compressive Strength Prediction of Metakaolin Based High-Performance Concrete with Machine Learning	2nd International Conference on Construction Materials and Structures 14-18th December 2022 (ICCMS 2022) NIT Calicut, Kerala	DOI/ISBN: https://doi.org/10.1016/j.matpr.2023.03.522 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR
Pranoy Roy and Amiya Kr. Samanta	Behavior of Concrete- Filled Stub Columns Confined With Cold Formed Steel under Axial Compression: A Comparative Review	2nd International Conference on Construction Materials and Structures 14-18th December 2022 (ICCMS 2022) NIT Calicut, Kerala.	DOI/ISBN: https://doi.org/10.1016/j.matpr.2023.04.507 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR
A. K. Banik, M. R. Teja , S. Roy	Hydrodynamic Performance of Single and Double Row Floating Breakwaters	15th International Symposium on Practical Design of Ships and Other Floating Structures	DOI/ISBN: 978-953-7738-87-7 Volume: Issue No: Page No:721-749 Year:2022 Month:Oct Presenter:SELF
M. Bandyopadhyay, A. K. Banik	Numerical modeling and nonlinear analysis of semi-rigid jointed steel frames	12th Structural Engineering Convention - An International Event (SEC 2022)	DOI/ISBN: 10.38208/acp.v1.505 Volume: Issue No: Page No:251-258 Year:2022 Month:Dec Presenter:SELF

# 4.2.18 Conference: Published in Others in 2022-2023

Author(s) Name	Paper Name	Conference Name	Others Info
Sudha Das Khan,	Application of Soft Computing	3rd Congress on Intelligent	DOI/ISBN: NA
Pijush	Techniques in Bridge Health	Systems (CIS	Volume:
Topdar, and Aloke	Assessment: A Review.	2022)	Issue No: Page No:
Kumar Datta			Year:2022 Month:Sep
			Presenter:CO-
			AUTHOR



Author(s) Name	Paper Name	Conference Name	Others Info
Patil, M., Majumdar, B.B., Marazi, N. Sahu, P, Sil G, Shankar BB	Analyzing Prospective Users' Willingness to Pay for Electric Two-wheeler Infrastructure Attributes in Indian context	14TH EASTS conference, Malaysia	DOI/ISBN: Accepted Volume: Issue No: Page No: Year:2023 Month:Sep Presenter:
Manhanpally, N., Nagarajan, P., and Saha, S.	3D Printed Concrete: A Key to Future Constructions	1st International Conference on Novel Sustainable Concepts and Technologies in Civil Engineering	DOI/ISBN: N/A Volume: Issue No: Page No: Year:2022 Month:Sep Presenter:CO- AUTHOR
Shalu Roy, Arindam Karmakar ,Sahinur Rahaman Mondal, and Supriya Pal	Efficacy Assessment of Electrokinetic Treatment For Ground Improvement of Soft Soil.	Ninth Indian Young Geotechnical Engineers Conference (9th IYGEC-2023), MIT AURANGABAD ( MAHARASHTRA)	DOI/ISBN: xxx Volume: Issue No: Page No: Year:2023 Month:Mar Presenter:CO- AUTHOR
Jhilik Gantait , Avishek Adhikary and Supriya Pal	Removal of doxycycline from wastewater using Chrysopogon zizanioides as bio adsorbent	9th International Groundwater Conference (IGWC-2022) , IIT ROORKEE	DOI/ISBN: xxx Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:CO- AUTHOR
Suchhanda Mondal, Avishek Adhikary, Supriya Pal	Assessment of adsorption Potential of lightweight Expanded clay aggregates for Removal of naphthalene from wastewater	9th IGWC (international ground water conference),2022 by IIT Roorkee	DOI/ISBN: xxx Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:CO- AUTHOR
Ghosh, S. K., Saini, A., & Das, D.	Factors affecting the properties of geopolymer concrete: A state of the art review	3rd International Conference on Recent Developments on Sustainable Infrastructure: (Engineering, Technology & Innovation) (ICRDSI-22)	DOI/ISBN: NA Volume: Issue No: Page No: Year:2023 Month:Jan Presenter:CO- AUTHOR
Ghosh, S. K., Bera, D. K., &	Factors affecting the strength and	3rd International Conference on Recent	DOI/ISBN: NA Volume:
Das, D.	hydrological properties of pervious geopolymer concrete cured at ambient temperature	Developments on Sustainable Infrastructure: (Engineering, Technology & Innovation) (ICRDSI-22)	Issue No: Page No: Year:2023 Month:Jan Presenter:CO- AUTHOR
Avishek Adhikary, Supriya Pal	Fate and removal of organic and inorganic contaminants using Corchorus olitorius	The 9th International Groundwater Conference 2022: Effective Management of (sub) surface Water Resources in Arid and Semi-arid regions	DOI/ISBN: xxx Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:CO- AUTHOR
Kundan Kumar, Nisheeth Shekhar, and Supriya Pal	Study on the geo-grid reinforcement and stone column combination for enhancement of bearing capacity below circular raft foundation.	Ninth Indian Young Geotechnical Engineers Conference (9th IYGEC-2023), MIT AURANGABAD (MAHARASHTRA)	DOI/ISBN: xxx Volume: Issue No: Page No: Year:2023 Month:Mar Presenter:CO- AUTHOR



Author(s) Name	Paper Name	Conference Name	Others Info
A Bandyopadhyay, A K Samanta	Effect of slenderness ratio on ductility of upvc confined reinforced concrete column	UKIERI Concrete Congress, Sustainable Concrete Infrastructure 2023 14-17 March 2023, Jalandhar, India.	DOI/ISBN: 311 Volume: Issue No: Page No:[UCC- 2023] Year:2023 Month:Mar Presenter:CO-
Soumya Mukherjee, Niladri Biswas, Dilip Kr. Singha Roy	Interaction of open-top, short, cylindrical tank with wind-driven rain	2nd International Conference on Construction Materials and Structures, N.I.T. Calicut, Kerala	AUTHOR  DOI/ISBN: NA  Volume:  Issue No: Page No:- Year:2022 Month:Dec Presenter:CO- AUTHOR
Saurabh Suman, Soumya Mukherjee, Dilip Kr. Singha Roy	A comparative review on bubble- voided reinforced concrete slab – An innovative concept for lightweight concreting	2nd International Conference on Construction Materials and Structures, N.I.T. Calicut, Kerala	DOI/ISBN: NA Volume: Issue No: Page No:- Year:2022 Month:Dec Presenter:CO- AUTHOR
Soumya Mukherjee, Jalla Sandeep Kr. Reddy, Dilip Kr. Singha Roy	The study of wind-interference effect on an elevated RC circular tank due to an adjacent building	2nd International Conference on Construction Materials and Structures, N.I.T. Calicut, Kerala	DOI/ISBN: NA Volume: Issue No: Page No:- Year:2022 Month:Dec Presenter:CO- AUTHOR

# 4.2.19 Conference: Accepted in Others in 2022-2023

Author(s) Name	Paper Name	Conference Name	Others Info
Tamal Kundu,	On Development of Smart Energy	ESMOC	DOI/ISBN: NA Volume:
Apurba Pal,	Efficient Damage Detection ANN		Issue No: Page No:
Aloke Kumar Datta,	Model for Indian Rail Section		Year:2022 Month:Dec
Pijush Topdar			Presenter:CO-AUTHOR
Koramati S,	A binary logistic regression based	14TH EASTS conference,	DOI/ISBN: Accepted
Majumdar,	investigation of factors influencing	Malaysia	Volume: Issue No: Page
B.B., Sahu, P, Biswas	the urban road crash severity: A		No: Year:2023
S and Maji A	case study of Hyderabad, India		Month:Sep Presenter:
Sarkar S, Biswas S,	A Case Study in Jamshedpur, India	14TH EASTS conference,	DOI/ISBN: Accepted
Koramati S,	of an Investigation of Risk	Malaysia	Volume: Issue No: Page
Majumdar,	Element Recognition of Traffic		No: Year:2023
B.B., Sinha A	Parameters in Association with		Month:Sep Presenter:
	Fatal Road Collisions		
Patil, M., Majumdar,	Travel Behaviour Analysis based	UMI Urban Mobility 2022,	DOI/ISBN: Accepted
B.B., Marazi, N. and	investigation to Estimate the	Kochi	Volume: Issue No: Page
Sahu, P	Willingness to Pay for Electric		No:
	Two-wheeler Infrastructure		Year:2022 Month:Sep
	Attributes		Presenter:CO-AUTHOR
Siddardha Koramati,	Development of Safety	CTRG Conference NIT Surat	DOI/ISBN: Accepted
Bandhan Bandhu	Performance Functions (SPF) for		under review for journal
Majumdar, Prasanta	Road Traffic Crash Prediction at		consideration Volume:
Sahu	Urban Midblock: A case study of		Issue No: Page No:
	Hyderabad, India.		Year:2023 Month:Dec
			Presenter:



Author(s) Name	Paper Name	<b>Conference Name</b>	Others Info
Naveed Farooz Marazi, Mallikarjun Patil, Bandhan Bandhu Majumdar, Prasanta Sahu, Gourab Sil, Sadaif Andrabi	A Methodological Framework for Investigation of Service Quality Attributes Influencing Metro Feeder Modes Operations	CTRG Conference NIT Surat	DOI/ISBN: Accepted under review for journal consideration Volume: Issue No: Page No: Year:2023 Month:Dec Presenter:
Niladri Biswas, Soumya Mukherjee, Dilip Kr. Singha Roy	Fluid-structure interaction analysis on the response of open-top, squat, circular tank due to wind-driven rain	2nd International Conference on Construction Materials and Structures, N.I.T. Calicut, Kerala	DOI/ISBN: NA Volume: Issue No: Page No:- Year:2022 Month:Dec Presenter:CO-AUTHOR

# 4.2.20 Books Authored

Author Name	Co-Author	Title of the Book	Title of the Chapter	<b>Publication Details</b>
Roy Pronab	Kumar M., and Khan K.	Recent Advances in Computational and Experimental Solid Mechanics, Vol -II	Numerical Investigations of Collapse Moment of Deformed Pipe Bends Subjected to Internal Pressure and Bending Moment	Publisher: Springer Nature Singapore, Pvt. Ltd Publication Date: 2022-0228
Pronab Roy	Pijus Rajak	Soft Computing and Optimization	Determination of Probability of Failure of Structures Using DBSCAN and Support Vector Machine.	Publisher: Springer Nature Singapore, Pvt. Ltd Publication Date: 2023-0315
Niranjan Shekar	Sanku Konai	Lecture Notes in Civil Engineering	Multivariate Regression Model to Predict Geotechnical Properties of Fly Ash-Stabilized Clayey Soil	Publisher: Springer Publication Date: 2022-1208
Manhanpally, N., Saha, S.		Recent Advances in Materials, Mechanics and Structures	Benefit Cost Analysis of 3D Printed Concrete Building	Publisher: Springer Singapore Publication Date: 2022-10-04
Bandhan Bandhu Majumdar	Sahu PK, Zabiulla Md,	TR News (ISSN: 07386826)	Electric Bicycles: Evolution, Research, and the Move Forward	Publisher: TRB, Washington DC USA Publication Date: 2023-03-14
Saha S.	Sajith A. S., Sahoo, D. R. and Sarkar, P.	Recent Advances in Mechanics, Materials & Structures (Select Proceedings of ICMMS2022)		Publisher: Springer Singapore Publication Date: 2022-10-04
Supriya Pal	Kenue, A.W., Sana, E., Adhikary, A., Hussain, M.	Recent Advances in Sustainable Environment	Assessment of Subsurface Migratory Behavior of Lead (Pb) Laden Leachate Generated from a Waste Dumpsite in Srinagar, Kashmir, India	Publisher: Springer Nature Singapore Pte Ltd Publication Date: 2022-1026



<b>Author Name</b>	Co-Author	Title of the Book	Title of the Chapter	<b>Publication Details</b>
Gilbert Hinge	Anupal Baruah, Arup Kumar Sarma	River Dynamics and Flood Hazards: Studies on Risk and Mitigation	Influence of Boundary Condition on the Modified 2D Shallow Water Model near the Flow— Structure Interaction Zone: A Case	Publisher: Springer Nature Singapore Publication Date: 2022-11-29
			Study in Brahmaputra River	
Supriya Pal	Debasmita Datta, Abdul Waris, Avishek Adhikary, Kalyan Adhikari	Recent Advances in Sustainable Environment	Assessment of Efficacy of Silty-Sandy Soil to Treat Carbendazim- Laden Wastewater	Publisher: Springer Nature Singapore Pte Ltd Publication Date: 2022-1026
Supriya Pal	Avishek Adhikary, Pradyumna Konar, Tapabrata Chakraborty,	Transportation and Environmental Geotechnics	Assessment of Adsorptive Removal of Naphthalene Through Constructed Wetland Using Physical and Numerical Modeling	Publisher: Springer Nature Singapore Pte Ltd Publication Date: 2022-1126

# 4.2.21 Seminars, Summer/Winter Schools, Short Term Courses Attended

Name of the Programme	Organized By	From Date	To Date	Organizing Country
International Conference and Exhibition on NDE (ICENDE) 2022	ASNT INDIA Section	2022-08-26	2022-08-27	India
International Interdisciplinary Conference on Mathematics, Engineering and Science (MESIICON)	B.C Roy Engineering College	2022-11-11	2022-11-12	India
3rd Energy System Modeling and Optimization Conference	NIT Durgapur	2022-12-05	2022-12-07	India
12th Structural Engineering Convention 2022	MNIT Jaipur	2022-12-19	2022-12-22	India
17th Symposium on Earthquake Engineering (17 SEE) at IIT Roorkee, India.	IIT Roorkee	2022-11-14	2022-11-17	India
Applications of Artificial Intelligence and Machine Learning in Civil Engineering	ACE Engineering College, Hyderabad	2023-01-30	2023-02-04	India
15 days Road Safety Auditors Certified Course (By IRC and MoRTH)	VNIT Nagpur association with IRC and MoRTH	2023-07-08	2023-07-22	India
15th International Symposium on Practical Design of Ships and Other Floating Structures (PRADS 2022)	Faculty of Mechanical Engineering and Naval Architecture, of the University of Zagreb, Croatia, and Bureau Veritas, Paris, France.	2022-10-09	2022-10-13	Croatia



Name of the Programme	Organized By	From Date	To Date	Organizing Country
12th Structural Engineering Convention - An International Event (SEC 2022)	National Centre for Disaster Mitigation & Management, Malaviya National Institute of Technology Jaipur	2022-12-19	2022-12-22	India
Geo-environmental engineering webinar on "Understanding Elevated Temperature Landfill Events: From Field Observations to Numerical Modeling" delivered by Dr. Navid H. Jafari, Associate Professor, Department of Civil and Environmental Engineering, Louisiana State University, Baton Rouge, LA, USA	Online organized by Prof. Krishna R. Reddy, University of Illinois Chicago	2022-11-10	2022-11-10	USA
Geo-environmental engineering webinar on "Geotechnical Stability of Waste Fills –Lessons Learned and Continuing Challenges" delivered by Dr. Rudy Bonaparte, Board Chairman and Senior Principal, Geosyntec Consultants, and Professor of Practice, Georgia Institute of Technology, Atlanta, GA, USA	Online organized by Prof. Krishna R. Reddy, University of Illinois Chicago	2022-11-17	2022-11-17	USA
Geo-environmental engineering webinar on "Enhancing Armored Final Covers for Uranium Mill Tailings Disposal Facilities Through Naturalization" delivered by Dr. Craig H. Benson, Wisconsin Distinguished Professor Emeritus, CRESP/University of Wisconsin- Madison, WI, USA	Online organized by Prof. Krishna R. Reddy, University of Illinois Chicago	2022-10-13	2022-10-13	USA
Best Practices in Higher Education	UGC online	2022-05-30	2022-05-30	India
outcome based accreditation: Challenges and Opportunities	NIT Durgapur	2022-06-23	2022-06-24	India
Structural Design and Proof Checking Consultancy Services	BIS online	2022-09-15	2022-09-15	India
Basic Machine Learning Course at Mysuru	Infosys & Ashoka University	2022-12-12	2022-12-23	India
Valorization of Fly Ash and Steel Slag: Challenges, Innovations, and Future Trends V-FASS at Jamshedpur	TATA Steel	2022-09-22	2022-09-23	India
Health Monitoring of Structures through Instrumentation'	UltraTech Cement Ltd. & Indian Concrete Institute online	2023-02-11	2023-02-11	India
7th India Water Week	Ministry of Jal Shakti, Govt. of Inida	2022-11-01	2022-11-05	India
2nd International Conference on Construction Materials and Structures	N.I.T. Calicut, Kerala	2022-12-13	2022-12-19	India



# 4.2.22 Ph.D. Supervisor

Topic Name	Scholar	Supervisor	Status	Status Date
Fuzzy-Logic Based Condition Accessment and Rating of Reinforced Concrete Bridges: A Study	Ms. Sudha Das Khan	Dr. Pijush Topdar and Dr. Aloke Kumar Datta	DEGREE AWARDED	2023-08-03
Study and Modelling of Highway Pavement Under Dynamic Loading	Mr. Arijit Banerji	Dr. Pijush Topdar & Dr. Aloke Kumar Datta	SUBMITTED	2023-08-03
Studies on Different Aspects of Acoustic Emission Technique for Damage Localisation in Structures	Mr. Parikshit Roy	Dr. Pijush Topdar and Dr. Aloke Kumar Datta	SUBMITTED	2023-08-03
Detection and Monitoring of Damages in Rail Section Using Acoustic Emission Technique	Mr. Tamal Kundu	Dr. Aloke Kumar Datta and Dr. Pijush Topdar	ONGOING	-
Characterization of Rigid Pavement Using Acoustic Emission Technique	Mr. Soumyadip Das	Dr. Aloke Kumar Datta and Dr. Pijush Topdar	ONGOING	-
A Study on Damage Localisation in Framed Structure using Acoustic Emission Technique	Mr. Anupam Kumar Biswas	Dr. Aloke Kumar Datta and Dr. Pijush Topdar	ONGOING	-
Studies and Development of AI Models for Fault Detection in Railway Track	Apurba Pal	Dr. Aloke Kumar Datta	ONGOING	-
Evaluation of plastic collapse moment of initially geometric imperfect pipe bends under internal pressure and bending moments	Manish Kumar	Dr. Pronab Roy and Dr. Kallol Khan	DEGREE AWARDED	2022-02-16
Rutting Analysis by Using Construction and Demolish Waste for Low Volume Roads	Arpan Ray	Dr. R . P. Nanda and Dr. Pronab Roy	SUBMITTED	2022-12-19
A study of stability designs of the different types of Floating Offshore Wind Turbine (FOWT) system by integrated-coupled analysis under environmental loadings.	Swarnadip Dey	Prof. A. K. Banik and Dr. Pronab Roy	ONGOING	-
Analytical and Numerical Analysis of Free Spanning Offshore Pipelines Emphasising Different Geotechnical Aspects	Goutam Sarkar	Dr. Pronab Roy	ONGOING	-
Machine Learning-Based Reliability Analysis of Structures	Pijus Rajak	Dr. Pronab Roy	ONGOING	-
Machine Learning Based Leakage Detection of the Pipelines.	Koyndrik Bhattacharjee	Dr. Pronab Roy	ONGOING	-
Machine Learning Based Slope Stability Prediction	Rimjhim Ghosh	Dr. Pronab Roy	ONGOING	-
Ground Improvement	Minar Islam	Dr. Sushovan Dutta, Dr. Sanku Konai	ONGOING	-
Ground Improvement (Broad area)	Minar Islam	Dr. Sushovan Dutta and Dr. Sanku Konai	ONGOING	-
Utilization of Reclaimed Asphalt Pavement (RAP) as sustainable materials in Rigid pavement Construction	MK Diptikanta Rout	Dr. Sabyasachi Biswas	SUBMITTED	2023-08-03
Wind impact on bridge	Puja Haldar	Somnath Karmakar	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status Date
Blast Impact on bridge	Shuvra Saha	Somnath Karmakar	ONGOING	-
Response of VOP under blast loading	Goutam Kutti	Somnath Karmakar	ONGOING	-
Response specturm under wind load and its effects on slender structures	Taniya Saha	Somnath Karmakar	ONGOING	-
Digitalization in the construction industry for the assessment of the enablers to optimize the constructions	Bittu Ghosh	Somnath Karmakar	ONGOING	-
Mine blast using the FEM-SPH Coupled Computational Methods	Pawan Kumar Das	Somnath Karmakar	ONGOING	-
Study and Modelling of Highway Pavements under Dynamic Loading	Mr. Arijit Banerjee	Dr. Pijush Topdar and Dr. Aloke Kumar Datta	SUBMITTED	2023-02-10
Studies on Different Aspects of Acoustic Emission Technique for Damage Localisation in Structures	Mr. Parikshit Roy	Dr. Pijush Topdar and Dr. Aloke Kumar Datta	SUBMITTED	2023-03-10
Health Monitoring of Rail using Acoustic Emission Technique	Mr. Tamal Kundu	Dr. Aloke Kumar Datta and Dr. Pijush Topdar	ONGOING	-
Characterization of Pavements Using Acoustic Emission Technique	Mr. Soumyodip Das	Dr. Aloke Kumar Datta and Dr. Pijush Topdar	ONGOING	-
Fuzzy Logic-based Condition Assessment and Ranking of Reinforced Concrete Bridges: A Study	Ms. Sudha Das Khan	Dr. Pijush Topdar and Dr. Aloke Kumar Datta	SUBMITTED	2022-10-24
Performance Study of Asymmetric Structure under Static & Dynamic Loads	Mr. Debiprasad Das	Dr. Diptesh Das and Dr. Pijush Topdar	ONGOING	-
A Study on Structural Defects in Frame Type Buildings using Acoustic Emission Technique	Mr. Anupam Biswas	Dr. Aloke Kumar Datta and Dr. Pijush Topdar	ONGOING	-
Broad Area of Research: SHM of Composites using Acoustic Emission Technique	Ms. Neetika Saha	Dr. Pijush Topdar	ONGOING	-
A Travel Behaviour Based Analysis on the Operational and Infrastructure Needs of Prospective Electric Two-wheeler Users	Mallikarjun Patil V	Dr Bandhan Bandhu Majumdar	DEGREE AWARDED	2023-02-08
Development of a systematic methodology for improving rod safety on roads in India	Siddharda Koramati	Dr Bandhan Bandhu Majumdar and Dr. PK Sahu (BITS Pilani)	ONGOING	-
Planning of optimal strategies and commuters behavioral implications under different congestion pricing schemes	Naveed Farooz M	Dr Bandhan Bandhu Majumdar and Dr. PK Sahu (BITS Pilani)	ONGOING	-
Electric Assist Bicycle (E-Bike) Moblity Planning Framework for Smart Cities: A Spatial, Temporal and Behavioral investigations	Md. Zabiullah	Dr Bandhan Bandhu Majumdar and Dr. PK Sahu (BITS Pilani)	ONGOING	-
Electric Three wheeler Infrastructure Mobility Planning	Arindam Prasad Sinha	Dr Bandhan Bandhu Majumdar and Dr Sabyasachi Biswas	ONGOING	-
Geopolymer concrete with recycled aggregate	Najeeb M	Prof. Praveen Nagarajan & Dr. Suman Saha	ONGOING	-

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Topic Name	Scholar	Supervisor	Status	Status Date
High Performance Concrete	Bhukya Vamsi Naik	Dr. Sharan K Goudar & Dr. Suman Saha	ONGOING	-
Rutting analysis by using Construction and demolished Waste for low volume roads	Arpan Ray	RP Nanda and P Roy	SUBMITTED	2022-12-23
Waste plastic aggregate as sustainable construction material	Debargha Banerjee	RP Nanda	ONGOING	-
Performance Study of Asymmetric Structures under Static and Dynamic Loads	Debiprasad Das	Dr. Diptesh Das, Dr. P. Topdar and Dr. R. K. Biswas	SUBMITTED	2023-08-16
Vibration Control of Structures under Multihazard Scenario	Arunabha Sen	Dr. Diptesh Das and Prof. S. Chakraborty	ONGOING	-
Vibration Control of Offshore Structures subjected to Environmental Loads	Ankita Som	Dr. Diptesh Das	ONGOING	-
Simulation and Control of Bridge Vibration under Environmental Loads	Tathagata Banerjee	Dr. Diptesh Das	ONGOING	-
Vibration Control of Base-isolated Structures	Sukamal Kanta Ghosh	Dr. Diptesh Das	ONGOING	-
Vibration Control of Offshore Structures	Shreyashee Sulakshana Sanjay	Dr. Diptesh Das	ONGOING	-
Optimization of Sustainable integrated municipal solid waste management system through case studies	Arpan Chattopadhyay	Prof. Kalyan Adhikari and Dr. Supriya Pal	ONGOING	-
Performance assessment of efficacy of hybrid constructed wetland for removal of antibiotics and polyaromatic hydrocarbons in wastewater	Avishek Adhikary (Roll No. 18/CE/1102)	Dr. Supriya Pal	SUBMITTED	2023-08-18
Prediction of ground subsidence due to underground coal mining through numerical modelling approach	Nisheeth Shekhar (21CE 1104)	Dr. Supriya Pal	ONGOING	-
Application of Jute-Geotextile in Rural Roads	Sahinur Rahaman Mondal (22CE1103)	Dr. Supriya Pal and Dr. Rajib Ghosh Choudhury	ONGOING	-
Performance Evaluation of Flyash, Slag,Cement Stabilized Coal Mine Over-Burden as a Potential Sub-Base and Base Course Material in Flexible Pavement Systems with Additional Improvement Using Geocell	Arindam Karmakar (20CE1102)	Prof. Kamal Bhattacharya and Dr. Supriya Pal	ONGOING	-
Slope Stabilization of Overburden Dump slope using Jute Geotextile	Tapabrata Chakraborty(22C E1102)	Dr. Mrinal Kanti Mandal	ONGOING	-
Experimental Investigation on the Strength and Behaviour of Plate Reinforced Concrete Beam	Prakash Mondal	Dilip Kr. Singha Roy & Amiya Kr. Samanta	ONGOING	-
An Investigation on the Wind- Structure Interaction of Cylindrical Shells for Storage Purpose	Soumya Mukherjee	Dilip Kr Singha Roy	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status Date
Condition assessment and residual life prediction of corrosion distressed reinforced concrete structures.	Amgoth rajender	AK Samanta	ONGOING	-
Identification of Urban Heat Islands from Multi Temporal MODIS Land Surface Temperature Data in the Southern Part of West Bengal, India	Nval K Yadav	AK Samanta, A Santra	SUBMITTED	2023-01-09
Experimental Investigation on the Strength and Behaviour of Plate Reinforced Concrete Beam.	Prakash Mondal	AK Samanta, DK Singha Roy	ONGOING	-
Effect of Elevated Temperature on Diverse Properties of Concrete Containing Refractory Waste Materials	Sudipta Ghosh	AK Samanta	ONGOING	-
Performance evaluation of Concrete- filled Cold-formed Steel Built-up Composite Structures	Pranoy K Roy	AK Samanta	ONGOING	-
Characterization of Sustainable Heat Resistant Concrete with Recycled Refractory Brick and Alccofine	Kapildeo P Yadav	AK Samanta	ONGOING	-
Cardiac Arrhythmia detection	Pinaki Ranjan Das	TK Bera AK Samanta	ONGOING	-
Enhancing Water Resources Management in Bankura District: A Holistic Approach using Remote Sensing, Field Data, and Modeling Techniques (Tentative)	Suktiprajna Rath	Dr. Gilbert Hinge	ONGOING	-
A comprehensive study of stability design for different types fowt system by integrated-coupled analysis under the action of dynamic environmental loads	Swarnadip Dey	A. K. Banik & P. Roy	ONGOING	-
Active passive control and dynamic stability of nonlinear flexible systems	Saikat Suvra Mondal	A. K. Banik & R. K. Mitra	ONGOING	-
Impact of Climate Change on water resource in lower Gangetic basin with specific reference to drought in the district Bankura and Purulia, West Bengal, India.	Sri Kush Kumar Dey	Prof. Vijay Kumar Dwivedi- Dept. of Civil Engg., NIT Durgapur, (ii) Dr. Satanand Mishra, Principal Scientist, CSIR-AMPRI, Bhopal, M.P, (iii) Dr. Sandip Mondal - Dept. of E & E Studies., NIT Durgapur	ONGOING	-



# 4.2.23 Ongoing Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Amount(in Rs.)	Starting Year
Congestion Pricing: Planning for optimal strategies and commuters behavioral implications under different pricing schemes	Dr Bandhan Bandhu Majumdar Dr. Dimitris Potoglou; Dr. Georgina Santos (Cardiff University, UK); Dr. Dilum Dissanayake Newcastle University, UK); Prof. Ashoke Sarkar (IIT Jammu); Dr. Prasanta Kumar Sahu (BITS Pilani)	MHRD SPARC	2943000.0	2020
Electric-assist bicycle (e-Bike) mobility planning for smart cities: Fostering active transportation to improve public health	Dr Bandhan Bandhu Majumdar Dr. Rodrigo Bini; Dr. Jayden Hunter (La Trobe University, Australia); Dr. Prasanta Kumar Sahu (BITS Pilani)	Asian Smart Cities Research Innovation Network, La Trobe University	1500000.0	2021
Nanotechnological Intervention on jutegeotextile to adapt long term Sustainability and enhanced Durability for its costeffective and wide application In flexible pavement systems	Dr. Supriya Pal, Dr. Hirok Choudhuri, Dr. Mrinal Kanti Mandal, Dr. R. Ghosh Chaudhuri	National jute Board, a statutory Body, ministry of Textiles, govt. Of india	6952264.0	2021
Environmental geochemistry and treatment of organic pollutants in aquatic systems in the selected areas of China, India and Russia	Dr. Supriya Pal, Dr. Hirok Choudhuri, Dr. Mrinal Kanti Mandal, Dr. K.K.Dubey	DST-Govt. of India under BRICS STI Framework Programme	4408843.0	2019
process of height increment of overburden dumps at open cast coal mines in India using jute- geotextile as reinforcing material	Dr. Supriya Pal, Dr. Hirok Choudhuri, Dr. Mrinal Kanti Mandal, Dr. R. Ghosh Chaudhuri	National Jute Board, A Statutory Body, Ministry of Textiles, Govt. of India	7172264.0	2021
Performance Evaluation of Fly Ash –Cement Stabilized Coal Mine Overburden as a Potential Sub-base and Base Course Material in Flexible Pavement Systems	Dr. Supriya Pal, Dr. Hirok Choudhuri, Dr. Mrinal Kanti Mandal, Dr. R. Ghosh Chaudhuri	National Rural Infrastructure Development Agency Ministry of Rural Development Government of India	1892000.0	2023
Grossly Polluting Industries (GPIs) inspection by National Institute of Technology Durgapur in Main stem States of River Ganga	Dr. Supriya Pal and Dr. Sandip Mondal	Central Pollution Control Board, GoI	663750.0	2021
Prospects and study of floating offshore wind turbine (FOWT) platforms for wind energy harnessing	A. K. Banik	Department of Science & Technology, Higher Education, Govt. of WB,	850000.0	2018

# 4.2.24 Completed Sponsored Projects Details



Title of the Project	Investigator	Sponsor Authority	Complete Year
Development of a comprehensive methodology to improve road traffic safety in Indian urban roadways based on advanced statistical techniques	Dr Bandhan Bandhu Majumdar	DST SERB Start Up Research Grant	2022
Environmental geochemistry and treatment of organic pollutants in aquatic systems in the selected areas of China, India and Russia	PI: Dr. Supriya Pal, Co PI: Dr. Hirok Chaudhuri, Dr. M. K. Mandal. Dr. K. Dubey, Dr. Prof. Oleg Savichev, Dr.Prof. Zhanxue Sun	Dst-Govt. Of India Under Brics Sti Framework Programme	2022
Grossly polluting industries (gpis) Inspection by national institute of Technology durgapur in main stem states of river ganga	Dr. Supriya Pal and Dr. Sandip Mondal	Central Pollution Control Board, Goi	2023

# 4.2.25 Testing & Consultancy Services Rendered

Sponsoring Industry / Institute Name	Title of the Project	Total Amount (in Rs.)	Remarks
PIR Project and Consultancy Pvt. Ltd. Kolkata - 54.	Design Calculation of Proposed 450 mm Diameter MS Casing Pipe with 280 mm dia HDPE Carrier Water Pipeline crossing	81000.0	Completed
Joy Santosi Enterprise, Purulia-723121	WMM Mix Design	41000.0	Completed
Government or Private Organization	Different types of Project	2736160.0	Completed
Garge Engineering Pvt ltd	Material Testing for Rail embankment	26845.0	Investigator(s): Dr Sabyasachi Biswas, Dr. B. B. Majumdar and Dr. S. Dutta
LLOYED Insulation India Ltd	PQC design for runway	118000.0	Investigator(s): Dr Sabyasachi Biswas and Dr. B. B. Majumdar
Maa Manasha Enterprise	Bitumen content investigation for Steel City Road	15340.0	Investigator(s): Dr Sabyasachi Biswas and Dr. B. B. Majumdar
Garge Engineering Pvt ltd	Testing of materials for Rail embankment	31601.93	Dr Sabyasachi Biswas, Dr. B. B. Majumdar and Dr. S. Dutta
Various Industries	Mix Design and Aggregate Testing	500000.0	As Co-PI, with Prof Sabyasachi Biswas as PI
Garg Engineering & Construction Pvt. Ltd.	Soil Testing for Railway Embankment	31602.0	Soil testing
Garg Engineering & Construction Pvt. Ltd.	Soil Testing for Railway Embankment	26845.0	Evaluation of required soil properties
M/S Chittaranjan Locomotive Works, Chittaranjan	Consultancy for restoration work of damage S. K. Setu	563450.0	Ongoing



Sponsoring Industry / Institute Name	Title of the Project	Total Amount (in Rs.)	Remarks
National Highway Authority of India	Review/Vetting of design & drawing of 4-lane of Purulia bypass	2212500.0	Ongoing
M/S Swamy Resorts (Pvt) Ltd.	Scrutiny of design & drawing of 2B+G+7 Hotel Building at Bhabaneswar	560500.0	Completed
National Stone Works, Pakur , Jharkhand	Determination of swelling factor of ballast rock from stone mines	76700.0	completed
WBSRDA, Bishnupur Division	Consultancy work for report preparation based on pile load testing of Bridge work vide package no. WB-03-789 under PMGSY-II at Bishnupur Division	472000.0	completed
M/S Shyam Sel and Power Limited, G6 Mangalpur Industrial Estate, Paschim Bardhaman-713347	Root cause analysis for ash silo collapsed at Mangalpur plant of M/S Shyam Sel and Power Limited	337480.0	completed
Bhavya Bharat Infrastructure & Construction Pvt. Ltd., 3 BHK in Rajlaxmi Apartment, flat 4/B, South lake Road, Bengal 723102	CBR test of subgrade soil samples for Purulia Bypass project in Purulia-West Bengal of NH- 32	107380.0	completed
Associated construction and Consultancy, Kolkata	Rock sample testing for the proposed doubling line between Motumari Vishnupurum project under South central railway construction department	283200.0	completed
Eastern Coalfields limited	Determination of RMR for 4 nos. of Districts for the mines under Kajora Area, ECL	368160.0	completed
Essar Oil and Gas Exploration and Production ltd., Gopalpur, Durgapur-713212	Rock mechanic studies of coal and non-coal samples	2876250.0	Ongoing
S.S. Solutions, Durgapur-713213	Consultancy work of vetting of technical report of oxygen Plant AIWPL, Durgapur	118000.0	completed
S.S. Solutions, Durgapur-713213	Vetting of geotechnical investigation work for 2.0 MPTA Pellet Plant at Nagannar, Chattishgarh	767000.0	completed
Bengal aerotropolis Projects Limited, 1st floor, City Heart, 5 gorky Terrace, Kolkata, WB-700017	Consultancy services for preparation of load/stress calculation over existing IOCL pipe corridor area for developing 2nd lane of the mail airport access road	153400.0	completed
Neo Metaliks Ltd., ., Gopalpur, Durgapur	Retention/Strengthening of existing foundation at Neo- Metaliks Ltd., Gopalpur, Durgapur	429520.0	completed
NSC projects Pvt. Ltd., L-87, Street no. 7C, Mahipalpur, New Delhi-110037	Determination of design mix of soil stabilization and Borewell water sample testing for Airport station	366830.0	completed



Sponsoring Industry / Institute Name	Title of the Project	Total Amount (in Rs.)	Remarks
	panagarh		
Samar Ranjan Sahu, GM, BIVAB DEV. PVT. LTD., Nayapali, Bhubeneswa	Structural vetting , BIVAB YASHILA at Puri	531000.0	completed
NHAI	Review of design & drawing of 4laning of Purulia Bypass Section (length 103.15 km), WB	22.125	80% Complete
M/s JRA Infratech Noida	Proof-checking /vetting of Structural Design & Drawing of Married Accommodation Project for DU & JCO, MES at Panagarh & Nabagram	4.72	Complete
M/s Shyam Sel & Power Ltd, Raniganj	Root Cause Analysis for Ash Silo collapsed at Mangalpur Plant	3.37	Completed
M/s SWAMI RESORTS (P) Ltd, Bhubaneswar	Proof checking of (2B+G+7) Storied Hotel Building at Mouza - Jayadev Vihar, Bhubaneshwar, Dist: Khordha, Odisha	5.61	Completed
DAV Asansol	Health check up and testing of soil samples of the existing building foundation (Block-B).	3.07	Completed
National Council of Science Museum, Ministry of Culture, GOI	Vetting of Structural Design and drawings for proposed Science Centre (Cat II) at Ujjain, MP	118000.0	Completed
Growever Infra Private Limited, Delhi-85	Vetting of DPR for design of roads (Andaman Marine Drive) and Flyover/Crossovers and Underpass at Port Blair in Andaman and Nicobar islands	590000.0	Completed
M/s. Executive Engineer, Kolkata-III, CPWD, 3rd Floor, 1st MSO Building, Nizam Palace, 234/4 AJC Bose Road, Kolkata, Pin - 700020	Design Mix of M25 and M30 Grades of Concrete for Construction of Residential Campus of CISF at Rajarhat, Kolkata	101224.0	Completed, May, 2022
M/s. Executive Engineer, Kolkata-III, CPWD, 3rd Floor, 1st MSO Building, Nizam Palace, 234/4 AJC Bose Road, Kolkata, Pin - 700020	Design Mix of M25, M30 and M25 (for pilling) Grades of Concrete for Construction of Residential Campus of CISF at Rajarhat, Kolkata	115050.0	Completed, June, 2022
M/s Management Development Institute, Raghunathganj, Murshidabad, West Bengal, Pin-742235.	Quality inspection and assessment of construction of faculty residence block and Executive Hostel.	65692.0	Completed, March, 2022



Sponsoring Industry / Institute Name	Title of the Project	Total Amount (in Rs.)	Remarks
M/s JRA Infratech B-16, Sector-50, Noida- 201301, UP	Proof-checking /vetting of Structural Design & Drawing of Married Accommodation Project, MES at Panagarh & Nabagram	590000.0	Completed, June, 2022

# 4.2.26 Reviews of Manuscripts for Publication in Journal

Reviewer	Name of the Journal	Publisher	Date of Final Reviev
Aloke Kumar Datta	Journal of Vibration Engineering & Technologies (JVET)	Springer	2023-04-14
Aloke Kumar Datta	Journal of Vibration Engineering & Technologies (JVET)	Springer	2022-12-26
Gilbert Hinge	Remote Sensing	MDPI	2022-10-27
Gilbert Hinge	Sustainability	MDPI	2022-12-10
Gilbert Hinge	Remote sensing	MDPI	2023-03-13
Gilbert Hinge	Theoretical and Applied Climatology	Springer	2022-11-09
Gilbert Hinge	Water Conservation Science and Engineering	Springer	2022-09-29
Gilbert Hinge	Modelling Earth Science and Environment	Springer	2022-06-17
Pronab Roy	Journal of Ocean Engineering	ELSEVIER	2022-11-29
Pronab Roy	Journal of Innovative Infrastructure Solutions	Springer	2022-11-20
Aloke Kumar Datta	Journal of Vibration Engineering & Technologies (JVET)	Springer	2023-04-26
Aloke Kumar Datta	Journal of Vibration Engineering & Technologies (JVET)	Springer	2023-01-24
Somnath Karmakar	Journal of Institute of Engineers India Series A	Springer	2023-04-26
Somnath Karmakar	Indian Concrete Journal	ACC Cement	2023-01-23
Pijush Topdar	Journal of The Institution of Engineers (India): Series A	Springer	2022-05-25
Pijush Topdar	Measurement	Elsevier	2023-03-30
Bandhan Bandhu Majumdar	15 Journals Such as Transportation Research Part A, Transportation Research Record, KSCE, ASCE, Case Studies in Transport Policy, Transport Policy	Elsevier, Springer	2023-08-06
Suman Saha	Materials Today Proceedings	Elsevier	2022-12-20
Suman Saha	Journal of Structural Fire Engineering	Emerald	2023-01-19
Suman Saha	Journal of The Institution of Engineers (India): Series A (IEIA)	Springer	2023-02-09
Suman Saha	Materials Today Proceeding	Elsvier	2023-02-22
Suman Saha	Journal of The Institution of Engineers (India): Series A (IEIA)	Springer	2023-02-14



Reviewer	Name of the Journal	Publisher	Date of Final Review
Suman Saha	Asia-Pacific Journal of Science and Technology	Research and Technology Transfer Affairs Division of Khon Kaen University	2022-04-04
Suman Saha	ACI Structural and Materials Journals	American Concrete Institute (ACI)	2022-04-05
Suman Saha	Advances in Cement Research	ICE	2022-04-12
Suman Saha	Construction and Building Materials	Elsevier	2022-04-21
Suman Saha	Applied Science and Engineering Progress	King Mongkut's University of Technology North Bangkok	2022-06-30
Suman Saha	Construction and Building Materials	Elsevier	2022-09-20
Suman Saha	Advances in Materials Research	Techno-Press	2022-10-12
Suman Saha	Construction and Building Materials	Elsevier	2022-10-23
Suman Saha	Construction and Building Materials	Elsevier	2022-11-24
Suman Saha	Construction and Building Materials	Elsevier	2022-12-04
Suman Saha	Construction and Building Materials	Elsevier	2022-12-06
Suman Saha	mart Infrastructure and Construction (Proceedings of the ICE)	ICE	2022-12-17
Suman Saha	Construction and Building Materials	Elsevier	2022-12-30
Suman Saha	Environmental Science and Pollution Research	Elsevier	2022-12-27
Suman Saha	Construction and Building Materials	Elsevier	2023-03-10
Amiya Kumar Samanta	Structures	Elsevier	2022-08-24
Amiya Kumar Samanta	Journal of King Saud University - Engineering Sciences	Springer	2022-08-09
Amiya Kumar Samanta	Innovative Infrastructure Solutions	Springer	2022-09-20
Amiya Kumar Samanta	Structures	Elsevier	2022-10-18
Amiya Kumar Samanta	Natural Hazards	Elsevier	2022-10-28
Amiya Kumar Samanta	Indian Concrete Journal	Associated Cement Companies Ltd.	2022-11-23
Amiya Kumar Samanta	Cogent Engineering	Springer	2023-03-25
Vijay Kumar Dwivedi	Journal of Global Warming	Inderscience	2023-03-17
Diptesh Das	Journal of The Institution of Engineers (India): Series A (IEIA)	Institution of Engineers (India): Series A (IEIA)	2022-05-16

# 4.2.27 Review of Books

Reviewer	Title of the Book	Name and Affiliation	Publisher	Date
		of the Author		



Suman Saha	Indian Concrete Journal (Feb	As Guest Editor	ACC Limited	2023-02-
	edition)			01
Amiya Kumar	Development of eco-efficient	Ankur C. Bhogayata".	CRC Press	2022-10-
Samanta	concrete with plastic and industrial	Associate Professor,		11
	wastes	Department of Civil		
		Engineering,		
		Marwadi University,		
		Rajkot, Gujarat 11-		
		10-2022		

# 4.2.28 Participation in National Committees/Visits

Name of the Faculty	Name of the Committee	Place of Visit	From Date	To Date
Bandhan Bandhu	Transportation Research Group Co-chair	NIT Surat	2023-12-	2023-12-
Majumdar			11	14
Vijay Kumar Dwivedi	Mahanadi Water Disputes Tribunal	Catchment of River	2023-04-	2023-05-
		Mahanadi lying in the	18	28
		State of Odisha and		
		Chhattisgarh		

# 4.2.29 Invited Examiners/Paper-Setters/Board of Studies

Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Pronab Roy	External expert in Members of Doctoral	Department of Civil	2022-10-	2022-10-
	Committee of a	Engineering, IIEST	21	21
	PhD scholar	Shibpur, Howrah		
Bandhan Bandhu	MTECH Transportation Engineering	VSS University of	2023-03-	2023-08-
Majumdar		Technology, Burla	15	06
Suman Saha	Ph.D. defense viva voce examination	Manipal Academy of	2022-12-	2022-12-
		Higher Education	06	06
Amiya Kumar	Examiner for BTech Project of CE	NIT Sikkim	2022-05-	2022-05-
Samanta			19	19
Amiya Kumar	Examiner for MTech viva at Department of	IITKgp	2022-05-	2022-05-
Samanta	Civil Engineering		06	06
Diptesh Das	'External Expert' for evaluation of M.Tech	IIEST Shibpur	2022-07-	2022-07-
-	theses in Structural Engineering	•	20	20

# 4.2.30 Invited Expert in Selection Committees

Name of the Faculty	Discipline	University/Institute	From Date	To Date
Supriya Pal	Civil Engineering	Jadavpur University	2022-04-27	2022-04-27
Supriya Pal	Civil Engineering	Jadavpur University	2022-11-28	2022-11-28
Amiya Kumar	Selection of LBS-II	DMC	2022-07-25	2022-07-25
Samanta				
Amiya Kumar	Selection of Faculty	BPSC	2022-11-17	2022-11-23
Samanta				





#### 4.2.31 Invited Lectures

Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Gilbert Hinge	Satellite Precipitation Products and its Application	Online Faculty Development Program on "Recent Trends of Research in Engineering & Technology	Assam Downtown University (Virtual)	2022-07- 25	2022-07- 29
Bandhan Bandhu Majumdar	Road Safety Audit	DRSC RSIA – RSA 2022 Delft	Netherlands (Virtual)	2022-11- 20	2023-08- 26
Bandhan Bandhu Majumdar	Development and Demonstration of a Novel Congestion Assessment Tool in Indian Context	SMART 2023 CoELSCM, NIT Calicut	NIT Calicut (Virtual)	2023-07- 24	2023-07- 29
Suman Saha	3D Printing Concrete	Online Faculty Development Programme on 'Recent Advances in Infrastructural Developments (RAID 2023)	NIT Calicut	2023-02- 13	2023-02- 18
Suman Saha	An Alternative Binder towards Sustainability	National Faculty Development Program on "Smart City Infrastructure & Sustainability"	Global Institute of Science and Technology, Haldia	2023-01- 09	2023-01- 13
Supriya Pal	Environmental Geotechniques :Some case studies	FDP programme "Advancement in Civil Engineering (ACE-2022)"	Dr. BC Roy Engineering College Durgapur	2022-11- 15	2022-11- 15
Supriya Pal	Application of geotechnical engineering in mining projects	FDP programme "Advancement in Civil Engineering (ACE-2022)"	Dr. BC Roy Engineering College Durgapu	2022-11- 15	2022-11- 15

#### 4.2.32 Session Chair/Convenor

Name of the Faculty	Programme	Place	Session	From Date	To Date
Pronab Roy	17th Symposium on Earthquake Engineering (17SEE)	IIT Roorkee	Technical Session-6	2022-11- 14	2022-11- 17

## 4.3 Department of Chemistry

#### 4.3.1 Department at a Glance

Since the inception of the institute (1960), the Department of Chemistry is sincerely engaged in teaching both UG and PG students from different engineering courses. The Department began its journey with M. Tech. Program in Corrosion Science & Eamp; Technology in 1987. Later on, M.Sc. in Chemistry has been introduced in 2009. From 2017, the Department has introduced 5 years integrated M. Sc. course in Chemistry. The faculty members of this department are devoted to the research activities in various fields of chemistry, such as, Electrochemistry, Natural Product Chemistry, Photochemistry, Environmental Chemistry, Coordination Chemistry, Bioinorganic, Biophysical Chemistry, Theoretical Chemistry and other interdisciplinary areas. At present, the department boasts of several ongoing sponsored research projects and a number of research scholars are pursuing their Ph.D. The research findings are regularly published in reputed international and national journals (SCI). Achievement of the department

has been acknowledged by DST, Govt. of India by granting fund under DST-FIST Scheme to uplift academic excellence to the highest level.

### 4.3.2 Mission & Vision

#### Mission

To be a globally recognized department in scientific and technical education through value-added teaching, research and innovation and producing quality human resources who can meet the challenges of the ever-changing, technology-based society.

#### Vision

To produce highly qualified, well- rounded, motivated and technologically sound students possessing fundamental understanding and knowledge in chemical science and technology, who will deliver service and leadership to the nation and the world and can fulfil the technological and socio-economic need of industry, government and society.

### 4.3.3 Faculty

Name	Designation	Email-id
Prof. Sankar Chandra Moi	Professor & HOD	scmoi.ch@nitdgp.ac.in
Prof. Apurba Kumar Patra	Professor	akpatra.ch@nitdgp.ac.in
Prof. Dipankar Sukul	Professor	dsukul.ch@nitdgp.ac.in
Prof. Milan Maji	Professor	mmaji.ch@nitdgp.ac.in
Prof. Rajnarayan Saha	Professor	rnsaha.ch@nitdgp.ac.in
Dr. Sujit Sankat Panja	Associate Professor	sspanja.ch@nitdgp.ac.in
Dr. Jitamanyu Chakaravarty	Associate Professor	jchakravarti.ch@nitdgp.ac.in
Dr. Utpal Adhikari	Associate Professor	Uadhukari.ch@nitdgp.ac.in
Dr. Paresh Nath Chatterjee	Associate Professor	pnchatterjee.ch@nitdgp.ac.in
Dr. Subhas Ghosal	Associate Professor	sghosal.ch@nitdgp.ac.in
Dr. Tanmoy Kumar Saha	Assistant Professor	tksaha.ch@nitdgp.ac.in
Dr. Deb Ranjan Banerjee	Assistant Professor	drbanerjee.ch@nitdgp.ac.in
Dr. Sourav Laha	Assistant Professor	slaha.ch@nitdgp.ac.in
Dr. Krishnendu Pal	Assistant Professor	kpal.ch@nitdgp.ac.in

## 4.3.4 Equipments

Sl. No.	Name of the equipment	
1.	Single beam visible spectrophotometer (02)	
2.	Dean Stark assembly (06)	
3.	Hot air gun (2)	
4.	8-10 Lt water bath (01)	
5.	Microprocessor based automatic pH meter (03)	
6.	Platinum loop (40) and Blow pipes (40)	
7.	K-type Kanthal wire Muffle furnace (01)	
8.	Sartorius LCD Micro weighing balance (01)	
9.	Automatic Galvanized Ultra-sonic bath sonicator (01)	
10.	Chemical Oxygen Demand digesting unit (01)	
11.	Chromatography column (15)	
12.	Benchtop non-refrigerated centrifuge (01)	
13.	High-Temperature Furnace (01)	
14.	Orbital shaker incubator (01)	
15.	High Vacuum pump (01)	
16.	Microprocessor controlled Magnetic Stirrer (08)	
17.	LCD Rotary Evaporator (01)	
18.	3KVA online UPS (01)	
19.	Ultra low temperature laboratory deep freezer (01)	
20.	300 L Frost free double door refrigerator (01)	



#### 4.3.5 Labs

Sl. No.	Name of Laboratory	Major equipment
1.	Synthesis and characterization	UV-Vis, Fluorescence, and Titro-processor,
	Laboratory ( Prof. S. C. Moi Lab.)	
2.	Cell culture and Molecular Biology	Gel Doc Aparatus, Gel documentory system,
	laboratory ( Prof. S. C. Moi Lab.)	Eliza Plate reader, Laminar floe Hood,
		Dwinter Microscope, CO2 incubator etc.
3	UG laboratory for B. Tech and Int. M.	Ph meters, Potentiometers, Conductivity
	Sc. in chemistry	meters, etc
4	PG laboratory for M. Sc. 2 yrs students	Common Lab Instruments for PG students
5.	Common Instruments facility	GC-Mass, CHNS analyzer, Multiplate reader,
	Laboratory	FTIR, CV, EPR etc.

#### 4.3.6 PhD Degree awarded till 2022-23

Sixty four.

#### 4.3.7 Any other relevant information

Prof. S. C. Moi have been recognized as a Fellow member of Royal Society of Chemistry (FRSC) by Royal Society of Chemistry, London, UK in April 2022)

### 4.3.8 Specialization

- · Materials Chemistry, Solid State Chemistry, Energy Materials
- · Organic Chemistry
- · Theoretical Physical Chemistry
- · Nonlinear Dynamics
- · Physical Chemistry
- · inorganic Chemistry
- · Physical chemistry
- Inorganic Chemistry, Environmental Chemistry, Environmental Engg
- · Inorganic Chemistry
- · Bio-inorganic Chemistry
- · Organic Chemistry
- · Organic Chemistry
- · Theoretical and Computational Chemistry
- Anticancer Drug Design and Drug Development
- · Organic chemistry and Drug design and drug development
- · Organic chemistry

#### 4.3.9 Proposed Plan for Research

- · Nano and photo catalysis
- · Food Chemistry
- · Effect of Higher Order Interactions in complex dynamical systems systems
- Electrochemistry
- · 1. Transition metal catalyzed small organic tranformations
- 2. Synthesis bioactive heterocycles using bioinspired NPs
- · Synthesis and characterization new energy materials
- · Nano Material Synthesis and its Environmental Applications, Water and Wastewater Treatment Design
- study on electronic structure of molecules and structure function correlation
- Active site modelling of Cu and Ni containing metalloenzyme's
- to write projects in the area of Corrosion science, Metal-Organic Framework, Covalent Organic Framework, carbohydrate chemistry, and synthesis of small organic molecules to find their applications in the area of sensor. The goal of the research work will be to maintain sustainable development by developing ecofriendly and environment friendly molecules.



- The overall goal of my research lab is to develop and apply novel technologies to address the issues at the interface of
  chemistry and biology, and to break the wall between these two. By combining research expertise in drug discovery,
  organic synthesis, structural biology, and biophysical/biochemical techniques, my research lab use chemical biology
  approach to discover epigenetic drugs targeting cancer and AD. Additionally, we design and synthesize sensors for
  biologically relevant metals and biomolecules.
- Calculation of thermodynamic and spectroscopic properties of small molecules using Density Functional Theory (DFT) and coupled cluster (CCSD) methods
- To develop less toxic and more effective anticancer drug compared to recognised drugs like; cisplatin, carboplatin and oxaliplatin, the gobally used chemotherapeutics. My research group is working on Pt(II) and Pd(II) based better soluble and more specific drug candidate. The total work in brief is (i) Synthesis of Pt(II) and Pd(II) complexes with different ancillary groups and their characterization by spectroscopic analysis. (II) Their DNA and BSA binding study (IIi) Kinetics and mechanism of the bio-molecular interactions (iv) Theoretical DFT study based on structural optimization, HOMO-LUMO energy, reactivity descriptor, NBO analysis, Molecular Docking (v) Cytotoxic property of the complexes on different cancer cell lines, cell death mechanism.
- Organic methodologies using organometallic catalysts, Lewis acid and Bronsted acid catalysts in homogeneous and heterogeneous media

#### 4.3.10 Area of Research Interest

- Lipid Chemistry
- · Food Chemistry
- · Nano and photo catalyst
- Cryopreservation
- Theoretical Ecology, Neuron Bio-Physics
- · Organic corrosion inhibitor
- · Organic Methodology; Green Chemistry; Transition metal chemistry; Muti-component coupling reaction
- · Photochemistry, Fluorescence spectroscopy, Fluorescent sensor
- Materials Chemistry, Solid State Chemistry, Energy Materials
- Water and Wastewater Treatment, Ground Water Remediation, Green Chemistry, Nano Material Synthesis and its Environmental Applications
- · coordination chemistry and electronic structure
- Currently the reactivity studies of the Nitrosocyanin Model Complexes
- Corrosion science and technology, Metal-Organic Framewrk, Covalent Organic Framework, Carbohydrate chemistry and synthesis of small molecules
- Epigenetics, Drug design, Chemical sensors
- Theoretical Investigation of hydrocarbon molecules having Astrochemical Interest
- · Understanding structure and reactivity through DFT and MD Simulations
- Pt(II) and Pd(II) based anticancer Drug Design and Drug Development
- · Homogeneous and heterogeneous catalysis

#### 4.3.11 Institute Industry Collaboration

Collaborating Institute Organization	Areas of collaboration	Collaboration Activities
CSIR- Institute of Minerals and Materials Technology	pH dependent synthesis and electrochemical arsenic sensing behavior of metal oxides, carbonates and hydroxysulphates	One PhD student is working having Coguide at CSIR-IMMT
Dr. Reddy's Lab, Hyderabad	Structure and properties of molecules of pharmaceutical interest	Joint publications and research
Damodar Valley Corporation, Mejia Thermal Power station, Bankura	Industrial Visit, discussion on High temparature corrosion and deminaralization of water	Industrial visit and Water treatment related issues
TCG LifeSciences Kolkata	Green Chemistry	Guiding PhD scholars as a co- supervisor





Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
CSIR-CMERI	Design and synthesis of chemoreceptors for selective sensing of toxic anions	Dr. Priyabrata Banerjee	Joint guidance of PhD, publication
Chemistry Department, Burdwan University	Nano and photo catalysis	Dr. Debasish Das	Joint research, publication
Indian Institute of Technology Ropar (IIT Ropar)	Theoretical Ecology	Dr. Partha Sharathi Dutta, Department of Mathematics	Published a paper in Physical Review E journal.
CSIR-CMERI	Corrosion inhibition	Dr Priyabrata Banerjee	Joint project, Joint publication, joint PhD supervision
NISER Bhubaneswar	Single crystal Xray diffraction	Dr. J. N. Behera & Dr. T. K. Saha	Structure solving of coordination compounds
IIT(ISM) Dhanbad	Instrumental analysis	Dr. Chanchal Halder & Dr. T. K. Saha	NMR of synthesized molecules
National Institute of Technology Kurukshetra	Solid State Chemistry	Dr. Avijit Kumar Paul	Sample preparation, characterization, data analysis, manuscript preparation, publication
Presidency University Kolkata	Energy Materials	Dr. Anjan Banerjee	Sample preparation, characterization, data analysis, manuscript preparation, publication
Indian Institute of Petroleum and Energy, Visakhapatnam	Energy Materials	Dr. Somnath Ghosh	Sample preparation, characterization, data analysis, manuscript preparation
Indian Institute of Technology Patna	Solid State Chemistry	Dr. Debajit Sarma	Sample preparation, characterization, data analysis, manuscript preparation
Max Planck Institute for Solid State Research, Stuttgart, Germany	Energy Materials	Prof. Dr. Bettina V. Lotsch	Sample preparation, characterization, data analysis, manuscript preparation, publication
Burdwan University, CSIR-CMERI Durgapur	Water and Wastewater treatment, Environmental Chemistry	Dr. Srimanta Gupta (BU), Dr. Nipen Chandra (CSIR-CMERI Durgapur)	Joint research Project, Publications etc
University of Barcelona, Spain	Research	Christian Griñán-Ferré	Joint publication and projects
IIT Kharagpur	Theoretical Investigation of hydrocarbon molecules having Astrochemical Interest	Prof. Anoop Ayyappan	Ongoing joint research project funded by DST
San Diego State University, USA	Theoretical Investigation of hydrocarbon molecules having Astrochemical Interest	Prof. Venkatesan S. Thimmakondu	Joint publications



Collaborating	Areas of collaboration	Faculty Members Involved	Collaboration Activities
Institute Organization			
(i) Vienna University of technology, Vienna, Austria, Europe.	Very fast reaction kinetics and their mechanism using stopped-flow spectrophotometer. We have published more than 10 (ten) research papers from this collaboration. Since 2010, I have visited four times in this Laboratory for fast kinetics. for one month in summar time. Letter on three number of research scholars from my group have visited for one month in 2016,2017 and 2018.	Prof. Wolfgang Linert. (Retaired now)	Very fast reaction kinetics and their mechanism using stopped-flow spectrophotometer. We have published more than 10 (ten) research papers from this collaboration. Since 2010, I have visited four times in this Laboratory for fast kinetics. for one month in summar time. Letter on three number of research scholars from my group have visited for one month in 2016,2017 and 2018.
(ii) Calcutta University, Department of Zoology, Cancer research laboratory in Prof. Urmi Chatterjii since 2018	Cell culture and cell death mechanism of cancer cells in Cancer research Laboratory	Prof. Urmi Chatterjii , Department of Zoology, CU.	Cell culture and cell death mechanism of cancer cells in Cancer research Laboratory and we have published five research papers from this collaboration.
(iii) Visva-Bharati University, Department of Zoology with Prof. Sudipta Moietra	Cell culture and cell death mechanism of cancer cells in Cancer research Laboratory	Prof. Sudipta Moitra	We have published more than 3 research papers from this collaboration.
NIT Meghalaya	Catalytic approaches to carboncarbon bond breaking reactions	Dr. Naba Kamal Nath, Asst. Prof., NIT Meghalaya & Dr. Paresh Nath Chatterjee, Assoc. Prof., NIT Durgapur	Guiding PhD scholar as a cosupervisor
University of Barcelona, Spain	Research Visit, Training in NMR	Prof Miquel Pons	Research Visit, Training in NMR instrument

# 4.3.13 Innovations and Technology Transfer (Patents filed during)

Title	Inventors	Application Nos	Date of Filling
Less toxic and more effective anticancer activity of pyridine derivative and few labile groupbased Pt(II) complexes	Prof. Sankar Chandra Moi and Miss. Rituparna Bhaduri	NA till now and shortly we will get it though our Institute.	2023-02-02

# 4.3.14 Workshops/Seminars Organized

Name of Key Speaker(s)	Name of the Programme	Date of the Programme
Dr. Arup Kr. Chandra, Director, Acmechem-	Industrial opportunity of chemists in polymer	2022-04-01
Merchem,	and Rubber	
Gujarat, India	Industry	
Dr. Atanu Bhattacharya, Assistant Professor,	Ultrafast Surface Chemical Dynamics:	2022-08-05
IISc	Recombinative Desorption from Pd(110) and	
Bangalore, IPC division	Pd(100) Surfaces	
Dr. Indranil Sengupta, Director Singapore	Career with Chemistry – perspective & needs of	2023-03-29
Region for	the	
Actylis	Industry	



Name of Key Speaker(s)	Name of the Programme	Date of the
		Programme
Dr. Sarnath Chattaraj, Senior Research Director	Sitting at the cross-roads of combinatorial	2023-03-13
of	sciences: Design	
Medtronic, USA	& development of medical devices	

# 4.3.15 Journal: Published in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Shyam Sundar Mondal,Namita	Monosaccharide Linked Schiff Base Metal Complexes of	ChemistrySelect	Volume:7 Issue No: Page No:e202200060 Year:2022 Month:Jun
Jaiswal,Rajat Kumar Tripathy, Partha Sarathi Bera,Nripen Chanda,J. N. Behera, Subhas Ghosal,and Tanmoy Kumar Saha*	Cu(II), Zn(II) and Mn(II): Exploring the Antiproliferative Activity and Cell Death Mechanism		
A. Mondal, P. Banerjee, J. Chakrabarty	Rational design of reversible CN  – selective multifarious responsive chemosensors:  Theoretical substantiation and adaptable real—world applications	Journal of Photochemistry & Photobiology, A: Chemistry	Volume:428 Issue No: Page No:113893 Year:2022 Month:Jun
T. Sadhu, A. Bhattacharjee, S.K. Lahiri, J. Chakrabarty	Application of artificial neural network with metaheuristic optimization for improving the nutritive value of fried fish	Journal of Food Processing and Preservation	Volume: Issue No: Page No:10.1111/jfpp.17190 Year:2022 Month:Sep
A. Rai, B. Bishayee, A. Dey, A. Kumar, S.K. Lahiri, J. Chakrabarty, S. Dutta	Tertiary treatment of coke-oven wastewater using suspended and immobilized whole live cells of constructed bacterial-microalgal consortium: modeling and optimization using ANN-GA hybrid methodology	Water Science & Technology	Volume:87 Issue No:3 Page No:509-526 Year:2023 Month:Feb
Manash Gope, Anibrata Das, Sandip Mondal Apurba Ratan Ghosh & Rajnarayan Saha	Immobilization of Cr(III) and Cr(VI) from contaminated aqueous solution by using sewage produced biochar: Affecting factors and mechanisms	Energy Sources, Part A: Recovery, Utilization and Environmental Effects	Volume:44 Issue No:3 Page No:5812-5828 Year:2022 Month:Jun
Mishra, S.; Kumar, S.; Bhandari, A.; Das, A.; Mondal, P.; Hundal, G.; Olmstead, M. M.; Patra, A. K.	Reactivity of Nitric Oxide and Nitrosonium Ion with Copper(II/I) Schiff Base Complexes: Mechanistic Aspects of Imine C=N Bond Cleavage and Oxidation of Pyridine- 2-aldehyde to Pyridine2-carboxylic Acid.	Inorganic Chemistry	Volume:61 Issue No:17 Page No:6421-6437 Year:2022 Month:Apr
Sanjoy Satpati, Aditya Suhasaria, Subhas Ghosal, Utpal Adhikari, Priyabrata Banerjee, Sukalpa Dey, Dipankar Sukul	Anti-corrosive propensity of naturally occurring aldehydes and 1-(3-aminopropyl)imidazole condensed Schiff bases:  Comparison on the effect of extended conjugation over electron donating substituents	Journal of Molecular Structure	Volume:1268 Issue No:15 Page No:133684 Year:2022 Month:Jul



Author(s) Name	Paper Name	Journal Name	Others Info
S. Kr. Tarai, S. Mandal, R. Bhaduri, A. Pan, K. Misra, S. C. Moi*,	Theoretical hydrolysis mechanism of anticancer Pt (II) and Pd (II) dichloro complexes with N, N bidentate chelator in aqueous medium and their molecular docking,.	Journal of Chemical Physics	Volume:553 Issue No:NA Page No:111390 Year:2022 Month:Jun
R. Bhaduri, S. Mandal, S. Kumar Tarai, A. Pan, S. Mukherjee, A. Bagchi, A. Biswas, S. C. Moi*	Cytotoxic activity of nitrogen, sulfur, and oxygen chelated Pt(II) complexes; their DNA/BSA binding by in vitro and in silico approaches	J. Mol Liquids	Volume:360 Issue No:NA Page No:119529 Year:2022 Month:Apr
S. Mandal, S. Kr. Tarai, A. Pan, R. Bhaduri, P. Biswas, S. C. Moi,*	Cytotoxic effects of Pd(II) complexes on cancer and normal cells: Their DNA & BSA adduct formation and theoretical approaches	Journal of Bioorganic Chemistry	Volume:128 Issue No:NA Page No:106093 Year:2022 Month:Aug
S. Mandal, A. Pan, R. Bhaduri, S. Kr. Tarai, B. Singh Kapoor, S. C. Moi,*	Theoretical investigation on hydrolysis mechanism of cisplatin analogous Pt(II)/Pd(II) complex by DFT calculation and molecular docking approach for their interaction with DNA & HSA	J. Mol. Graphics and Modelling	Volume:117 Issue No:NA Page No:108314 Year:2022 Month:Aug
S. Kr. Tarai, A. Pan, S. Das, R. Bhaduri, S. Mandal, S. Maitra and S. C. Moi*	Anticancer property and normal cell toxicity profile of pyrrolidine-based platinum (II) complexes: Their DNA, BSA interaction, and molecular docking	Journal of Applied Organometallics Chemistry	Volume:6859 Issue No:NA Page No:e6859, 6859 Year:2022 Month:Oct
R. Bhaduri, A. Pan, S. Kr. Tarai, S. Mandal, A Bagchi, A Biswas, S. C. Moi*	In vitro anticancer activity of Pd(II) complexes with pyridine scaffold: Their bioactivity, role in cell cycle arrest, and computational study	J. Molecular Liquids	Volume:367 Issue No:NA Page No:120540 Year:2022 Month:Jul
S. Mandal,§ S. Kr. Tarai,§ P. Patra, P. Nandi, S. Sing, B. Rajak, and S. C. Moi*	Brief Research on the Biophysical Study and Anticancer Behavior of Pt(II) Complexes: Their DNA/BSA Binding, Molecular Docking, and Cytotoxic Property	Langmuir	Volume:44 Issue No:38 Page No:13613 Year:2022 Month:Oct
S. Kr. Tarai, S. Mandal, R. Bhaduri, A. Pan, P. Biswas, A. Bhattacharjee, S. C. Moi*	Bioactivity, molecular docking and anticancer behaviour of pyrrolidine based Pt(II) complexes: their kinetics, DNA and BSA binding study by spectroscopic methods Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	Volume:287 Issue No:1 Page No:122059 Year:2023 Month:Jan
A. Pan, R. Bhaduri, S. Mandal, S. Kr. Tarai, A. Bagchi, A. Biswas, S. C. Moi*	Photophysical study on DNA & BSA binding and cytotoxic behaviour of piperidine-Pt(II) complexes: Their kinetics & mechanism and molecular docking	J. Photochem. Photobiol. A	Volume:441 Issue No:NA Page No:114740 Year:2023 Month:Mar



Author(s) Name	Paper Name	Journal Name	Others Info
Gitumoni Kalita, Sharat Sarmah, Atanu Singha Roy, Paresh Nath Chatterjee*	Synthesis of 2,2-disubstituted- 2H-1-benzopyrans using tetraphenylethylene-based heterogeneous acidic organocatalyst and the evaluation of their binding interaction with human serum albumin	Journal of Heterocyclic Chemistry	Volume:60 Issue No:2 Page No:297-317 Year:2023 Month:Feb
Dipankar Paul, Paresh Nath Chatterjee*	The Rise of Carbon-based Leaving Groups	ChemistrySelect	Volume:7 Issue No:37 Page No:e202200965 Year:2022 Month:Oct
Gitumoni Kalita, Snehadrinarayan Khatua, Paresh Nath Chatterjee*	A Brønsted Acid Catalyzed Easy Access to Conjugated DieneDiones from Tertiary Propargyl Alcohols and 1,3-Dicarbonyl Compounds	Synlett	Volume:34 Issue No:7 Page No:815-822 Year:2023 Month:Jan
T. Sadhu, S.K. Lahiri, J. Roy, A. Bhattacharjee, J. Chakrabarty	Optimization of frying process for maintaining nutritional quality to satisfy consumers' sensory attributes: A novel application of multi-criteria decision-making approach	Journal of Multi-Criteria Decision Analysis	Volume:10.1002/mcda.17 99 Issue No: Page No: Year:2022 Month:Nov
Sanjoy Satpati, Aditya Suhasaria, Subhas Ghosal, Sukalpa Dey, Dipankar Sukul	Interaction of newly synthesized dipeptide Schiff bases with mild steel surface in aqueous HCl: Experimental and theoretical study on thermodynamics, adsorption and anti-corrosion characteristics	Materials Chemistry and Physics	Volume:296 Issue No: Page No:127200 Year:2023 Month:Feb
Sanjoy Satpati, Aditya Suhasaria, Subhas Ghosal, Utpal Adhikari, Priyabrata Banerjee, Sukalpa Dey, Dipankar Sukul	Anti-corrosive propensity of naturally occurring aldehydes and 1-(3-aminopropyl)imidazole condensed Schiff bases:  Comparison on the effect of extended conjugation over electron donating substituents	Journal of Molecular Structure	Volume:1268 Issue No: Page No:133684 Year:2022 Month:Nov
Tapashree Mondal, Sourav Biswas, Manoj V Mane, Sujit S Panja	Deciphering swift reversal of multifaceted photodynamics of a novel pyrene appended unsymmetrical salicylaldehyde azine derivative in aqueous and protein environments	New Journal of Chemistry	Volume:47 Issue No:11 Page No:5280 Year:2023 Month:Feb
Soumita Mukherjee, Subrata Dasgupta, Sujit Sankar Panja, Utpal Adhikari	Structural insight to human Retinoid X receptor alpha- Thyroid hormone receptor beta heterodimer by molecular modelling and MD-simulation studies: role of conserved water molecules	Journal of Biomolecular Structure and Dynamics	Volume: Issue No:1 Page No:1-12 Year:2022 Month:Nov
Koushik Mondal, Ashim Pramanik, Tapashree Mondal, Sujit Sankar Panja, Rajat Sarkar, Pathik Kumbhakar	Self-Assembly of SolventStabilized Au Nanocluster as Efficient Förster Resonance Energy-Transfer Initiator for White Light Generation	The Journal of Physical Chemistry Letters	Volume:13 Issue No:13 Page No:3079 Year:2022 Month:Mar



Author(s) Name	Paper Name	Journal Name	Others Info
Tanmay Rom, Sourav Laha*, Srushti Gadiyaram, Pradip K. Maji,	Rare-earth (Nd and Eu) Induced Structural Transformation and Optical Properties of Brownmillerite-type Sr2ScGaO5	Journal of Solid State Chemistry	Volume:317 Issue No: Page No:123696 Year:2023 Month:Jan
Avijit Kumar Paul*	Oxide		Wolful.Jan
Hugo A. VignoloGonzález, Andreas Gouder†, Sourav Laha†, Viola Duppel, Sol Carretero-Palacios, Alberto Jiménez- Solano, Takayoshi Oshima, Peter Schützendübe, Bettina V. Lotsch († These authors contributed	Morphology Matters: 0D/2D WO3 Nanoparticle-Ruthenium Oxide Nanosheet Composites for Enhanced Photocatalytic Oxygen Evolution Reaction Rates	Advanced Energy Materials	Volume:13 Issue No:6 Page No:2203315 Year:2023 Month:Feb
equally)  Manash Gope, Puja Paramanik, Ipsita Som, Apurba Ratan Ghosh & Rajnarayan Saha	A review on low-cost adsorbent (biochar) for the elimination of potentially toxic elements (PTEs) from contaminated water	Arabian Journal of Geosciences	Volume:15 Issue No:20 Page No:1609 Year:2022 Month:Oct
Ipsita Som, Sourav Suman, Mouni Roy, Srimanta Gupta & Rajnarayan Saha	Effective phosphate removal from sewage water using zerovalent iron nanomaterial as an adsorbent	Water Quality Research Journal of Canada	Page No:177-199. Year:2022 Month:Jul
T. Sadhu, S. Chowdhury, S,	A comparative study of metaheuristics algorithms based	Decision Making: Applications in Management and Engineering	Volume:DOI:_https://doi. org/10.31181/dmame0306 102022r Issue No: Page No: Year:2022 Month:Oct
Mondal, J. Roy, J. Chakrabarty, S.K. Lahiri	on their performance of complex benchmark problems		
Dr. Apeksha Ashok Phadte, Prof. P. Bhavana, Prof. Subhas Ghosal, Dr. Raviprasad Aduri, Prof. Subhadeep Banerjee	Synthesis, Optical Properties and DNA-Binding Behavior of a Quinoxaline Ring-Fused πElongated Chlorin – Efforts Towards Preparation of Long Wavelength Absorbing Porphyrinoids	Chemistryselect	Volume:7 Issue No:17 Page No:e202200492 Year:2022 Month:May
Krishnendu Pal, Smita Deb and Partha Sharathi Dutta	Tipping points in spatial ecosystems driven by shortrange correlated noise	PHYSICAL REVIEW E	Volume:106 Issue No:5 Page No:054412 Year:2022 Month:Nov
Jyotirmoy Halder, Tarun Roy, Sayon Satpati, Subhas Ghosal, Deboshree Mukherjee, Benjaram M. Reddy	Insight of solvent effect on CeO2 catalyzed oxidation of styrene with tert-butyl hydroperoxide: A combined experimental and theoretical approach	Catalysis Communications	Volume:164 Issue No: Page No:106413 Year:2022 Month:April
Jana, A.; Naga, R.; Saha, S.; Banerjee, D. R.*	3D QSAR pharmacophore based lead identification of G9a lysine methyltransferase towards epigenetic therapeutics	Journal of Biomolecular Structure and Dynamics	Volume: Issue No: Page No: Year:2022 Month:Oct



Author(s) Name	Paper Name	Journal Name	Others Info
Aditya Suhasaria, Sanjoy Satpati, Subhas Ghosal, Sukalpa Dey, Dipankar Sukul	Effect of the Heterocyclic Groups on the Anti-corrosion Performance of Heterocyclic Schiff Bases of Benzothiazole for Mild Steel in 1 M Aqueous HCl	Journal of Bio- and TriboCorrosion	Volume:9 Issue No: Page No:26 Year:2023 Month:Mar
A. Rai, B. Kamila, S. Dutta, J. Chakrabarty	Macromolecules Assessment from Spent Biomass during Phycoremediation of Pollutants from Coke-oven Wastewater: A Prospective Approach for Production of Value added Products	Journal of the Indian Chemical Society	Volume:99 Issue No:7 Page No:100555 Year:2022 Month:Jul
Jana, A.; Naga, R.; Saha, S.; Christian, G-F.; Banerjee, D. R.*	Integration of ligand and structure- based pharmacophore screening for the identification of novel natural leads against Euchromatic Histone Lysine Methyltransferase 2 (EHMT2/G9a)	Journal of Biomolecular Structure and Dynamics	Volume: Issue No: Page No: Year:2023 Month:Feb
Aditya Suhasaria, Sanjoy Satpati, Subhas Ghosal, Sukalpa Dey & Dipankar Sukul	Effect of the Heterocyclic Groups on the Anti-corrosion Performance of Heterocyclic Schiff Bases of Benzothiazole for Mild Steel in 1 M Aqueous HCl	Journal of Bio- and TriboCorrosion	Volume:9 Issue No: Page No:26 Year:2023 Month:Mar
Sanjoy Satpati, Aditya Suhasaria, Subhas Ghosal, Sukalpa Dey, Dipankar Sukul	Interaction of newly synthesized dipeptide Schiff bases with mild steel surface in aqueous HCl: Experimental and theoretical study on thermodynamics, adsorption and anti-corrosion characteristics	Materials Chemistry and Physics	Volume:296 Issue No:15 Page No:127200 Year:2023 Month:Feb
Thipashini Ganesan, Prakash Muthudoss, Raja Sekhar Voguri, Subhas Ghosal,	A new Febuxostat-Telmisartan Drug-Drug Cocrystal for Gout- Hypertension Combination Therapy	Journal of Pharmaceutical Sciences	Volume:111 Issue No:12 Page No:3318 Year:2022 Month:Dec
Eddy Yii Chung Ann, Jayson Kwok, Sajid Syed Shahnawaz, Muhammad Firdaus Omar, Ravikiran Allada, Hong Heng See			
Sanjoy Satpati, Aditya Suhasaria, Subhas Ghosal, Utpal Adhikari, Priyabrata Banerjee, Sukalpa Dey, Dipankar Sukul	Anti-corrosive propensity of naturally occurring aldehydes and 1-(3-aminopropyl)imidazole condensed Schiff bases:  Comparison on the effect of extended conjugation over electron donating substituents	Journal of Molecular Structure	Volume:1268 Issue No:15 Page No:133684 Year:2022 Month:Nov
Tarun Roy, Venkatesan S. Thimmakondu, and Subhas Ghosal	New Carbenes and Cyclic Allenes Energetically Comparable to Experimentally Known 1-Azulenylcarbene	ACS Omega	Volume:7 Issue No: Page No:30149 Year:202 Month:August
Tarun Roy, Sayon Satpat , Venkatesan S. Thimmakondu and Subhas Ghosal	Theoretical Investigation on C11H8 Bicyclic Carbene and Allene Isomers	Frontiers in Physics	Volume:10 Issue No: Page No:907466 Year:2022 Month:June





Author(s) Name	Paper Name	Journal Name	Others Info
Shyam Sundar	Monosaccharide Linked Schiff Base	Chemistryselect	Volume:7 Issue No:21 Page
Mondal, Namita Jaiswal, Rajat	Metal Complexes of Cu(II), Zn(II) and Mn(II):		No:e202200060 Year:2022 Month:June
Kumar Tripathy,	Exploring the Antiproliferative		
Partha Sarathi Bera, Dr.	Activity and Cell Death Mechanism		
ripen Chanda, Dr. J. N. Behera, ubhas Ghosal, Dr.			
Tanmoy Kumar Saha			

## 4.3.16 Journal: Published in Others in 2022-2023

Author(s) Name	Paper Name	Journal Name	Others Info
Suman Samai, Paresh Nath Chatterjee, Sapna Sethi	A symptom based study of water quality in village Talwandi Sabo, District-Bathinda, Punjab, India	Journal of Indian Water Works Association	Volume:Oct-Dec Issue No:NA Page No:276- 279 Year:2022 Month:Nov

## 4.3.17 Conference: Published in Others in 2022-2023

Author(s) Name	Paper Name	Conference Name	Others Info
Banerjee, D. R.	A chemist's dream to investigate epigenetics: A combined theoretical and experimental studies	International Symposium on Emerging trends in chemical science (ETCS- 2023) at NEHU, Shillong	DOI/ISBN: NA Volume: Issue No: Page No: Year:2023 Month:Mar Presenter:SELF

## 4.3.18 Seminars, Summer/Winter Schools, Short Term Courses Attended

Name of the Programme	Organized By	From Date	To Date	Organizing Country
International Symposium On	NEHU, Shillong	2023-03-02	2023-03-04	India
Emerging Trends In Chemical	, 8			
Sciences				
Emerging Trends in Chemical	NEHU, Shillong, Meghalaya	2023-03-02	2023-03-04	India
Sciences-2023				
Computational Methods for	Jaypee University of Information	2022-12-29	2023-01-03	India
Physics and Material Science	Technology Solan, Himachal			
CMPMS-2022	Pradesh, India			
59th annual convention for	In collaboration of Indian	2022-12-16	2022-12-18	India
chemists-2022;	Chemical Society;			
International conference on Recent	IIT (ISM) Dhanbad			
trends in Chemical Sciences				
59th Annual Convention of	IIT (ISM) Dhanbad and Indian	2022-12-16	2022-12-18	India
Chemists and International	Chemical			
Conference on Recent Trends in	Society, Kolkata			
Chemical Sciences				





Topic Name	Scholar	Supervisor	Status	Status
				Date
Design and synthesis of	Amita Mondal	J. Chakrabarty, P.	DEGREE	2022-04-
chromogenic and fluorogenic		Banerjee	AWARDED	06
chemoreceptors for selective sensing of toxic anions		(CSIR-CMERI)		
Improvement of nutritional quality	Tithli Sadhu	J. Chakrabarty, Ashish	DEGREE	2022-05-
of fish during conventional frying	Titili Sadila	Bhattacharjee (BT)	AWARDED	10
process: A novel approach using		Bhattacharjee (B1)	TWTREDED	10
Artificial Intelligence				
Protein and other biochemical	Indrani Banerjee	J. Chakrabarty, Ashish	ONGOING	
components of fish and their	maram bancijec	Bhattacharjee (BT)	ONGOING	
nutritional effect		Bilattacharjee (B1)		
Not registered yet	Pulak Pradhan	J. Chakrabarty,	ONGOING	
			Ortoonto	
The molecular dynamics simulation	Soumita Mukherjee	Sujit Sankar Panja	ONGOING	-
studies on Thyroid hormones				
receptor				
Chemistry of various p and d block	Sourav Chatterjee	Dipankar Sukul,	DEGREE	2022-07-
metal complexes of Schiff bases		Priyabrata	AWARDED	28
having different N,O donor sites:		Banerjee, Tanmoy		
Catalytic and sensor applications		Chattopadhyay		
Anti-corrosive activity of Schiff	Sanjoy Satpati	Dipankar Sukul,	DEGREE	2022-11-
bases involving biomolecules		Priyabrata Banerjee	AWARDED	17
towards mild steel in hydrochloric				
acid medium				
Synthesis of bioactive heterocycles	Mr. Partha Sarathi	Dr. T. K. Saha	ONGOING	-
catalyzed by nanoparticles	Bera			
(preparing for submission)				
Muticomponent reaction catalyzed	Ms. Jharana mahato	Dr. T. K. Saha	ONGOING	-
by transition metal				
Development And Photophysical	Tapashree Mondaal	Sujit Sankar Panja	SUBMITTED	2023-03-
Investigation Of Aggregation-	rapasinee Mondaar	Sujit Sankai Tanja	SODWITTED	30
Induced Emission Enhancement				30
Active Luminogens And Their				
Multifarious Applications				
Development and photo-physical	Swapnadip Roy	Sujit Sankar Panja	DEGREE	2022-08-
study of fluorescein based	- · · · · · · · · · · · · · · · · · · ·	2 392 2 332233 2 33293	AWARDED	03
fluorescent sensor and				
their different applications				
Synthesis and reactivity studies of	Shibaditya Kumar	Milan Maji and	ONGOING	-
copper complexes relevant to		Apurba Kumar Patra		
biologicals sites				
Advances in Mesoporous	Ipsita Som	Prof. Rajnarayan Saha	ONGOING	-
Nanomaterialbased Water				
Treatment Approaches for				
Remediation of Aqueous				
Contaminants				
Synthesis of nano Photocatalyst	Satyabhama Sahu	Prof. Rajnarayan Saha	ONGOING	-
and its application for the				
degradation of dyes				
Biological Relevance and	Saikat Mishra	Apurba K. Patra	DEGREE	2023-01-
Reactivity of			AWARDED	27
Cu(II/I) Complexes Supported by				
N, S Donor Ligands				





Topic Name	Scholar	Supervisor	Status	Status Date
carbon-Carbon bond formation via redox reactions : Green chemistry exercise and role of nano architecture	Bibhas Mondal	Utpal Adhikari, Ujjal kanti Roy	DEGREE AWARDED	2020-06- 12
Studies on the extracts of some Indian plants as corrosion inhibitors of mild steel in 1M HCl medium	Shipra Mukhopadhyay	Utpal Adhikari	ONGOING	-
Corrosion inhibition and antioxidant activities of the extracts from the Indian samples of Purple Knight Hedge plant and Snap Melon	Surajit Hazra	Utpal Adhikari	SUBMITTED	2022-11- 04
pH dependent synthesis and electrochemical Arsenic sensing behaviour of Fe, Co based oxides, carbonates and hydroxysulphates	Priyanka Mukherjee	Utpal Adhikari (NIT Durgapur), Mamta Mahapatra (CSIR- IMMT)	ONGOING	-
rational Design and synthesis of functionalized metal-organic frameworks for targeted remediation of heavy metal ions and organic toxins	Pallav Mondal	Utpal Adhikari	ONGOING	-
Azo-linked CHEF-PET regulated 'turn-on' molecular probe for metal ion sensing	Subhabrata Mabhai	Deb Ranjan Banerjee	SUBMITTED	2023-02- 22
Computational Investigation on Epigenetics and Identification of potential Inhibitors	Abhisek Jana	Deb Ranjan Banerjee	ONGOING	-
Growth Mechanism of Polycyclic Aromatic Hydrocarbons (PAHs) in the interstellar medium	Tarun Roy	Subhas Ghosal	ONGOING	-
Structure Elucidation of Hydrocarbon Molecules through Global Optimization using Density Functional Theory and postHF Methods	Sayon Satpati	Subhas Ghosal	ONGOING	-
Bioactivity and cytotoxic property of Pt(II) & Pd(II) complexes with different (N, N) bidentate chelates: their bio- physical analysis on DNA/BSA binding, molecular docking and theoretical aspects	Mr. saikat Mandal	Prof. Sankar Chandra Moi (Sole)	SUBMITTED	2023-08- 07
Anticancer activity of Pt(II) & Pd(II) complexes with pyridine scaffold: their biomolecular interactions, cell death mechanism and computational study	Miss. Rituparna Bhaduri	Prof. Sankar Chandra Moi (Sole)	SUBMITTED	2023-08- 07
Bronsted acid catalyzed electrophilic activation of tertiary propargylic alcohols to synthesize various indenes, benzopyrans and conjugated dienediones	Gitumoni Kalita (roll no. P18CH007), registered at NIT Meghalaya	Dr. Paresh Nath Chatterjee	SUBMITTED	2022-11- 21
Pharmaceutical wastewater treatment by adsorption and photocatalytic Processes	Priyanka Khan	Prof. Rajnarayan Saha and Prof. Gopinath Halder	ONGOING	-





# 4.3.20 Ongoing Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Amount(in Rs.)	Starting Year
Design and Development of Two Stage Efficient Laboratory Wastewater Treatment (Advanced Oxidation and Activated Sludge Process) Plant for Producing Environmentally Safe and Clean Water for further uses	Prof. R.N. Saha,, Dr. J.Chakrabarty	DHESTBT, Govt. of West Bengal	315000.0	2019
Design and Development of two stages efficient laboratory waste water treatment	Rajnarayan Saha (PI) and J. Chakrabarty (Co-PI)	Department of Higher Education, Science & Technology and Biotechnology, Govt. o9f West Bengal	315000.0	2019
Emerging Contaminants and their accumulation in ecosystem of lower stretch of Hooghly River	Mondal S (PI) & Rajnarayan Saha (Co- PI)	Department of Higher Education, Science & Technology and Biotechnology, Govt. o9f West Bengal	998000.0	2018
Chemical sensors cum inhibitors of Histone PTM	Deb Ranjan Banerjee	SERB	3651494.0	2022
NMR studies of Lys/Arg side chain interactions in epigenetics and membrane-induced dimerization	Deb Ranjan Banerjee	SERB	712754.0	2022
Structure elucidation of simple hydrocarbons through Global Optimization using Density Functional Theory and post HF methods	Subhas Ghosal (PI, NIT Durgapur) and Prof. Anoop A (co-PI, IIT Kharagpur)	DST under National Supercomputing Mission (NSM)	2552000.0	2021
Ultracold Chemistry of Molecular ions	Subhas Ghosal	SERB, India	2400959.0	2020
Synthesis and characterization of Cis-platin based Pt/Pd(II) complexes: Their kinetics, mechanism, DNA- binding property and theoretical study	Prof. sankar Chandra Moi (Sole)	DST-BT Government of West Bengal	2499100.0	2018
Searching of less toxic and more effective Cis-platin based new Pt(II) anticancer agents: Kinetics, DNA binding, bio-activity and DFT study	Prof. Sankar Chandra Moi (Sole)	CSIR- GRDG, Govt. of India	1030000.0	2018
Bio-transformation reactions of Pt(II)/Pd(II) and Pt(IV)-sulfur chelates to metal-DNA adduct with nucleobases: their kinetics, mechanistic pathway, bio-activity and theoretical aspects	Prof. Sankar Chandra Moi (Sole)	DST-SERB, Govt. of India	4466000.0	2017

## 4.3.21 Completed Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Complete
			Year



Investigation of corrosion inhibition properties	Utpal Adhikari,	DST-SERB	2022
of newly synthesized green inhibitors against mild steel in acidic medium	Dipankar Sukul		
"Investigation of corrosion inhibition properties of newly synthesized green corrosion inhibitors against mild steel in acidic medium"	Utpal Adhikari, Dipankar Sukul	DST-SERB, Govt. of India	2022
"Investigation on the extracts of Swertia chirata, Butea monosperma, Tradescantia Pallida and Madhuca indica as green corrosion inhibitors for mild steel in acidic medium"	Utpal Adhikiari, Suprakash Roy	Science and Technology and Biotechnology Department, Govt. of West Bengal	2021
"Forward-osmosis integrated membrane distillation coupled with solar photocatalytic reactor for textile wastewater"	Jaya Sikder (NIT Durgapur), Utpal Adhikari	Department of Science & Technology and Biotechnology, Govt. of West Bengal	2022
"Microbial production of lactic acid using wastes (diary waste and rice star) as substarates, for the production of bioplastic"	Koustav Aikat (NIT Durgapur), Utpal Adhikari	Department of Science & Technology and Biotechnology, Govt. of West Bengal	2022
"Chemically modified polysaccharides linked to Schiff base ligand-metal complexes: a novel approach of investigation toward antioxidant and antitumor activities"	Tanmoy Kumar Saha (NIT Durgapur), Utpal Adhikari	DST-SERB, Govt. of India	2020
Functional inter-connection between WISH and cell-wall biosynthesis / re-modelling pathway in rice blast fungus	Subhankar RoyBarman (NIT Durgapur), Utpal Adhikari	DST-SERB, Govt. of India	2024
Interaction of Bio-active Molecules with Pt(II) and Pd(II) complexes of bidentate supporting Ligands: Their Kinetics, mechanism and speciation study	Dr. Sankar Chandra Moi (Sole)	DST-SERB, Govt. of India	2017

## 4.3.22 Reviews of Manuscripts for Publication in Journal

Reviewer			Date of Final Review	
Dipankar Sukul	ACS Omega	ACS	2022-05-20	
Jitamanyu Chakraborty	Comprehensive Reviews in Food Science and Wiley Food Safety		2022-06-04	
Jitamanyu Chakraborty	Cleaner Chemical Engineering	Elsevier	2022-06-2	
Jitamanyu Chakraborty	Current Nutrition & Food Science	Current Nutrition & Food Science Bentham Science		
Jitamanyu Chakraborty	Journal of Water Process Engineering	Journal of Water Process Engineering Elsevier		
Jitamanyu Chakraborty	Journal of CO2 Utilization	Elsevier	2022-09-14	
Jitamanyu Chakraborty	Environmental Progress & Sustainable Energy	Wiley	2022-10-08	
Dipankar Sukul	Results in Chemistry	ScienceDirect	2022-09-18	
Dipankar Sukul	ACS Sustainable Chemistry & Engineering	ACS Sustainable Chemistry & Engineering ACS		
Dipankar Sukul	ACS Omega	ACS	2022-07-20	
Dipankar Sukul	Journal of Dispersion Science and Technology Taylor & Francis		2022-09-2	
Dipankar Sukul	Journal of Environmental Science and Health, Part A	Taylor & Francis	2022-08-2	



Reviewer	Name of the Journal	Publisher	Date of Final Review
Dipankar Sukul	Materials Research	SciELO-Brazil	2022-06-26
Tanmoy Kumar Saha	Topics in catalysis	Springer Journals	2022-10-30
Dipankar Sukul	Sustainable Chemistry and Pharmacy	ScienceDirect	2023-01-04
Dipankar Sukul	ACS Omega	ACS	2023-01-18
Tanmoy Kumar Saha	ChemistrySelect	Wiley Publications	2022-08-12
Sujit Sankar Panja	Journal of Photochemistry & Photobiology, A: Chemistry	Sciencedirect	2022-10-11
Apurba Kumar Patra	Journal of the American Chemical Society	American Chemical Society	2023-01-30
Apurba Kumar Patra	Inorganic Chemistry	American Chemical Society	2022-11-02
Apurba Kumar Patra	Inorganic Chemistry	American Chemical Society	2022-08-27
Paresh Nath Chatterjee	ChemistrySelect	Wiley	2023-03-30
Sankar Chandra Moi	Cell	MDPI	2022-04-04
Sankar Chandra Moi	Journal of Medicinal Chemistry	American Chemical Society	2022-07-13
Sankar Chandra Moi	Journal of Molecular Structure	Elsevier	2022-06-09
Sankar Chandra Moi	Journal of Molecular Structure	Elsevier	2022-07-21
Sankar Chandra Moi	Journal of Molecular Structure	Elsevier	2022-05-10
Sankar Chandra Moi	Journal of Molecular Structure	Elsevier	2022-05-27
Sankar Chandra Moi	Inorganica Chimica Acta	Elsevier	2023-02-13
Sankar Chandra Moi	Inorganica Chimica Acta	Elsevier	2023-02-09
Sankar Chandra Moi	Chemical Research in Toxicology	American Chemical Society	2022-12-28
Paresh Nath Chatterjee	Research on Chemical Intermediates	Springer	2022-06-02
Paresh Nath Chatterjee	New Journal of Chemistry	Royal Society of Chemistry	2022-09-08
Paresh Nath Chatterjee	Results in Chemistry	ScienceDirect	2022-09-20
Paresh Nath Chatterjee	Results in Chemistry	ScienceDirect	2023-01-07
Paresh Nath Chatterjee	Results in Chemistry	ScienceDirect	2023-02-22

# 4.3.23 Invited Examiners/Paper-Setters/Board of Studies

Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Jitamanyu	Paper-Setter of M.Sc in Conservation Biology	Kazi Nazrul	2023-02-	2023-02-
Chakraborty	•	University	20	20
Jitamanyu	Paper-Setter of M.Sc in Conservation Biology	Kazi Nazrul	2022-06-	2022-06-
Chakraborty		University	17	17
Dipankar Sukul	PhD defence seminar	Manipal university	2022-09-	2022-09-
		Jaipur	21	21
Sourav Laha	Physical Chemistry Practical Examination	Bankura University	2023-02-	2023-02-
			09	09

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Nazrul University, Asansol   University, Asansol   11   11	Utpal Adhikari	M.Sc. 4th Semester Examinations 2022 of Kazi	Kazi Nazrul	2022-07-	2022-07-
Sankar Chandra Moi         Ph. D. Course work question moderation         Bardwan University         2023-01-10         2023-01-10           Paresh Nath         PhD thesis examination         IIIT Allahabad,         2023-02-2         2023-02-2           Chatterjee         Prayagraj         07         07           Apurba Kumar Patra         PhD Thesis Examiner         Delhi University         2023-02-2         2023-02-2           Apurba Kumar Patra         PhD Thesis Examiner         IACS, Kolkata         2022-10-2022-10-25         25         25           Rajnarayan Saha         Pre-Ph.D Seminar         Visva-Bharati         2022-08-202-208-208-208-208-208-208-208-		Nazrul University, Asansol	University, Asansol	11	11
Sankar Chandra Moi         Ph. D. Course work question moderation         Bardwan University         2023-01-         2023-01-           Paresh Nath Chatterjee         PhD thesis examination         IIIT Allahabad, Prayagraj         2023-02-         2023-02-           Apurba Kumar Patra         PhD Thesis Examiner         Delhi University         2023-02-         2023-02-           Apurba Kumar Patra         PhD Thesis Examiner         IACS, Kolkata         2022-10-         2022-10-           Apurba Kumar Patra         Pre-Ph.D Seminar         Visva-Bharati         2022-08-         2022-08-           Rajnarayan Saha         MSc. in Conservation Biology         Kazi Nazrul         2023-02-         2023-02-           Rajnarayan Saha         MSc. in Conservation Biology         Kazi Nazrul         2023-03-         2023-03-           Rajnarayan Saha         BRS meeting in Conservation Biology         Kazi Nazrul         2022-05-         2022-05-           Rajnarayan Saha         UGBOS meeting for conducting the UG 2nd and 4th semester examination.         Dept. of Chemistry, 2022-04-         2022-04-         2022-04-           Rajnarayan Saha         UGBOS meeting for conducting the UG 2nd, 4th and 6th semester examination         Dept. of Chemistry, 2023-03-         2023-03-         2023-03-	Sankar Chandra Moi	M. Sc. Chemistry Practical Examination	Bankura University	2023-02-	2023-02-
Paresh Nath Chatterjee         PhD thesis examination         IIIT Allahabad, Prayagraj         2023-02- 07         2023-02- 07           Apurba Kumar Patra         PhD Thesis Examiner         Delhi University         2023-02- 06         2023-02- 06         2023-02- 06           Apurba Kumar Patra         PhD Thesis Examiner         IACS, Kolkata         2022-10- 25         2022-10- 25         2022-08- 25           Rajnarayan Saha         Pre-Ph.D Seminar         Visva-Bharati         2022-08- 2022-08- 2023-02- 2023-02- 2023-02- 2023-02- 2023-02- 2023-02- 2023-02- 2023-02- 2023-02- 2023-03- 2023-03- 2023-03- 2023-03- 2022-04- 2022-04- 2022-04- 2022-04- 2022-04- 2022-04- 2022-04- 2022-04- 2022-04- 2022-04- 2022-04- 2022-04- 2022-04- 2022-04- 2022-04- 2022-04- 2022-04- 2022-04- 2023-03- 2023-0				01	01
Paresh Nath Chatterjee         PhD thesis examination         IIIT Allahabad, Prayagraj         2023-02- 07         2023-02- 07           Apurba Kumar Patra         PhD Thesis Examiner         Delhi University         2023-02- 06         2023-02- 06         06           Apurba Kumar Patra         PhD Thesis Examiner         IACS, Kolkata         2022-10- 25         2022-10- 25         25         25           Rajnarayan Saha         Pre-Ph.D Seminar         Visva-Bharati University         2022-08- 08         08         08           Rajnarayan Saha         MSc. in Conservation Biology         Kazi Nazrul         2023-02- 2023-02- 023-02- 023-02- 023-02- 023-02- 023-02- 023-02- 023-03- 023	Sankar Chandra Moi	Ph. D. Course work question moderation	Bardwan University	2023-01-	2023-01-
Chatterjee         Prayagraj         07         07           Apurba Kumar Patra         PhD Thesis Examiner         Delhi University         2023-02-06         60           Apurba Kumar Patra         PhD Thesis Examiner         IACS, Kolkata         2022-10-25         2022-10-25           Apurba Kumar Patra         Pre-Ph.D Seminar         Visva-Bharati         2022-08-25         2022-08-25           Rajnarayan Saha         MSc. in Conservation Biology         Kazi Nazrul         2023-02-20-20-20-20-20-20-20-20-20-20-20-20-				10	10
Apurba Kumar Patra         PhD Thesis Examiner         Delhi University         2023-02-06         2023-02-06           Apurba Kumar Patra         PhD Thesis Examiner         IACS, Kolkata         2022-10-25         25         25           Rajnarayan Saha         Pre-Ph.D Seminar         Visva-Bharati         2022-08-202-08-08         2022-08-08-08           Rajnarayan Saha         MSc. in Conservation Biology         Kazi Nazrul         2023-02-202-02-02-02-02-02-02-02-02-02-02-02	Paresh Nath	PhD thesis examination	IIIT Allahabad,	2023-02-	2023-02-
Apurba Kumar Patra	Chatterjee		Prayagraj	07	07
Apurba Kumar Patra         PhD Thesis Examiner         IACS, Kolkata         2022-10-25         2022-10-25           Rajnarayan Saha         Pre-Ph.D Seminar         Visva-Bharati University         2022-08-08-08         2022-08-08-08-08           Rajnarayan Saha         MSc. in Conservation Biology         Kazi Nazrul University         2023-02-10-10-10         2023-02-10-10-10           Rajnarayan Saha         MSc. in Conservation Biology         Kazi Nazrul University         2023-03-10-10-10         2023-03-10-10-10           Rajnarayan Saha         BRS meeting in Conservation Biology         Kazi Nazrul University         2022-05-10-10-10-10-10-10         2022-05-10-10-10-10-10-10-10-10-10-10-10-10-10-	Apurba Kumar Patra	PhD Thesis Examiner	Delhi University	2023-02-	2023-02-
Rajnarayan Saha         Pre-Ph.D Seminar         Visva-Bharati University         2022-08-2022-08-2022-08-2022-08-202-2023-02-202-2023-02-202-2023-02-202-2				06	06
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Rajnarayan Saha MSc. in Conservation Biology Kazi Nazrul 2023-02- 2023-02- University 10 10 10  Rajnarayan Saha MSc. in Conservation Biology Kazi Nazrul 2023-03- 2023-03- University 21 21  Rajnarayan Saha BRS meeting in Conservation Biology Kazi Nazrul 2022-05- 2022-05- University 02 02  Rajnarayan Saha UGBOS meeting for conducting the UG 2nd and 4th semester examination. Kazi Nazrul 27 27  Rajnarayan Saha UGBOS meeting for conducting the UG 2nd, 4th and 6th semester examination Kazi Nazrul 28 28				25	25
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Rajnarayan Saha MSc. in Conservation Biology Kazi Nazrul 2023-03- 2023-03- University 21 21  Rajnarayan Saha BRS meeting in Conservation Biology Kazi Nazrul 2022-05- 2022-05- University 02 02  Rajnarayan Saha UGBOS meeting for conducting the UG 2nd and 4th semester examination. Kazi Nazrul 27 27  Rajnarayan Saha UGBOS meeting for conducting the UG 2nd, 4th and 6th semester examination Kazi Nazrul 28 28			University	08	08
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Rajnarayan Saha BRS meeting in Conservation Biology University 2022-05- University 02 02  Rajnarayan Saha UGBOS meeting for conducting the UG 2nd and 4th semester examination. Kazi Nazrul 27 27  Rajnarayan Saha UGBOS meeting for conducting the UG 2nd, University University University 2023-03- 2023-03- 4th and 6th semester examination Kazi Nazrul 28 28	Rajnarayan Saha	MSc. in Conservation Biology	Kazi Nazrul	2023-03-	2023-03-
Rajnarayan Saha UGBOS meeting for conducting the UG 2nd and 4th semester examination.  Rajnarayan Saha UGBOS meeting for conducting the UG 2nd and University  Rajnarayan Saha UGBOS meeting for conducting the UG 2nd, 4th and 6th semester examination Kazi Nazrul 28 28			University	21	21
Rajnarayan Saha UGBOS meeting for conducting the UG 2nd and 4th semester examination.  Rajnarayan Saha UGBOS meeting for conducting the UG 2nd and University  Rajnarayan Saha UGBOS meeting for conducting the UG 2nd, 4th and 6th semester examination  Rajnarayan Saha UGBOS meeting for conducting the UG 2nd, 4th and 6th semester examination  Kazi Nazrul  Dept. of Chemistry, 2022-04-27  University  Dept. of Chemistry, 2023-03-2023-03-2023-03-28	Rajnarayan Saha	BRS meeting in Conservation Biology	Kazi Nazrul	2022-05-	2022-05-
4th semester examination.  Rajinarayan Saha  UGBOS meeting for conducting the UG 2nd, 4th and 6th semester examination  Kazi Nazrul  University  Dept. of Chemistry, 2023-03-2023-03-4th and 6th semester examination  Kazi Nazrul  28 28			University	02	02
Rajnarayan Saha UGBOS meeting for conducting the UG 2nd, 4th and 6th semester examination Kazi Nazrul 28 28	Rajnarayan Saha	UGBOS meeting for conducting the UG 2nd and	Dept. of Chemistry,	2022-04-	2022-04-
Rajnarayan Saha UGBOS meeting for conducting the UG 2nd, Dept. of Chemistry, 2023-03-2023-03-4th and 6th semester examination Kazi Nazrul 28 28		4th semester examination.	Kazi Nazrul	27	27
4th and 6th semester examination Kazi Nazrul 28 28			University		
	Rajnarayan Saha	UGBOS meeting for conducting the UG 2nd,	Dept. of Chemistry,	2023-03-	2023-03-
University		4th and 6th semester examination	Kazi Nazrul	28	28
University			University		

## 4.3.24 Invited Expert in Selection Committees

Name of the Faculty	Discipline	University/Institute	From Date	To Date
Milan Maji	chairman of Research fellow selection	CMERI	2022-12- 09	2022-12- 09
Apurba Kumar Patra	Engineering, science,IDDP,M.Tech, PGDAMT	CSIR-CMERI	2023-05- 23	2023-05- 23
Rajnarayan Saha	Admission in Ph.D Engineering Science and Chemical Science	CSIR-CMERI	2022-11- 03	2022-11- 04
Rajnarayan Saha	Admission in Ph.D programme in conservation Biology	Kazi Nazrul University	2023-01- 31	2023-01- 31

## 4.3.25 Invited Lectures

Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Deb Ranjan Banerjee	A chemist's dream to investigate epigenetics: A combined theoretical and experimental studies	International Symposium On Emerging Trends In Chemical Sciences	NEHU, Shillong	2023-03- 02	2023-03- 04
Subhas Ghosal	Structure elucidation of simple hydrocarbons through Global Optimization using Density Functional Theory and post HF methods	Young Scientist Lecture (YSL) invitation for ETCS- 2023, NEHU, Shillong	NEHU, Shillong	2023-03- 02	2023-03- 04



Sankar Chandra Moi	Pt(II) based anticancer drug design and drug development	Inauguration programme for centre in recent advances in chemistryment of	Bankura University	2023-03- 28	2023-03- 28
Sankar Chandra Moi	Pt(II) based anticancer drug design and drug development	59th Convection of chemists (ACC-2022) of Indian Chemical Society (International Conference on Recent Trends in Chemical Sciences-2022(RTCS-2022)	Department of Chemistry, IIT (ISM) Dhanbad	2022-12- 16	2022-12- 18
Sankar Chandra Moi	A brief research on biophysical study on soft and bio-materials to design and develop Pt(II) based anticancer drug	One day Seminar in DBT Star College Scheme	Durgapur Government College	2023-02- 08	2023-02- 08
Paresh Nath Chatterjee	Greener approaches to organic synthesis and utilization of spectroscopic techniques in mechanistic understanding	Seminar cum workshop organized by Department of Chemistry, Durgapur Govt. College	Durgapur	2023-03- 27	2023-03- 27
Rajnarayan Saha	Biodegradability Enhanced by Advanced Oxidation Process for Highly Toxic Organics	Seminar cum Workshop series under the DBT STAR COLLEGE SCHEME of Durgapur Government College.	Durgapur Government College.	2023-03- 31	2023-03- 31

# 4.3.26 Session Chair/Convenor

Name of the Faculty	Programme	Place	Session	From Date	To Date
Sankar Chandra Moi	59th Convention of chemists (ACC-2022) of Indian Chemical Society (International Conference on Recent Trends in Chemical Sciences-2022(RTCS- 2022)	IIT (ISM) Dhanbad	Analytical Chemistry Section division	2022-12- 16	2022-12- 18
Rajnarayan Saha	5th Regional Science & Technology Congress (Region 7), 2022-23, DST & BT Govt. of Westbengal	The University of Burdwan	2022-23	2023-01- 06	2023-01- 07

## 4.4 Department of Computer Science & Engineering

#### 4.4.1 Department at a Glance

The Department started imparting instructions with the most modern curricula and syllabus to the students for undergraduate course since 1991 and post graduate course since July, 2004. The Department maintains an excellent teaching/learning and research environment with dedicated, qualified and dynamic faculties and well equipped laboratories.

The Department of Computer Science and Engineering (CSE) embodies the Institute's tradition of excellence in engineering education. CSE is in a period of exciting growth and opportunity. CSE Graduates capture leading academic appointments as well as opportunities in renowned computer industries.

Apart from UG & PG S/W & H/W Laboratories the Department has designed few specialized research Laboratories which includes highly sophisticated VLSI laboratory & Embedded Systems laboratory, Bio-medical Engineering laboratory, Systems laboratories, Data Science laboratory, Software Engineering Laboratory, etc. It also focuses research in areas like Bioinformatics, algorithms, security, natural language processing which the researchers have made a foray into in recent years. The newly built augmented space in the Department (1st floor of the Chemistry Building) department will host sophisticated Software Laboratories for Undergraduate & Post Graduate Programmes, dedicated server rooms including few specialized Laboratories.

#### 4.4.2 Mission & Vision

#### Mission:

M1. Imparting quality education through the well-designed curriculum in tune with the challenging needs of the industry and society.

M2. Providing state-of-art research facilities to generate knowledge and develop technologies in the thrust areas of Computer Science and Engineering.

M3. Developing linkages with world-class organizations to strengthen industry-academia relationships for mutual benefit.

M4. To produce quality engineers, researchers, and successful professionals who will become responsible citizens by contributing to the progress of the nation.

#### Vision:

Attaining global recognition in the area of Computer Science & Engineering through creating, applying, and imparting scientific and technical education, research, and training to meet the growing needs of the industry and society.

#### 4.4.3 Faculty

Name	Designation	Email-id
Debashis Nandi	Professor	dnandi.cse@nitdgp.ac.in
Subhrabrata Choudhury	Professor	schoudhury.cse@nitdgp.ac.in
Subrata Nandi	Professor	snandi.cse@nitdgp.ac.in
Suchismita Roy	Professor	sroy.cse@nitdgp.ac.in
Tandra Pal	Professor	tpal.cse@nitdgp.ac.in
Tanmay De	Professor	tde.cse@nitdgp.ac.in
Animesh Dutta	Associate Professor	adutta.cse@nitdgp.ac.in
Anirban Sarkar	Associate Professor	asarkar.cse@nitdgp.ac.in
Baisakhi Chakraborty	Associate Professor	bchakraborty.cse@nitdgp.ac.in
Bibhash Sen	Associate Professor	bsen.cse@nitdgp.ac.in
Dakshina Ranjan Kisku	Associate Professor	drkisku.cse@nitdgp.ac.in
Debasis Mitra	Associate Professor	dmitra.cse@nitdgp.ac.in
Goutam Sarker	Associate Professor	gsarker.cse@nitdgp.ac.in
Mousumi Saha	Associate Professor	msaha.cse@nitdgp.ac.in
Prasenjit Choudhury	Associate Professor	pchoudhury.cse@nitdgp.ac.in
Sajal Mukhopadhyay	Associate Professor	smukhopadhyay.cse@nitdgp.ac.in
Saravanan Chandran	Associate Professor	schandran.cse@nitdgp.ac.in
Suvamoy Changder	Associate Professor	schangder.cse@nitdgp.ac.in
Suvrojit Das	Associate Professor	sdas.cse@nitdgp.ac.in
Sujan Kumar Saha	Associate Professor	sksaha.cse@nitdgp.ac.in
Abhijit Sharma	Assistant Professor	asharma.cse@nitdgp.ac.in



Name	Designation	Email-id	
Ankush Acharyya	Assistant Professor	aacharyya.cse@nitdgp.ac.in	
Deepanwita Das	Assistant Professor	ddas.cse@nitdgp.ac.in	
Jaydeep Howlader	Assistant Professor	jhowlader.cse@nitdgp.ac.in	
Mamata Dalui	Assistant Professor	mdalui.cse@nitdgp.ac.in	
Nanda Dulal Jana	Assistant Professor	ndjana.cse@nitdgp.ac.in	
Parag K Guha Thakurta	Assistant Professor	pkguhathakurta.cse@nitdgp.ac.in	
Rajib Kumar Chatterjee	Assistant Professor	rkchatterjee.cse@nitdgp.ac.in	
Sandip Karmakar	Assistant Professor	skarmakar.cse@nitdgp.ac.in	
Sanghita Bhattacharya	Assistant Professor	sbhattacharjee.cse@nitdgp.ac.in	
Sanjib Sadhu	Assistant Professor	ssadhu.cse@nitdgp.ac.in	
Subhankar Majhi	Assistant Professor	smajhi.cse@nitdgp.ac.in	
Sujoy Saha	Assistant Professor	ssaha.cse@nitdgp.ac.in	
Narayan Murmu	Assistant Professor	nmurmu.cse@nitdgp.ac.in	
Shyantani Maiti	Assistant Professor	smaiti.cse@nitdgp.ac.in	
Monalisa Mandal	Assistant Professor	mmandal.cse@nitdgp.ac.in	
Subhas Chandra Sahana Assistant Professor scsahana.cse@nito		scsahana.cse@nitdgp.ac.in	
Suvadip Batabyal	Assistant Professor	sbatabyal.cse@nitdgp.ac.in	

# 4.4.4 Equipments

Sl. No.	Equipment	Quantity	Date of purchase	Amount (₹)
01.	Water Cooler cum Purifier(120 Liter)	01	April, 2022	1,98,500/-
02.	Water Cooler cum Purifier(80 Liter)	01	1	
03.	Digital 24 port L2 Switch	07	November, 2022	73,815/-
04.	Arduino Board	13	November, 2022	23,400/-
05.	Rack Server (PowerEdgeR750)	01		
06.	Server Rack(NRS600 series)	01	December,2022	71,05,101/-
07.	Online UPS(MFP3120L16)	01	7	
08.	Desktop(Optiplex 7000 Tower)	62	1	
09.	Desktop Category1(Dell)	67		
10.	Desktop Category2(Dell)	02	N 1 2022	71 (2.015)
11.	Laptop(HP)	01	March,2023	71,62,915/-
12.	Projector(InFocus)	05	1	
13.	Online UPS(APC, SURT 20 KVA)	02	1	
14.	TinyML(Type-1)	02		37,524/-
15.	TinyML(Type-2)	06	March,2023	
16.	White Board(8ftX4ft)	01	September,2022	8,496/-
17.	White Screen Projector	01	September, 2022	12,500/-
18.	Computer Table	18		
19.	Wall Mount Wardrobe	02	1	
20.	Dias + Podium	01	1 1	
21.	White Board	02	]	
22.	Office Table	05	December,2022	
23.	Executive office table	01	1	
24.	Steel Almirah	01	1	11,29,974/-



Sl. No.	Equipment	Quantity	Date of purchase	Amount (₹)
25.	File Cabinet	02		
26.	Executive Chair	02		
27.	Office Chair	12		
28.	Center Table	02		
29.	Window Curtain	18		
30.	Fibre Chair without arm	60		
31.	Aluminum Frame partition (850cmX270cm)	01		
32.	Custom made Computer Table	1800 cm.		
33.	Almirah	15		
34.	Office Table	04	0-4-1 2022	5.02.070/
35.	Executive Chair	10	October, 2022	5,03,070/-
36.	Visiting Chair	25		
37.	Fiber Chair	50		
38.	Soft Partition	01	February, 2023	35,000/-
39.	Centre Table (wood top) [914mmX533mm]	01	March, 2023	8,000/-
40.	Wooden Almirah	01	February,2023	15,000/-
41.	Horizontal Vanishing Curtain	12	March,2023	23,750/-
42.	Shoe Rack[3ftX1.5ft.X1.2ft]	04	March, 2023	19,800/-
43.	2 seater sofa with Leatherite c	01	February, 2023	22,000/-

## 4.4.5 Labs

Sl. No.	Name of Laboratory	Major equipment
1	Software Lab - I	Computers (62 nos.)
2	Software Lab - II	Server (1no.), Computers (95 nos.)
3	Software Lab - III	Computers (8 nos.)
4	Research Lab - I	Computers (13 nos.)
5	Research Lab - II	Super micro GPU System (01 no.), Computers (6 nos.), Workstation (1 no.)
6	Research Lab - III	Computers (12 nos.)
7	Server Room	Rack Server (1 no.)
8	VLSI Lab	Computers (35 nos.), Server (1 no.), Xilinx Spartan 3E (24 nos.)
9	Embedded System Lab	Computers (25 nos.), Arduino Board (13 nos.)
10	Biomedical and	Workstation (02), Server (01), Mobile Devices, Printer (01), EEG and fNIRS devices
	Healthcare Engineering	
	Lab	
11	CoE-IoTIS Lab	Workstation (02), Desktop (02), Tobii-Pro Eyetracker Device (01), GSR-EMG
		Biofeedback Device (02), Mobile Device (01)

## 4.4.6 PhD degree awarded till 2022-23

One hundred six.

## 4.4.7 Specialization

- Compiler Design
- Machine Learning
- Data Structures
- Deep Learning for Image Processing
- Operating Systems
- Natural Language Processing
- Computional Geometry
- VLSI Design and Test



- Networks and Communication, Real-time systems
- Computer Vision, Biometrics, Information Security
- Computer Vision, Medical Imaging, Evolutionary Optimization Algorithm, Machine Learning
- Algorithms and Game Theory
- · CAD for VLSI Design and Test, Algorithms and Game Theory
- Computer vision and image processing
- AI applications
- Mobile Computing
- · Computational Biology, Bioinformatics
- Mobile Computing
- Sensor Network
- Internet of Things
- Ubiquitous Computing
- Multi Agent System, Social Network Analysis, Distributed Computing
- Wireless Networks & Mobility
- Data Analytics, Grid Computing, Recommender System
- Software Engineering, Database System
- Cellular Automata
- Computer Security
- Knowledge Management Systems, DBMS
- Cryptography, Theoretical Computation, Blockchain
- Information Security (Steganography)
- Quantum Computing
- Cryptography and Network Security
- · Communication networks, Distributed Systems
- · Artificial Intelligence and Machine Learning
- Machine Learning and Optimization
- Database management systems
- Software Engineering, Multi Agent Systems, Medical Image Specification using Machine Learning
- Operating Systems, Object Oriented Programming, Computer Networks
- IoT, Security, Blockchain, Cybersecurity
- Computer Science and Engineering

#### 4.4.8 Proposed Plan for Research

- Natural Language Processing
- Geometric facility location problems for Imprecise data
- Computer Vision, Biometrics, Information Security
- Cognitive Science
- Developing Computer Aided Diagnostic System for Healthcare
- Behavioural Economics and Game Theory, Crowdsourcing, Kidney Exchange problem, Voting, Multi-Armed Bandit, Matching
- · Meteorological issues
- Working on good quality research proposal
- The hype in the field of aging research during the recent years indicates that healthy aging has long term societal impacts and economic consequences. The valuable knowledge which can be gained from this project along with the possibilities created by other technological developments can be considered to develop novel treatments which are very much required in society. The age related diseases cause degradation in the quality of life and are a reason for healthcare and socioeconomic challenges. Many countries are trying to solve this problem by developing new healthcare programs and plans. Machine learning and Artificial Intelligence combined with Big Data and other novel computational approaches can be used to track and monitor disease patterns, make better healthcare systems for people, develop new drugs and design appropriate ways to lead a healthy life. These all factors are interrelated which will help us to unravel the path towards healthy aging and longevity.
- Currently working in the area of caching in D2D networks for improving QoE in multimedia streaming. Will be
  implementing a test-bed on this. Further research will be done using mmWave and beamforming. Also working in the
  area of Integrated Access and Backhaul for multimedia streaming.
- IoT, Human Activity Monitoring, Pervasive Sensing, Body Area Networks
- Gesture Recognition using Vison Based Sensor & Wearables Sensors
- Exploration of TinyML for different Societal Applications
- Design & Development of AI enabled Rural Education/Telemedicine System

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- The plan is to find out cancer biomarkers from cancer microarray gene expression data computationally. After doing some literature survey we concluded that the problem of identifying gene markers from cancer microarray data reduces to the problem of identifying the genes that are differentially expressed in normal and cancerous samples. From a computational point of view, this problem can be modeled as a feature selection problem, where genes are considered as the features. Then we developed different feature selection methods such as multiobjective optimizationbased Particle Swarm Optimization, Fuzzy Rule-based Classifier, Graph-Theoretic framework, etc. to get the resultant marker genes and performed various statistical validation on the outcome.
- Multi Agent System, Social Network Analysis, Distributed Computing
- In today's rapidly evolving technological landscape, Adaptive and Inclusive Technology has emerged as a pivotal multidisciplinary field that addresses the diverse needs of individuals, particularly those with disabilities. This dynamic field is dedicated to developing and implementing innovative technologies that transcend limitations and empower individuals to engage fully in all dimensions of life. This proposed research plan seeks to delve into the intricacies of Adaptive and Inclusive Technology, exploring its multifaceted dimensions, innovative applications, and farreaching implications. By delving into the heart of this transformative field, this research endeavors to contribute valuable insights that propel us toward a more equitable and inclusive technological landscape.
- Software Integrated IoT Based Applications
- IOT, Cellular Automata, Data Analysis
- On Distributed Systems and Computer Security
- Development of ASR in Santali and Sadri (Nagpuri) languages. Development of a system for automatic evaluation of Handwritten Bengali answers of school students.
- Plan to research more on cognitive systems and publish research papers on the same area.
- · Research for a class of functions that can be securely evaluated without knowing the function itself,
- Designing Different Quantum Image Representation
- Finding Computational Aesthetic of photographs
- The hype in the field of aging research during the recent years indicates that healthy aging has long term societal impacts and economic consequences. The valuable knowledge which can be gained from this project along with the possibilities created by other technological developments can be considered to develop novel treatments which are very much required in society. The age related diseases cause degradation in the quality of life and are a reason for healthcare and socioeconomic challenges. Many countries are trying to solve this problem by developing new healthcare programs and plans. Machine learning and Artificial Intelligence combined with Big Data and other novel computational approaches can be used to track and monitor disease patterns, make better healthcare systems for people, develop new drugs and design appropriate ways to lead a healthy life. These all factors are interrelated which will help us to unravel the path towards healthy aging and longevity.
- Authentication and Privacy Preservation in IoT based Health care System
- To Contribute in Public Policy Formulation using Computational Social Science
- Application of AI and ML in Terrestrial (Cosmic) Object Classification
- To develop algorithm for various fair division problems
- Presently working in the area of 5G Device to Device (D2D) Networks, and Elastic Optical Networks. We are trying to develop an approach which effectively manage different resources in Elastic Optical Networks, and as well as protect the network from failure. Also working in the area of Resource Allocation and Cluster-Head Selection for Energy Aware 5G Device to Device communication.
- Our research focus on designing algorithms for different colour spanning problems of coloured geometric objects. We also study the 2 center covering, hitting, stabbing problem for line segments.
- VLSI
- Design and Development of Non-invasive Anaemia Detection Systems
- Image Specification using Machine Learning
- To develop systems to solve problems faced in developing regions focusing arears like transportation, disaster management, environnment monitoring Cognitive Computing based on Brain Signal Data

#### 4.4.9 Area of Research Interest

- · Swarm Robotics, Distributed Algorithms
- Deep Learning
- Machine Learning
- Image Processing
- Biometrics
- Pattern Classification
- Natural Language Processing, Education Technology, Speech Processing
- Formal Verification and Performance Analysis of VLSI circuits. Boolean Satisfiability based Simulation Techniques in VLSI Design Automation and Testing. FPGA based Embedded System design. Hardware Security.
- · Computer Vision, Biometrics, Information Security



- Computational Geometry, Approximation Algorithm
- Hardware Security
- · Cognitive Science
- Hardware Trojan Detection and Prevention
- Secure Architecture for IoT application
- Quantum-dot Cellular Automata (QCA), Reversible Logic and Fault-Tolerant Architecture
- · Behavioural Economics and Game Theory, Crowdsourcing, Kidney Exchange problem, Voting, Multi-Armed Bandit
- Computer-aided design and testing of digital VLSI circuits, Algorithms for design and testing of digital microfluidic biochips, Fault-tolerant design of quantum-dot cellular automata circuits, Fairness issues in automated decision making
- Robotics Vision, Stereo Vision
- · Data analysis
- Wireless Sensor Networks, IoT, Mobile Computing
- Intelligent Biomedical Devices, Multi-Processor and Multi-Core Architecture, Hardware Security, VLSI Design and Test, Theory and Applications of Cellular Automata (CA)
- D2D communication, multimedia streaming, Integrated access and backhaul, mobile opportunistic networks.
- Scheduling in real-time systems
- Bioinformatics, Machine Learning, Data Mining, Cancer Informatics
- · Internet of Things
- Ubiquitous Computing
- Speech Processing
- Human Computer interaction
- Soft Computing, Cognitive Computing, Pattern Recognition, Evolutionary Multi-objective Optimization, ANN, Fuzzy Logic
- Multi Agent System, Social Network Analysis, Distributed Computing
- Adaptive and Inclusive Technology
- Deep Learning and Activity Recognition
- Software Design, Database System Design
- IOT, Cellular Automata, Machine learning
- Computer Security
- DBMS, Case based Reasoning, NLP, Knowledge Systems, Cognitive Sciences
- Computational Aesthetics
- Multiparty Computation, Secure function Evaluation
- Quantum Computing
- Steganography & Watermarking
- Research area: Bioinformatics and Computational Biology
- Research area: Bioinformatics and Computational Biology
- IoT Security
- Communication Networks, IoT Service Management, Computational Social Science
- Computational Geometry, Design and analysis of algorithms, Approximation Algorithms
- Image Processing and Pattern Recognition, Data Warehousing and Data Mining, Application of AI and ML in Terrestrial (Cosmic) Object Classification 3) Text and Image Categorization and Summarization
- Optical Network, D2D Communication Network, Delay Tolerant Network, Wireless Sensor Networks
- Neural Architecture Search, Explainable AI, Generative AI, Evolutionary Computation VLSI
- · Software Engineering, Multi Agent Systems, Medical Image Specification using Machine Learning
- IoT, Sensing Systems, Pervasive Computing, Network Science
- IoT, Security, Blockchain, Cybersecurity

#### 4.4.10 Institute Industry Collaboration

Collaborating Institute Organization	Areas of collaboration	Collaboration Activities
Tata Consultancy Service, Mumbai	Cognitive Science	Cognitive load assessment methods for the blind, in
		adaptation to new assistive technologies
IBM	DBMS	Internship
TCS	Human Computer	Research Activities/Project
	Interaction	
DRDO	Speech Processing	Research Activities/Project
Samsung India	Mobile App	Project Guide
	Development	

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Collaborating Institute Organization	Areas of collaboration	Collaboration Activities
Tata Consultancy Services, Mumbai	Inclusive Technology	Project and Research
George Masion University, USA	5G Technologies,	Joint journal papers
	Degign of robust UAV	
	Networks	

## 4.4.11 Collaboration with Academic and Research Institutions

Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
NIT Silchar	VLSI Design	Dr. Shyamapada Mukherjee	PhD Guidance
Indian Institute of Technology Delhi	Cognitive Science	Dr. Suvrojit Das, Prof. Suchismita Roy, Prof. Anupam Basu	Neurocomputing and Cognitive Intelligence- Developing a model for Analysing the Learning Disabilities of Dyslexic Child
Department of Computer Science , Universitat Politècnica de Catalunya Barcelona, Spain	Game Theory and its Applications to Cloud, Fog, Healthcare, Crowdsourcing, Surplus Food Distribution etc.	Sajal Mukhopadhyay and Fatos Xhafa	Research
University of Calcutta	Research and Project	Amlan Chakraborti, Subrata Nandi	Project and PhD guidance
University of Sabanci, Turkey	Networks and Communication	Prof. Ozgur Ercetin	Research, article publication
IIT Jodhpur	Real-time stream processing	Dr. Debasis Das	research, article publication
NIBMG Kalyani Nadia	Wetlab Experiments for the Computational Outcome	Dr. Arindam Maitra	TBD
Eindhoven University of Technology , Netherlands	Computational Biology	Federica Eduati	TBD
IIEST Shibpur	Human Computer Interaction	Dr. Nirnay Ghosh	Research Activities
Claude Bernard University Lyon 1	Multi Agent System	Prof. Samir Aknine	Joint Publications
Polytechnic of Porto, Portugal	Multi Agent System, Social Network Analysis	Dr. Mariana Curado Malta	Publication, Joint Research Projects
GLA University	Image Processing, Biometrics, Computer Vision	Prof. Phalguni Gupta	Research
IIEST Shibpur	Cellular Automata	Dr. B. K Sikdar	Research
Indian Statistical Institute, Kolkata	Generative AI and Speech Synthesis	Prof. Swagatam Das	Joint PhD supervision
Indian Statistical Institute, Kolkata	Computational Geometry	Prof. Subhas C Nandy	Research
Carleton University, Canada	Computational Geometry	Prof. Anil Maheswari	Research
Czech Technical University in Prague	Computational Geometry	Dr. Maria Saumell	Research
Universitat Politècnica de Catalunya	Computational Geometry	Dr. Rodrigo I. Silveira	Research
Utrecht University, Netherlands	Computational Geometry	Dr. Maarten Löffler	Research
Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar	Theoretical Computer Science	Dr. Supantha Pandit	Research
Indraprastha Institute of Information Technology, Delhi	Theoretical Computer Science	Dr. Diptapriyo Majumdar	Research



Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar, Gujarat, India	Computational Geometry	Dr. Supantha Pandit	Joint Research.
University of Calcutta	Water Management, IoT	Prof Amlan Chakraborty	Joint Project proposal Submitted, joint paper submitted
George Masion University, USA	5G Technologies, Degign of robust UAV Networks	Dr Vijay Shah	Joint journal papers

## 4.4.12 Innovations and Technology Transfer (Patents filed during)

Title	Inventors	Application Nos	Date of Filling
A Portable Apparatus for Enabling Steady Capture of Color Transformer of Finger Nail-bed	Dr. Mamata Dalui, Dr. Dakshina Ranjan Kisku, Sunanda Das,Abhishek Kesarwani, Dr. Bibhash Sen, Prof. Suchismita Roy, Prof. Anupam Basu	202331017986A	2023-03-16
A method and system for prognosis of anaemia Based on observation of palm colour.	Dalui, M., Kisku, D.R., Kesarwani, A., Das, S., Sen, B., Roy, S. and Basu, A.	202131000062.	2021-01-01
A portable apparatus for Enabling steady capture Of color transformation of finger nail-bed	Dalui, M., Kisku, D.R., Das, S., Kesarwani, A., Sen, B., Roy, S. and Basu, A.	202331017986	2023-03-16

# 4.4.13 Workshops/Seminars Organized

Name of Key Speaker(s)	Name of the Programme	Date of the Programme
Mr. Gopal Kumar Nath	GATI Self Defence Program	2023-01-07
Prof. Amlan Chakraborty	Research Scholar Day, 2023	2022-11-17
Dr. Aniruddha Sinha, TCS Innovation Lab, Kolkata & Prof. Sanjoy K Saha, JU	Two Days' workshop on "Assessment of the Learning Materials (LMs)"	2022-04-22
Prof. Soumyajit Dey,Dept.of CSE, IIT Kharagpur	Workshop on high performance computing	2023-01-18
Prof. Swarnendu Biswas, Dept.of CSE, IIT Kanpur	Workshop on high performance computing	2023-01-21
Prof. Niloy Ganguly	Technical Talk	2023-02-15



## 4.4.14 Journal: Published in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
A Kesarwani, S Das, Mamata Dalui, Dakshina Ranjan Kisku, Bibhash Sen, Suchismita Roy, Anupam Basu	Non-invasiveAnaemia Detection by Examining Palm Pallor: A Smartphone-based Approach	Biomedical Signal Processing and Control	Volume:79 Issue No:1 Page No:1-13 Year:2023 Month:Jan
Dhawaleswar Rao CH and Sujan Kumar Saha	Generation of Multiple- Choice Questions from Textbook Contents of School-Level Subjects	IEEE TRANSACTIONS ON LEARNING TECHNOLOGIES	Volume:16 Issue No:1 Page No:40-52 Year:2023 Month:Feb
Ankur Priyadarshi, Sujan Kumar Saha	A Study on the Performance of Recurrent Neural Network based Models in Maithili Part of Speech Tagging	ACM Transactions on Asian and Low-Resource Language Information Processing	Volume:22 Issue No:2 Page No:1-16 Year:2013 Month:Feb
Amit Prakash, Niraj Kumar Singh,Sujan Kumar Saha	Automatic extraction of similar poetry for study of literary texts: An experiment on Hindi poetry	ETRI Journal, Wiley	Volume:44 Issue No:3 Page No:413-425 Year:2022 Month:Apr
Ankush Acharyya; Ramesh Jallu; Vahideh Keikha; Maarten Loffler; Maria Saumell	Minimum Color Spanning Circle of Imprecise Points	Theoretical Computer Science	Volume:930 Issue No: Page No:116-127 Year:2022 Month:
Sudeshna Kundu, Suchismita Roy, Shyamapada Mukherjee	Congestion-aware Rectilinear Steiner Tree Construction using PB-SAT	World Scientific Journal of Circuits, Systems and Computers	Volume:31 Issue No:09 Page No:Article No. 2250165 Year:2022 Month:
Anindan Mondol, Bibhash Sen, Suchismita Roy	4. Hardware Trojan Detection using Transition Probability with Minimal Test Vectors	ACM Transactions on Embedded Computing Systems	Volume:22 Issue No:1 Page No:1-21 Year:2022 Month:Oct
A Kesarwani, Sunanda Das, Mamata Dalui, Dakshina Ranjan Kisku, Bibhash Sen,Suchismita Roy, Anupam Basu	3. Non-invasive Anaemia Detection by Examining Palm Pallor: A Smartphone-based Approach	Elsevier Biomedical Signal Processing and Control	Volume:79 Issue No:1 Page No: Year:2023 Month:Jan
Kshitiza Vasudeva, Saravanan handran	SCL-FExR: supervised contrastive learning approach for facial expression Recognition	Multimedia Tools and Applications	Volume:82 Issue No: Page No:31351–31371 Year:2023 Month:Mar
Amit Kumar Pramanik, Mahabub Hasan Mahalat, Jayanta Pal, Seyed- Sajad Ahmadpour, Bibhash Sen	Cost-effective synthesis of QCA logic circuit using genetic algorithm	The Journal of Supercomputing	Volume:79 Issue No:4 Page No:3850–3877 Year:2022 Month:Sep
Amit Kumar Pramanik, Jayanta Pal, Kumar Mohit, Mrinal Goswami, Bibhash Sen	Cost-efficient method for inverter reduction and proper placement in quantum-dot cellular automata	International Journal of Electronics	Volume: Issue No: Page No:1-34 Year:2022 Month:Dec
Sanjib Saha, Subhadeep Dutta, Biswarup Goswami, Debashis Nandi	ADU-Net: An attention dense U-Net based deep supervised DNN for automated lesion	Biomedical Signal Processing and Control	Volume: Issue No: Page No: Year:2023 Month:Mar



Author(s) Name	Paper Name	Journal Name	Others Info
	segmentation of COVID-19 from chest CT images		
Manas Sarkar, Priyanka Rakshit Sarkar, Ujjwal Mondal, Debashis Nandi	Tetrolet Transform and Dual Dictionary Learning-Based Single Image Fog Removal	Arabian Journal for Science and Engineering	Volume:48 Issue No:10771– 10786 Page No: Year:2023 Month:Mar
Amit Paul and Animesh Dutta	Community detection using Local Group Assimilation	Expert Systems with Applications	Volume:206 Issue No: Page No:117794 Year:2022 Month
Samriddhi Sarkar, Mariana Curado Malta, and Animesh Dutta	A survey on applications of coalition formation in multiagent systems	Concurrency and Computation: Practice and Experience	Volume:34(11) Issue No: Page No:e6876 Year:2022 Month:
Abhijit Adhikari, Biswanath Dutta, and Animesh Dutta	Finding most informative common ancestor in cross-ontological semantic similarity assessment: An intrinsic information content based approach	Expert Systems with Applications	Volume:192 Issue No: Page No:116281 Year:2022 Month
Priyabrata Dash, Dakshina Ranjan Kisku, Phalguni Gupta, Jamuna Kanta Sing	Fast Face Detection using a Unified Architecture for Unconstrained and Infrared Face Images	Cognitive Systems Research	Volume:74 Issue No:1 Page No:18-38 Year:2022 Month:Apr
Rinku Datta Rakshit, Ajita Rattani and Dakshina Ranjan Kisku	An LDOP approach for face identification under unconstrained scenarios	Journal of Experimental & Theoretical Artificial Intelligence	Volume: Issue No: Page No:1-49 Year:2023 Month:Mar
Teressa Longjam, Dakshina Ranjan Kisku, Phalguni Gupta	Multi-scripted Writer Independent Off-line Signature Verification using Convolutional Neural Network	Multimedia Tools and Applications	Volume:82 Issue No:4 Page No:5839–5856 Year:2023 Month:Feb
Teressa Longjam, Dakshina Ranjan Kisku, and Phalguni Gupta	Writer independent handwritten signature verification on multi- scripted signatures using hybrid CNN-BiLSTM: A novel approach	Expert Systems with Applications	Volume:214 Issue No: Page No:1-19 Year:2023 Month:Mar
PKD Pramanik, T Biswas, P Choudhury	Multicriteria-based Resourceaware Scheduling in Mobile Crowd Computing: A Heuristic Approach	Journal of Grid Computing	Volume:21 Issue No: Page No: Year:2023 Month:Jan
Rath, C.K., Mandal, A.K., Sarkar, A.	Microservice based scalable IoT architecture for device interoperability	Computer Standards and Interfaces, Elsevier	Volume:84 Issue No: Page No:103697 Year:2022 Month
P. Pramanil, P. Karmakar, P. K Sharma, A. Roy, S Mondal, S hatterjee, S Nandi, S Chakrabarty, M saha and S saha	AQuaMoHo: Localized Low- cost Outdoor Air Quality Sensing over a Thermo- hygrometer	ACM Transaction on Sensor Network	Volume: Issue No:Vol 19 No 3 Page No:1-30 Year:2022 Month:Nov



Author(s) Name	Paper Name	Journal Name	Others Info
Sutapa Sarkar , Biplab Kumar Sikdar and Mousumi Saha	Cellular automata based multi-bit stuck-at fault diagnosis for resistive memory	Frontiers of Information Technology & Electronic Engineering, Springer	Volume:23 Issue No:7 Page No:1110-1126 Year:2022 Month:Aug
Nandan Banerjee and S. Choudhury	Auction inspired service replication for context-aware IoT environment	Concurrency and Computation, Practice and Experiences	Volume:35 Issue No:9 Page No:e7641 Year:2023 Month:Feb
D Naik, A Bauri, T De	Renewable Energy Aware Traffic Grooming in Hybrid Optical and WiMAX Networks	Wireless Personal Communications	Volume:123 Issue No: Page No:2317–2339 Year:2022 Month:Apr
J Dutta, PS Barma, A Mukherjee, S Kar, T De, D Pamučar, Š Šukevičius, Giedrius Garbinčius	Multi-objective green mixed vehicle routing problem under rough environment	Transport	Volume:37 Issue No:1 Page No:51–63 Year:2022 Month:May
R Pradhan, A Agarwal, T De	A Multi-Criteria Route Selection Method for Vehicles Using Genetic Algorithms Based on Driver's Preference	Wireless Personal Communications	Volume:125 Issue No:3 Page No:2477-2496 Year:2022 Month:Aug
Arghya Pathak, Jayashree Karmakar, Debashis Nandi , Mrinal Kanti Mandal	Feature enhancing image inpainting through adaptive variation of sparse coefficients	Signal, Image and Video Processing	Volume:17 Issue No: Page No:1189–1197 Year:2022 Month:Aug
Amish Kumar, Palash Ghosal, Soumya Snigdha Kundu, Amritendu Mukherjee,Debashis Nandi	A lightweight asymmetric U- Net framework for acute ischemic stroke lesion segmentation in CT and CTP images	Computer Methods and Programs in Biomedicine	Volume:226 Issue No: Page No:107157 Year:2022 Month:Nov
Surja Sanyal, Sajal Mukhopadhyay, Fatos Xhafa	Enhanced incentive schemes for volunteers to distribute surplus food in smart cities	Sustainable Cities and Society	Volume:91 Issue No:April 2023 Page No:104409 Year:2023 Month:Apr
Biswajit Maity, Abdul Alim, Sanghita Bhattacharjee Subrata Nandi,	DeHonk: A deep learning based system to characterize vehicular honks in presence of ambient noise	Pervasive and Mobile Computing	Volume:88 Issue No: Page No:101727 Year:2022 Month:Nov
Pragna Labani Sikdar, Abhinav Anurag and Parag Kumar Guha Thakurta	Efficacious tuning in energy efficient street lighting	Int. J. Ad Hoc and Ubiquitous Computing	Volume: Vol. 43, Issue No:No. 1 Page No:53-63 Year:2023 Month:May
Manas Kumar Mohanty, Parag Kumar Guha Thakurta, Samarjit Kar	Agricultural commodity price prediction model: a machine learning framework	Neural Computing and Applications	Volume:35 Issue No:20 Page No:15109-15128 Year:2023 Month:Mar
AKesarwani, Sunanda Das, Mamata Dalui, Dakshina Ranjan Kisku, Bibhash Sen, Suchismita Roy, and Anupam Basu	Non-invasive anaemia detection by examining palm pallor: A smartphone-based approach	Biomedical Signal Processing and Control	Volume:79 Issue No:1 Page No: Year:2023 Month:Jan



Author(s) Name	Paper Name	Journal Name	Others Info
Subashis Karmakar, Supreeti Kamily, Prasenjit Dey, Parag K. Guhathakurta, Mamata Dalui, Tushar Kanti Bera, Suman Halder, Chiranjib Koley, Tandra Pal, and Anupam Basu	Real time detection of cognitive load using fNIRS: A deep learning approach	Biomedical Signal Processing and Control	Volume:80 Issue No:1 Page No: Year:2023 Month:Feb
Mamata Dalui, Bidesh Chakraborty, Nilanjana Das and Biplab K. Sikdar	NSRT diagram for identification of SACA and TACA rules in null-boundary	International Journal of Modern Physics C, World Scientific	Volume:33 Issue No:06 Page No: Year:2022 Month:Jun
Leki Chom Thungon, Subhas Chandra Sahana and Md. Iftekhar Hussain	A lightweight certificate- based authentication scheme for 6LoWPAN-based internet of things	The Journal of Supercomputing	Volume:79 Issue No:11 Page No:1252312548 Year:2023 Month:Mar
P Pramanik, Prasenjit Karmakar, Praveen Kumar Sharma, Soumyajit Chatterjee, Abhijit Roy, Santanu Mandal, Subrata Nandi, Sandip Chakraborty, Mousumi Saha, Sujoy Saha	AQuaMoHo: Localized Low- cost Outdoor Air Quality Sensing over a Thermo- hygrometer	ACM Transactions on Sensor Networks	Volume:19 Issue No:3 Page No:1-30 Year:2021 Month:Mar
Prasenjit Karmakar, Vijay K Shah, Satyaki Roy, Krishnandu Hazra, Sujoy Saha, Subrata Nandi	Reliable Backhauling in Aerial Communication Networks Against UAV Failures: A Deep Reinforcement Learning Approach	IEEE Transactions on Network and Service Management	Volume:19 Issue No:3 Page No:2798-2811 Year:2022 Month:Aug
R Mondal, T Pal, and P Dey	A Hybrid Regularized Multilayer Perceptron for Input Noise Immunity	EEE Transactions on Artificial Intelligence	Volume:1 Issue No: Page No:1 - 12 Year:2023 Month:Jan
S. Karmakar, S. Kamilya, P. Dey, P. K Guhathakurta, M. Daluia, T.K Bera, S. Halder, C. Koley, T. Pal and A. Basu	Real Time Detection of Cognitive Load Using fNIRS: A Deep Learning Approach	Biomedical Signal Processing and Control	Volume:80 Issue No:1 Page No: Year:2023 Month:Feb
Debnath, S., Roy, R. & Changder, S.	A novel approach using deep convolutional neural network to classify the photographs based on leading-line by fine- tuning the pre-trained VGG16 neural network	Multimedia Tools and Applications	Volume: Issue No: Page No: Year:2022 Month:Jul
Rayani, P.K., Changder, S.	Continuous user authentication on smartphone via behavioral biometrics: a survey	Multimedia Tools and Applications	Volume:82 Issue No:2 Page No:1633-1667 Year:2023 Month:Jan
Rayani, P.K., Changder, S.	Sensor-based continuous user authentication on smartphone through machine learning	Microprocessors and Microsystems	Volume:96 Issue No: Page No:104750 Year:2023 Month:Feb
Changder, S., Majumder, A., Kundu, S.	An improved location mapping and cover synthesis based data hiding by model SSSP problem generation	Multimedia Tools and Applications	Volume:82 Issue No: Page No:29255–29281 Year:2023 Month:Feb



Author(s) Name	Paper Name	Journal Name	Others Info
Arunita Das, Amrita Namtirtha, and Animesh Dutta	Levy-Cauchy arithmetic optimization algorithm combined with rough K-means for image segmentation	Applied Soft Computing	Volume:140 Issue No: Page No:110268 Year:2023 Month:
Samriddhi Sarkar, Tuhin Biswas, Mariana Curado Malta, Deolinda Meira, and Animesh Dutta	A coalition formation framework of smallholder farmers in an agricultural cooperative	Expert Systems with Applications	Volume:221 Issue No: Page No:119781 Year:2023 Month:
Ramya D. Shetty, Shrutilipi Bhattacharjee, Animesh Dutta, and Amrita Namtirtha	GSI: An Influential Node Detection Approach in Heterogeneous Network using Covid-19 as Use Case	IEEE Transactions on Computational Social Systems	Volume: Issue No: Page No:01-15 Year:2022 Month:
Amrita Namtirtha, Biswanath Dutta, and Animesh Dutta	Semi-global triangular centrality measure for identifying the influential spreaders from undirected complex networks	Expert Systems with Applications	Volume:206 Issue No: Page No:117791 Year:2022 Month:
Narayan Changder, Samir Aknine, and Animesh Dutta	An Abortion Based Search Method for Optimal Coalition Structure Generation	Group Decision and Negotiation	Volume:31 Issue No: Page No:747–768 Year:2022 Month:
Chakraborty, P., Sarkar, A.	Dynamic Context Driven Reconfigurable Business Process	Annals of Emerging Technologies in Computing	Volume:6 Issue No:3 Page No:pp. 37–55 Year:2022 Month:
Suvadip Hazra and Mamata Dalui	Characterization of Single Length Cycle Two-Attractor Cellular Automata Using Next-State Rule Minterm	Complex Systems	Volume:31 Issue No:4 Page No: Year:2022 Month:
Narayan Murmu, Debashis Nandi	3D Shape Reconstruction using Single Camera and Two Mirrors	International Journal of Computing and Digital Systems	Volume:13 Issue No:1 Page No:159-167 Year:2023 Month:Jan
Praveen Kumar Sharma, Bidyut Dalal, Ananya Mondal, Argha Sen, Amartya Banerjee, Sandip Mondal, Tanmay De, Sujoy Saha	Indoor Air Sensing: A Study in Cost, Energy, Reliability and Fidelity in Sensing	Journal of Sensing and Imaging (Springer)	Volume:24 Issue No:1 Page No: Year:2023 Month:Feb
Anil Bikash Chowdhury, Vikash Kumar Singh, Sajal Mukhopadhyay, Abhishek Kumar, and Meghana M Dhananjaya	A Truthful Mechanism for Crowdsourcing-based Tourist Spots Detection in Smart Cities	International Journal of Grid and Utility Computing	Volume:13 Issue No:4 Page No:363-375 Year:2022 Month:Aug
Narayan Murmu, Debashis Nandi	3D Shape Reconstruction using Single Camera and Two Mirrors	International Journal of Computing and Digital Systems	Volume:13 Issue No:1 Page No:159-167 Year:2023 Month:Jan
J Dutta, PS Barma, A Mukherjee, S Kar, T De	A hybrid multi-objective evolutionary algorithm for open vehicle routing problem through cluster primary-route secondary approach	International Journal of Management Science and Engineering Management	Volume:17 Issue No: Page No:132-146 Year:2022 Month:Apr
Trushna Parida, Kanika Nath, Suvrojit Das	SAM: A Mechanism to Facilitate Smear-Aware Forensic Analysis of Volatile System Memory	Journal of Applied Secuirty Research	Volume:https://doi.org/10.108 0/19361610.2022.2161972 Issue No: Page No: Year:2022 Month:Dec



Author(s) Name	Paper Name	Journal Name	Others Info
MK Mohanty, PKG Thakurta, S Kar	Efficient sensor node localization in precision agriculture: an ANN based framework	Opsearch	Volume:60 Issue No:2 Page No:1-24 Year:2023 Month:Feb
Madhumita Sardar, Deepanwita Das, Srabani Mukhopadhyay	Grid Exploration by a Swarm of Au- tonomous Robots with Minimum Repetitions	Theoretical Computer Science	Volume:933 Issue No: Page No: 67-87 Year:2022 Month:Sep
P K Sharma, B Dalal, A Mondal, A Sen, A Banerjee, S Mondal, T De, S Saha	Indoor Air Sensing: A Study in Cost, Energy, Reliability and Fidelity in Sensing	Sensing and Imaging	Volume:24 Issue No:1 Page No: Year:2023 Month:Feb
Kailash Pati Mandal, Prasenjit Mukherjee, Atanu Chattopadhyay, Baisakhi Chakraborty	XBLQPS: An Extended Bengali Language Query Processing System for e- Healthcare Domain	International Journal of Advanced Computer Science and Applications	Volume:13 Issue No:7 Page No:502-512 Year:2022 Month:
Sugyan Kr. Mishra, Anirban Sarkar	Service-oriented architecture for Internet of Things: A semantic approach	Journal of King Saud University – Computer and Information Sciences, Elsevier	Volume:34 Issue No:10 Page No:PP 8765-8776 Year:2022 Month:
Ratna Mandal, Prasenjit Karmakar, Soumyajit Chatterjee, Debaleen Das Spandan, Shouvit Pradhan, Sujoy Saha, Sandip Chakraborty, Subrata Nandi	Exploiting Multi-modal Contextual Sensing for City bus's Stay Location Characterization: Towards Sub-60 Seconds Accurate Arrival Time Prediction	ACM Transactions on Internet of Things	Volume:pp 1–24 Issue No:Volume 4Issue 1 Page No:1- 24 Year:2023 Month:Feb
Dhaneshwar Mardi, Jaydeep Howlader	Anonymous Bitcoin transaction: A solution using secure multiparty computation	Security and Privacy	Volume:5 Issue No:4 Page No:126 Year:2022 Month:Apr

# 4.4.15 Journal: Accepted for Publication in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Sunanda Das, Abhishek	2. Smartphone-based non-invasive	Elsevier Biomedical	Volume: Issue No:
Kesarwani, Mamata Dalui,	haemoglobin level estimation by	Signal Processing and	Page No: Year:2023
Dakshina Ranjan Kisku,	analysing nail pallor	Control	Month:
Bibhash Sen, Suchismita			
Roy, Anupam Basu			
Manas Sarkar, Priyanka	Single image rain removal via	Sadhana	Volume: Issue No:
Rakshit Sarkar, Ujjwal	tetrolet transform and morphological		Page No:
Mondal, Debashis Nandi	decomposition		Year:2023 Month:Mar
Amit Mukhopadhyay,	CCOCSA-based multi-frame sparse	Multimedia Tools and	Volume: Issue No:
Debashis Nandi, Umapada	coding super-resolution via mutual	Applications	Page No:
Pal, Baisakhi Chakraborty	information- based weighted image		Year:2023 Month:Mar
	fusion		
Suvadip Hazra and Mamata	Exploring NSRT Diagram for	Journal of Cellular	Volume: Issue No:
Dalui	Scalable Synthesis of TACA	Automata,	Page No:
			Year:2022 Month:Sep
A Biswas, S P Tripathy and	On Multi-objective Covering	Neural Computing and	Volume:34 Issue
T Pal	salesman problem	Applications	No:24
	_		Page No:22127-22140
			Year:2022 Month:Dec



Author(s) Name	Paper Name	Journal Name	Others Info
Gourish Goudar; Suvadip Batabyal	Estimating Buffer Occupancy sans Message Exchange in Mobile Opportunistic Networks	IEEE Networking Letters	Volume:4 Issue No:2 Page No:73-77 Year:2022 Month:Feb
Sugyan Kr. Mishra, Anirban Sarkar	An efficient clustering mechanism towards large scale service composition in IoT	International Journal of Web and Grid Services, (Inderscience Publishers),	Volume: Issue No: Page No: Year:2023 Month:Jan
Sugyan Kr. Mishra, Anirban Sarkar	Context-free dynamic service clustering of IoT-based services	Innovations in Systems and Software Engineering, Springer- Verlag London Ltd	Volume: Issue No: Page No: Year:2022 Month:
Kailash Pati Mandal, Prasenjit Mukherjee, Devraj Vishnu, Baisakhi Chakraborty	Unsupervised Machine Learning Approach to Handle Natural Language Queries in Bengali with Semantically Close Words	International Journal of Computing and Digital Systems	Volume: Issue No: Page No: Year:2022 Month:Jun
Kailash Pati Mandal, Prasenjit Mukherjee, Sauvik Ganguly and Baisakhi Chakraborty	Bengali Query Processing System for Disease Detection using LSTM and GRU	International Journal of Computing and Digital Systems	Volume: Issue No: Page No: Year:2022 Month:Jun
Chakraborty, P., Sarkar, A.	Re-configurable Business Process: A Constraint-based Approach	International Journal of Business and Systems Research (Inderscience Publishers)	Volume: Issue No: Page No: Year:2022 Month:May

## 4.4.16 Journal: Published in Others in 2022-2023

Author(s) Name	Paper Name	Journal Name	Others Info
D Bhowmik, AK	Regular clocking-based Automated	Computers & Electrical	Volume:98 Issue No:
Pramanik, J Pal, P	Cell Placement technique in QCA	Engineering	Page
Sen, AR Singh, AK	targeting sequential circuit		No:107668 Year:2022
Saha, B Sen			Month:Jan
A. Mondal, S.	Hardware Trojan Detection using	ACM Transactions on Embedded	Volume:22 Issue No:1
Karmakar, M.	Transition Probability with	Computing Systems	Page
H. Mahalat, S. Roy, B.	Minimal Test Vectors		No:1-21 Year:2022
Sen and A.			Month:Oct
Chattopadhyay			

## 4.4.17 Conference: Published in 2022-2023 DOI/ISBN

Author(s) Name	Paper Name	Conference Name	Others Info
Banashree Mandal,	Swarm Coverage in Continuous	Advances in Data-driven	DOI/ISBN: 10.1007/978-981-
Madhumita Sardar,	and Dis- crete Domain: A Survey	Computing and Intelligent	99-0981-0 44 Volume:
Deepanwita Das	of Robots Behaviour.	Systems.(ADCIS 2022)	Issue No: Page No:573-587
			Year:2022 Month:Sep
			Presenter:CO-AUTHOR
D. Das, S. Roy,	A Novel Cross-Platform	2022 Asian Hardware	DOI/ISBN:
M.H.Mahalat and B.	Physically Unclonable Function	Oriented	10.1109/AsianHOST56390.202
Sen	for Emerging FPGA-based IoT	Security and Trust	2.10022185 Volume:
	Devices	Symposium (AsianHOST)	Issue No: Page No: Year:2022
			Month:Dec Presenter:SELF



Author(s) Name	Paper Name	Conference Name	Others Info
Sourav Roy, Abir Maji, Mahabub Hasan Mahalat, Bibhash Sen	PUF based Authentication and Key Sharing Protocol for Smart Water Monitoring System	TENSYMP2022	DOI/ISBN: 10.1109/TENSYMP54529.202 2.9864376 Volume: Issue No: Page No: Year:2022 Month:Jul Presenter:SELF
A.K. Pramanik, J. Pal,	Performance Analysis of Regular	15th International Conference and	DOI/ISBN:
B. K. Sikdar and B. Sen	Clocking based Quantum-dot Cellular Automata Logic Circuit: Fault Tolerant approach	School "Cellular Automata for Research and Industry" ACRI- 2022	https://doi.org/10.1016/j.compel eceng.2021.107640 Volume: Issue No: Page No: Year:2022 Month: Presenter:SELF
Tiyasa Chakraborty,	SVM-based Pre-and	International Conference	DOI/ISBN:
Ashok Kumar Bhadra,	Posttreatment Cancer Segmentation	on Information and Communication	https://doi.org/10.1007/978- 981-19-5090-
Debashis Nandi	from Lung and Abdominal CT Images via Neighborhood- Influenced Features	Technology	2_3 Volume: Issue No: Page No:35-43 Year:2021 Month:Dec Presenter:CO- AUTHOR
Palash Ghosal,	Computer-Aided Detection of	International Conference	DOI/ISBN:
Amish Kumar, Ashis Datta, Hiren Kumar Deva	Brain Midline Using CT Images	on Information and Communication Technology	https://doi.org/10.1007/978- 981-19-50902_11 Volume: Issue No: Page No:117-123 Year:2021
Sarma, Debashis Nandi			Month:Dec Presenter:CO- AUTHOR
Sukanya Maji and Sanjib Sadhu	Arbitrary-Oriented Color Spanning Region for Line Segments	9th Annual International Conference on Algorithms and Discrete Applied Mathematics (CALDAM)	DOI/ISBN: DOI: 10.1007/978-3-031-25211-2\_6 Volume: Issue No: Page No:71-86 Year:2023 Month:Feb Presenter:CO-
Sukanya Maji and Sanjib Sadhu	Color-Spanning Problem for Line Segments	22nd International Conference on Computational Science and Its Applications	AUTHOR  DOI/ISBN: DDOI:  10.1007/978-3-031-10522-7\_6  Volume: Issue No: Page No:7689 Year:2022  Month:Jul Presenter:CO- AUTHOR
Surja Sanyal, Sajal Mukhopadhyay, Fatos Xhafa, Vikash Kumar Singh & Banhi Sanyal	An Incentive Framework for Surplus Food Distribution in the Context of Smart Cities	The 25th International Conference on Network- Based Information Systems (NBiS-2022)	DOI/ISBN: https://doi.org/10.1007/978-3- 031-14314- 4_4 Volume: Issue No: Page No: 35-47 Year:2022 Month:Sep Presenter:SELF
Rajib Kumar Mondal, Mohammed Ubaid Khan, Sanghita Bhattacharjee, Tandra Pal	A greedy algorithm for maximizing target Q-coverage in directional sensor networks	IEEE 6th Conference on Information and Communication Technology (CICT)	DOI/ISBN: 978-1-6654-7312-5 Volume: Issue No: Page No:1-6 Year:2022 Month:Nov Presenter:CO- AUTHOR
Prajna Paramita Pradhan, Aditya Kumar, Sanghita Bhattacharjee	Traffic Priority based Forwarder Selection for Data Routing in Mobile WBANs	TENCON 2022	DOI/ISBN: https://doi.org/10.1109/TENCO N55691.2022.9977694 Volume: Issue No: Page No:1-6 Year:2022 Month:Nov Presenter:SELF

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Author(s) Name	Paper Name	Conference Name	Others Info
Biswajit Maity, Maddu Amar Sri Lakshmi Prasanna Trinath, Sanghita Bhattacharjee, Subrata Nandi	PredHonk: A Framework to Predict Vehicular Honk Count using Deep Learning Models	TENCON 2022	DOI/ISBN: https://doi.org/10.1109/TENCO N55691.2022.9977644 Volume: Issue No: Page No:1-6 Year:2022 Month:Nov Presenter:CO-
		1 D.I.G. 200.00	AUTHOR
M Goswami, S Bhattacharjee, S Changder	A Novel Approach for Crop Yield Prediction Model Validation	ADICS2022	DOI/ISBN: http://dx.doi.org/10.56155/978- 81955020-2-8-10 Volume: Issue No: Page No:103-116 Year:2022 Month:Sep Presenter:CO-AUTHOR
Sanjukta Mishra and	Identification of Cloud types for	Fifth International	DOI/ISBN: 27 Volume: Issue
Parag Kumar Guhathakurta	Meteorological Satellite images: A character-based CNN-LSTM hybrid caption model	Conference on Computational Intelligence inCommunications, and Business Analytics (CICBA-2023)	No: Page No: Year:2023 Month:Jan Presenter:CO-AUTHOR
Soumyadipta Kar, Manas Kumar Mohanty and Parag Kumar Guha Thakurta	Automated Prediction of Income from Farming of a Commodity: An ARIMA based Framework	International Conference on Optimization, Learning and Analytics in Business (OLAB 2022)	DOI/ISBN: 29 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR
Pragna Labani-	Multi Objective Energy Efficient	13th Triennial International	DOI/ISBN: 33 Volume: Issue
Sikdar, Samarjit Kar and Parag Guhathakurta	Street Lighting: AMOSA based Framework	Conference of the Association of Asia Pacific Operational Research Societies (APORS)	No: Page No: Year:2022 Month:Nov Presenter:CO-AUTHOR
S. Das, A.	Non-invasive Haemoglobin	IEEE 6th Conference on	DOI/ISBN:
Kesarwani, D.R. Kisku and M. Dalui	Estimation by Observing Nail Color: A PCA based Approach	Information and Communication Technology (CICT), 2022, Gwalior, India	10.1109/CICT56698.2022.9997888 Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:CO-AUTHOR
A. Kesarwani, S. Das, M. Dalui and D.R. Kisku	Non-invasive Haemoglobin Estimation using Different Colour and Texture Features of Palm	7th International Conference on Computer Vision & Image Processing (CVIP), 2022, Nagpur, Maharashtra, India	DOI/ISBN: https://doi.org/10.1007/978-3- 031-31417- 9_14 Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:CO- AUTHOR
S. Das, A. Kesarwani, D.R. Kisku and M. Dalui	Non-invasive Haemoglobin Prediction using Nail Color Features: An Approach of Dimensionality Reduction	18th International Conference on Intelligent Computing (ICIC), 2022, Xi'an, China	DOI/ISBN: https://doi.org/10.1007/978-3- 031-13870- 6_66 Volume: Issue No: Page No: Year:2022 Month:Aug Presenter:CO- AUTHOR
Praveen Kumar Sharma, Debjit Chatterjee, Debaleen Das, Sujoy Saha	Can I take class in that classroom now? In the perspective of Air Quality	ICDCN 2023	DOI/ISBN: https://doi.org/10.1145/357130 6.3571442 Volume: Issue No: Page No:396-401 Year:2023 Month:Jan Presenter:CO- AUTHOR



Author(s) Name	Paper Name	Conference Name	Others Info
Pritisha Sarkar, Mahesh Kumar Makkena, Amit Bose, Munshi Yusuf Alam, Sujoy Saha and Mousumi Saha.	Impact of bursting fireworks during Diwali in Durgapur suburb, India: A case study	ICDCN 2023	DOI/ISBN: https://doi.org/10.1145/357130 6.3571440 Volume: Issue No: Page No: Year:2023 Month:Jan Presenter:CO-AUTHOR
Anju Bhuiya, Koyena Chowdhury, Suman Nandi and Animesh Dutta	Semi-Global Circular Centrality to find Influential Spreaders	15th International Conference on Communication Systems & Networks (COMSNETS). IEEE	DOI/ISBN: 10.1109/COMSNETS56262.20 23.10041382 Volume: Issue No: Page No: Year:2023 Month:January Presenter:
Koyena Chowdhury, Amit Paul, and Animesh Dutta	Cancel Out GCN Diffusion (CoutGCN): Finding the Indumenta Spreaders to Diffuse Information	15th International Conference on Communication Systems & Networks (COMSNETS). IEEE	DOI/ISBN: 10.1109/COMSNETS56262.20 23.10041335 Volume: Issue No: Page No: Year:2023 Month:January Presenter:
Arunita Das, Amrita Namtirtha, and Animesh Dutta	Automatic Fast Fuzzy Clustering Algorithm for Nucleus Segmentation of Color Pathology Images	2022 IEEE 19th India Council International Conference (INDICON).	DOI/ISBN: 10.1109/INDICON56171.2022. 10039694 Volume: Issue No: Page No: Year:2022 Month:November Presenter:
Sunanda Das, Abhishek Kesarwani, Dakshina Ranjan Kisku and Mamata Dalui	Non-invasive Haemoglobin Prediction using Nail Color Features: An Approach of Dimensionality Reduction	18th International Conference on Intelligent Computing (ICIC 2022)	DOI/ISBN: https://doi.org/10.1007/978-3- 031-138706_66 Volume: Issue No: Page No:811–824 Year:2022 Month:Aug Presenter:CO- AUTHOR
Abhishek Kesarwani, Sunanda Das, Mamata Dalui and Dakshina Ranjan Kisku	Non-invasive Haemoglobin Estimation using Different Colour and Texture Features of Palm	7th International Conference on Computer Vision & Image Processing (CVIP'22)	DOI/ISBN: https://doi.org/10.1007/978-3- 031-314179_14 Volume: Issue No: Page No:176–189 Year:2022 Month:Nov Presenter:CO- AUTHOR
Sunanda Das, Abhishek Kesarwani, Dakshina Ranjan Kisku and Mamata Dalui	Non-invasive Haemoglobin Estimation by Observing Nail Color: A PCA based Approach	The Conference on Information and Communication Technology (CICT'22)	DOI/ISBN: 10.1109/CICT56698.2022.9997 888 Volume: Issue No: Page No:1-5 Year:2022 Month:Nov Presenter:CO- AUTHOR
Rohan Kumar Gupta and Dakshina Ranjan Kisku	ImpressionNet: A Multi view Approach to Predict Socio Facial Impressions	15th International Conference on Agents and Artificial Intelligence (ICAART'22)	DOI/ISBN: 10.5220/0010762400003116 Volume: Issue No: Page No:33-38 Year:2022 Month:Feb Presenter:CO-AUTHOR
Avick Kumar Dey, Vineet Chauhan, Pradeep Kumar Singh, Prasenjit Choudhary	LSTM based Top-N Recommendation System Using Cognitive Data	11th International Conference on System Modeling & Advancement in Research Trends (SMART)	DOI/ISBN: 10.1109/SMART55829.2022.1 0046838 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:
Chouhan Kumar Rath, Amit Kr. Mandal and	A Feature-Weighted Clustering approach for Context Discovery and Selection of Devices in IoT	4th International Conference on Computing and Communication	DOI/ISBN: 10.1109/I3CS58314.2023.1012 7469

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Author(s) Name	Paper Name	Conference Name	Others Info
Anirban Sarkar		Systems (I3CS), IEEE Sponsored, Shillong, India, 2023.	Volume: Issue No: Page No:1-6 Year:2023 Month:Jan Presenter:CO-AUTHOR
Sugyan Kumar Mishra, Anirban Sarkar	Validating User-Centric Business Process based Service Composition	4th International Conference on Computing and Communication Systems (I3CS), IEEE Sponsored, Shillong, India, 2023	DOI/ISBN: 10.1109/I3CS58314.2023.1012 7469 Volume: Issue No: Page No: Year:2023 Month:Jan Presenter:CO-AUTHOR
Rath, C.K., Mandal, A.K., Sarkar, A.	Data Quality Driven Design Pattern for Internet of Things	9th International Doctoral Symposium on Applied Computation and Security Systems, Lecture Notes in Networks and Systems,	DOI/ISBN: LNNS,volume 555 Volume: Issue No: Page No:285-303 Year:2022 Month:Sep Presenter:CO-AUTHOR
Manvendra Singh and Abhijit Sharma	Assessment and Rehabilitation of Low Back Pain (LBP) Using Artificial Intelligence and Machine Learning – A Review	Artificial Intelligence Trends in Systems	DOI/ISBN: https://doi.org/10.1007/978-3- 031-09076- 9_40 Volume: Issue No: Page No: Year:2022 Month:Jul Presenter:CO- AUTHOR
Sanjeet Kumar and Suvrojit Das	An Open Source and Practical Approach to X2X linux workload migration	12th International Conference on Cloud Computing and Services Science CLOSER	DOI/ISBN: 10.5220/0011083700003200 Volume: Issue No: Page No:272-279 Year:2022 Month:Apr Presenter:CO-AUTHOR
Baisakhi Das, Mousumi Saha, Nilanjana Das and Biplab K Sikdar	Identification of Periodic Boundary SACA Rules Exploring NSRT Diagram	ACRI 2022	DOI/ISBN: 10.1007/978-3-031- 14926-9\_3 Volume: Issue No: Page No:29-39 Year:2022 Month:Sep Presenter:SELF
Kailash Pati Mandal, Baisakhi Chakraborty	Natural Language Query in Bengali to SQL Generation Using Named Entity Recognition	IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI-2022), organized by IEEE MP Section and ABV-IIITM Gwalior, India.	DOI/ISBN: DOI: 10.1109/IATMSI56455.2022.1 0119243 Volume: Issue No: Page No: Year:2022 Month: Presenter:CO- AUTHOR
P Mukherjee and T De	Energy Aware Cluster Head Rotation for D2D multicasting	10th International Conference on Signal Processing and Integrated Networks (SPIN)	DOI/ISBN: 10.1109/SPIN57001.2023.1011 6310 Volume: Issue No: Page No:840-845 Year:2023 Month:Mar Presenter:CO- AUTHOR
S. Dhar, A. Vishwakarma, D. Ghanti and N. D. Jana	Ensemble Learning based Plant Leaf Disease Classification Considering Deep Convolutional Features from Pre-trained CNN	IEEE 6th Conference on Information and Communication Technology (CICT), Gwalior, India, 2022	DOI/ISBN: 10.1109/CICT56698.2022.9997819 Volume: Issue No: Page No:1-6 Year:2022 Month:Nov Presenter:CO- AUTHOR



Author(s) Name	Paper Name	Conference Name	Others Info
Md. T. Akhter, P.	An Analysis of Performance	IEEE 19th India Council	DOI/ISBN:
Banerjee, S. Dhar, N.	<b>Evaluation Metrics for Voice</b>	International Conference at	10.1109/INDICON56171.2022.
D. Jana	Conversion (VC) Models	Cochin, Kerala, India 2022	10040000
			Volume: Issue No: Page No:1-6
			Year:2022
			Month:Nov Presenter:CO-
			AUTHOR
A. Ghosh and N. D.	Artificial Bee Colony	19th India Council	DOI/ISBN:
Jana	Optimization based Optimal	International	10.1109/INDICON56171.2022.
	Convolutional Neural Network	Conference (INDICON),	10040217
	Architecture Design	Kochi, India, 2022	Volume: Issue No: Page No:1-7
			Year:2022
			Month:Nov Presenter:CO-
			AUTHOR
S. Dhar, A. Ghosh,	Hyper-parameter Optimization of	ADCIS 2022	DOI/ISBN: 10.1007/978-981-
A.	CNN using Genetic Algorithm		99-0981-0_10 Volume:
Mazumder, S. Roy	for Speech Command		Issue No: Page No: Year:2022
and N. D. Jana	Recognition		Month:Sep Presenter:SELF
Dhar, S., Phukan, S.,	Speaker Identification Using	ADCIS 2022	DOI/ISBN: 10.1007/978-981-
Gogoi, R., Jana, N.D.	Ensemble Learning With Deep		99-0981-0_10 Volume:
	Convolutional Features		Issue No: Page No: Year:2022
			Month:Sep
			Presenter:CO-AUTHOR
A. Chatterjee , N. D.	Classification of Sleep Apnea	2022 IEEE Region 10	DOI/ISBN:
Jana	Event Type Using Imbalanced	Symposium (TENSYMP)	10.1109/TENSYMP54529.202
	Labelled EEG Signal		2.9864566
			Volume: Issue No: Page No:1-6
			Year:2022 Month:Jul
			Presenter:CO-AUTHOR
Goutam Sarker	A New Method of Galaxy	International Symposium on	DOI/ISBN: https://doi.org/101-
	Classification Using Optimal	Artificial Intelligence	22485-0_26.1007/978-
	Convolution Neural Network		3-03 Volume: Issue No: Page
			No:284-293 Year:2022
			Month:Mar Presenter:SELF

# 4.4.18 Conference: Accepted in 2022-2023 DOI/ISBN

Author(s) Name	Paper Name	Conference Name	Others Info
Prasenjit Mukherjee, Chandrima Chakraborty, Nandan Banerjee, Baisakhi Chakraborty	Time-Related Natural Language Query Handling to Extract Autism Spectrum Disorder Information from Temporal Database	Fourth International Conference on Advanced Computational and Communication Paradigms (ICACCP 23), Sikkim Manipal Institute of Technology, Sikkim, India	DOI/ISBN: 10.13140/RG.2.2.13309.23 528 Volume: Issue No: Page No: Year:2023 Month:Feb Presenter:CO-AUTHOR
Prasenjit Mukherjee, Chandrima Chakraborty, Nandan Banerjee, Baisakhi Chakraborty	Natural Language Query Processing System to Extract Autism Spectrum Disorder Information from Database Bengali language-based Disease diagnosis system for rural people using Bidirectional Encoder Representations from Transformers	Fourth International Conference on Advanced Computational and Communication Paradigms (ICACCP 23), Sikkim Manipal Institute of Technology, Sikkim, India	DOI/ISBN: 10.13140/RG.2.2.13309.23 528 Volume: Issue No: Page No: Year:2023 Month: Feb Presenter:CO-AUTHOR



OPJU international  Technology conference  On Emerging  Technologies for  Sustainable Development	DOI/ISBN: https://doi.org/10.1109/OT CON56053.2023.10113944 Volume: Issue No: Page No: Year:2023 Month: Feb Presenter:CO-AUTHOR
	Technology conference On Emerging Technologies for

## 4.4.19 Conference: Published in Others in 2022-2023

Author(s) Name	Paper Name	Conference Name	Others Info
Kshitiza Vasudeva,	Classifying Skin Cancer and Acne	15th International Conference on	DOI/ISBN: NA
Saravanan Chandran	using CNN	Knowledge and Smart Technology	Volume:
			Issue No: Page No:
			Year:2023 Month:Feb
			Presenter:SELF
Sunil Kumar Patel,	PDF Steganography using Hybrid	ICICNIS 2022: International	DOI/ISBN: NA
Saravanan Chandran	Crypto Encryption Technique	Conference on	Volume:
		IoT Based Control Networks and	Issue No: Page
		Intelligent Systems	No:425-436
			Year:2022 Month:Jul
			Presenter:CO-
			AUTHOR
Kazi Amrin Kabir and	Change Detection in LULC for	Fourth International Conference on	DOI/ISBN: 25
Parag Kumar Guha	Durgapur: An efficient GIS based	Advanced Computational and	Volume:
Thakurta	Framework	Communication Paradigms	Issue No: Page No:
		(ICACCP 2023)	Year:2023 Month:Feb
			Presenter:CO-
			AUTHOR
Goutam Sarker	One Optimal Convolution Neural	International Conference on	DOI/ISBN: - Volume:
	Network for Differentiation among	Advances in	Issue
	Coronavirus Pneumonia and	Data-driven Computing and	No: Page No:-
	Normal Chest	Intelligent Systems (ADCIS2022	Year:2022
			Month:Sep
			Presenter:SELF

## 4.4.20 Books Authored

Author Name	Co-Author	Title of the Book	Title of the Chapter	<b>Publication Details</b>
Sajal Mukhopadhyay	Surja Sanyal, Fatos	Advances in	Incentives in Surplus	Publisher: Springer
	Xhafa,	Engineering and	Food	Link
	Vikash Kumar Singh	Information Science	Distribution for Smart	Publication Date:
	& Banhi Sanyal	<b>Toward Smart City</b>	Cities and Beyond: An	2023-0525
		and Beyond	Activity	
			Aware Solution	
Anandaprova	Suvamoy Changder	Intelligent Cyber-	An Automated Cover	Publisher: Chapman
Majumder		Physical	Text	and Hall/CRC
		Systems Security for	Selection System for	Publication Date:
		Industry 4.0	Text	2022-12-16
			Steganography	
			Algorithms	





Name of the Programme	Organized By	From Date	To Date	Organizing Country
Moving and Computing 2022 - MAC 2022	University of Pisa	2022-09-19	2022-09-22	Italy
15th International Conference on Knowledge and Smart Technology	KST	2023-02-21	2023-02-24	Thailand
The 25th International Conference on Network-Based Information Systems (NBiS-2022)	Kwansei Gakuin University	2022-09-07	2022-09-09	Japan
9th Annual International Conference on Algorithms and Discrete Applied Mathematics (CALDAM 2023)	Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar, India	2023-02-09	2023-02-11	India
Second Winter School on Deep Learning (WSDL)	ISI Kolkata	2023-01-06	2023-03-04	India
ACC100 Symposium	Calcutta University	2023-01-08	2023-01-09	India
Workshop on GPU Programming	NIT Durgapur	2023-01-18	2023-01-21	India
3rd International Conference on Frontiers in Computing and Systems	IEEE (IIT Ropar)	2022-12-19	2022-12-23	India
24th International Conference On Distributed Computing And Networking	ACM (IIT Kharagpur)	2023-01-04	2023-01-07	India
Research Visit to Polytechnic of Porto, Portugal under ERASMUS+ICM (International Credit Mobility)	European Union	2023-01-16	2023-01-20	Portugal
GATI (Gender Advancement for Transforming Institutions) study visit to UK Universities	British Council and DST-Govt of India	2023-03-27	2023-03-31	UK
Special Session on "Artificial Intelligence in Real World Applications" at the 18th International Conference on Intelligent Computing (ICIC' 22), Online	ICIC Organizing Committee	2022-08-07	2022-08-11	China
7th Meeting of LITD 32 Biometrics Sectional Committee hosted online by Bureau of Indian Standards (BIS)	BIS India	2023-01-04	2023-01-04	India
Stakeholder Discussion of the Electronics and IT Sector for Standards National Action Plan (SNAP)	BIS India	2022-08-26	2022-08-26	India
Conference paper presentation in TENCON 2022	IEEE TENCON	2022-11-01	2022-11-04	Hong Kong
HPC and GPU programming	NIT Durgapur	2023-01-18	2023-01-21	India
ICACCP, 2023	Sikkim Manipal Institute of Technology	2023-02-16	2023-02-18	India
CALDAM Indo-Dutch Pre- Conference School on Algorithms and Combinatorics	Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar, India	2023-02-06	2023-02-07	India



Name of the Programme	Organized By	From Date	To Date	Organizing Country
Advances in Data-driven	BITS Pilaini, Goa Campus	2022-09-24	2022-09-26	India
Computing and Intelligent Systems				
Conference				
Second Asian Symposium on	IIEST Shibpur	2023-03-02	2023-03-04	India
Cellular Automata Technology				
(ASCAT 2023)				
Winter School on Deep Learning	ISI Kolkata	2023-01-06	2023-03-04	India
(WSDL)				
International Conference on	BITS Pilani, KK Birla Goa	2022-09-23	2022-09-25	India
Advances in Data Driven	Campus, India			
Computing and Intelligent				
Systems (ADCIS 2022)				
International Symposium on	Computer Society of India	2022-02-17	2022-02-19	India
Artificial Intelligence (ISAI -				
2022)				

## 4.4.22 Ph.D. Supervisor

Topic Name	Scholar	Supervisor	Status	Status Date
Distributed Exploration by a Swarm of Mobile Robots in Discrete Domain	Madhumita Sardar	Deepanwita Das, Srabani Mukhopadhyaya	ONGOING	-
Distributed Area Coverage in Continuous Domain	Banashree Mandal	Deepanwita Das	ONGOING	-
Automatic Speech Recognition in Indian Languages	Malay Kumar Majhi	Sujan Kumar Saha	ONGOING	-
Floorplanning and Placement in VLSI Circuits	Suchandra Banerjee	Suchismita Roy	DEGREE AWARDED	2022-09-24
SAT based Rectilinear Steiner Tree Construction and its applications in Global Routing	Sudeshna Kundu	Suchismita Roy, Shyamapada Mukherjee	DEGREE AWARDED	2022-09-26
Hardware Trojan : Analysis of Attacks and Detection in the context of Hardware Security	Anindan Mondol	Bibhash Sen, Suchismita Roy	SUBMITTED	2022-12-12
Hardware Security Issues at Synthesis Level	C.S. Ashwin	Suchismita Roy	ONGOING	-
Hardware Trojan Detection using Learning Techniques	Sitikantha Chattopadhyay	Suchismita Roy	ONGOING	-
Facial Features Extraction for Various Applications using Neural Network	Kshitiza Vasudeva	CHANDRAN SARAVANAN	ONGOING	-
Implementation and Synthesis of Efficient Computing Reversible Arithmetic and Logical Circuits to design a reversible ALU	Biswajit Das	CHANDRAN SARAVANAN	ONGOING	-
Investigation and Development of Steganography Schemes	Sunil Kumar Patel	CHANDRAN SARAVANAN	ONGOING	-
Analysis and Design of Image Compression Techniques	Raj Kumar Paul	CHANDRAN SARAVANAN	ONGOING	-
Variations of Covering Problem for Colored Geometric Objects	Sukanya Maji	Sanjib Sadhu	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status Date
Design & Analysis of Light Weight Physically Unclonable Function (PUF) Targeting Cost- Effective Hardware Security	Mahabub Hasan Mahalat	Dr. Bibhash Sen	DEGREE AWARDED	2022-10-21
Lung and Liver Cancer Status Evaluation from Pre- and Post- treatment CT Images Using ML- based Image Segmentation	Tiyasa Chakraborty	Debashis Nandi	ONGOING	-
Machine Learning Based Automated Glaucoma Detection From Fundus Images	Arindam Chowdhury	Debashis Nandi	ONGOING	-
Machine Learning Based Lung Disease Analysis From Chest CT Images	Sanjib Saha	Debashis Nandi	ONGOING	-
Design of Microwave Based Medical Imaging System	Mautusi Mondal	Debashis Nandi	ONGOING	-
Cloud and Fog Computing: A Mechanism Design Perspective	ANJAN BANDYOPADHYAY	SAJAL MUKHOPADHYAY	DEGREE AWARDED	2022-09-15
A Study on Crowdsourcing and Behavioural Economics	NAREN DEBNATH	SAJAL MUKHOPADHYAY	ONGOING	-
On the Study of Matching and Spatial Crowdsourcing	PRATIK CHOWDHURY	SAJAL MUKHOPADHYAY	ONGOING	-
Ensemble of Learners in AI Assisted CAD Systems for Medical Image Analysis	Rohit Agarwal	Prof. Debashis Nandi and Dr. Narayan Murmu	ONGOING	-
Ensemble of Learners in AI Assisted CAD Systems for Medical Image Analysis	Rohit Agarwal	Debashis Nandi, Narayan Murmu	ONGOING	-
Coverage and Connectivity of Wireless Sensor Network in the Paradigm of Computational Intelligence	Rajib Kumar Mondal	Sanghita Bhattacharjee, Tandra Pal	ONGOING	-
Studies on Interference Aware Routing and Scheduling in Wireless Body Area Networks	Prajna Paramita Pradhan	Sanghita Bhattacharjee	ONGOING	-
Exploring Outdoor Context using Multimodal Sensor Logs	Biswajit Maity	Sanghita Bhattacharjee	ONGOING	-
Studies on various prediction strategies and coverage in smart agriculture	Moumita Goswami (Sen)	Sanghita Bhattacharjee	ONGOING	-
IoT in Agriculture	Manas Kumar Mohanty	Parag K Guha Thakurta	ONGOING	-
Energy Research	Pragna Laboni Sikdar	Parag K Guha Thakurta	ONGOING	-
Urban Development	Kazi Amrin Kabir	Parag K Guha Thakurta	ONGOING	-
Design of Light-weight Identity based Authentication schemes	Ananya Banerjee	Dr. Subhas Chandra Sahana	ONGOING	-
Designing lightweight Authentication scheme for 6lowpan based internet of things	Leki Chom Thungon	Dr. Subhas Chandra Sahana and Prof. Md. Iftekhar Hussain	DEGREE AWARDED	2022-12-21



Topic Name	Scholar	Supervisor	Status	Status Date
Analysis and design of Authentication Techniques for Internet of Things (IoT) based Healthcare System	Donbyntalang Dewkhaid	Dr. Subhas Chandra Sahana and Prof. B. Bhuyan	ONGOING	-
SECURED INFORMATION- CENTRIC NETWORKING (ICN)	Mebanjop Kharjana	Dr. Subhas Chandra Sahana and Prof. G. Saha	ONGOING	-
Privacy Preservation of Patients' Information in IoT based Healthcare System	Tahmina Syeda Takshin	Dr. Subhas Chandra Sahana and Prof. Md. Iftekhar Hussain	ONGOING	-
Optimal Resource Planning for Situational Information Extraction During Post-Disaster Scenarios.	Krishnandu Hazra	Subrata Nandi, Sujoy Saha	DEGREE AWARDED	2022-08-08
A Cost-effective Framework for Indoor and Outdoor Air Quality Monitoring and Prediction	Praveen Kumar Sharma	Dr. Sujoy Saha, Dr. Tanamy De	DEGREE AWARDED	2022-09-27
Designing an Efficient Framework for Hybrid Ad hoc Network Scenarios using WiFi and VLC	Kashi Nath Datta	Sujoy Saha	ONGOING	-
Identification of Classroom Activities using Heterogeneous sensors	Ruma Ghosh	Sujoy Saha	ONGOING	-
On Covering Salesman Problems	Siba Prasada Tripathy	Tandra Pal and Samarjit Kar	ONGOING	-
Biosensor Based Cognitive Load Assessment	Subashis Karmakar	Tandra Pal and Chiranjib Koley	ONGOING	-
On Generalization and Robustness of Neural Networks	Rahul Mondal	Tandra Pal and Prasenjit Dey	ONGOING	-
A Deep Learning Approach to Recognize the Compositional aspect of Different Lines and Shapes in a Photograph	Soma Debnath	Dr. Suvamoy Changder	DEGREE AWARDED	2022-07-29
Secure Data Hiding with Cover Synthesis Techniques	Anandaprova Majumder	Dr. Suvamoy Changder	ONGOING	-
Study and Design of Continuous Authentication Algorithms for Smartphone using Behavioral Biometrics	Praveen Kumar Rayani	Dr. Suvamoy Changder	ONGOING	-
An Approach to Develop Quantum Image Representation and Its Applications	Arnab Chatterjee	Dr. Suvamoy Changder	ONGOING	-
Pattern mining for Single Cell gene expression data	Anamika Das	Monalisa Mandal	ONGOING	-
Coalition Formation in Multi- agent System	Samriddhi Sarkar	Animesh Dutta, Mariana Curado Malta	DEGREE AWARDED	2023-08-04
Location Prediction in Social Media using Hybrid Modelling	Amit Paul	Animesh Dutta	ONGOING	-
Coalition Formation of Multi-agent Systems in Heterogeneous Environment & Ongoing	Tuhin Kr. Biswas	Animesh Dutta	ONGOING	-
Enhancement of Partitional Clustering Techniques for Pathology Image Segmentation	Arunita Das	Animesh Dutta, Amrita Namtirtha	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status Date
Social Network Analysis	Suman Nandi	Animesh Dutta	ONGOING	_
Social Network Analysis	Srestha Sadhu	Animesh Dutta	ONGOING	-
Social Network Analysis	Nilanjana Saha	Animesh Dutta	ONGOING	-
Estimating the Attention of Faces through Visual Saliency	Ravi Kant Kumar	Goutam Sanyal and Dakshina Ranjan kisku	DEGREE AWARDED	2019-09-07
Study and Analysis on Some Aspects of Cohort Selection for Face Recognition	Jogendra Garain	Goutam Sanyal and Dakshina Ranjan Kisku	DEGREE AWARDED	2019-11-18
Experimental Investigation and Computational Modeling of the Electrohydrodynamic Inkjet Printing System	Amit Kumar Ball	Shibendu Sekhar Roy, Naresh Chandra Murmu and Dakshina Ranjan Kisku	DEGREE AWARDED	2020-11-11
Some Certain Studies on Facial Complexities for Face Identification with Local Descriptors	Rinku Datta Rakshit	Dakshina Ranjan Kisku	DEGREE AWARDED	2021-07-12
Some Studies on Pattern Matching Techniques: Novel Interpretations with Local Descriptors and Wavelets	Deep Suman Dev	Dakshina Ranjan Kisku	DEGREE AWARDED	2021-09-29
Single-scripted and Multi-scripted Offline Signature Verification Systems	Teressa Longjam	Dakshina Ranjan Kisku	SUBMITTED	2023-07-31
Unconstrained Face Recognition	Dipak Kumar	Dakshina Ranjan Kisku	ONGOING	-
Complex and Degraded Face Recognition	Srinibas Rana	Dakshina Ranjan Kisku	ONGOING	-
Non-invasive Anaemia Detection using Palm Video	Abhishek Kesarwani	Mamata Dalui and Dakshina Ranjan Kisku	ONGOING	-
Image Description Generation and Conversion to Audio for Visually Impaired Persons	Biswajit Patra	Dakshina Ranjan Kisku	ONGOING	-
Mitigating Demography Biasness in Biometrics	Shweta Patel	Dakshina Ranjan Kisku	ONGOING	-
Sustainable Computing with Mobile Crowd Computing	Pijush Kanti Dutta Pramanik	Prasenjit Choudhury	DEGREE AWARDED	2023-01-30
Personalized Recommendation in Ubiquitous Learning	Saurabh Pal	Prasenjit Choudhury	SUBMITTED	2022-12-30
Design of an Architectural Framework for Dynamic Web Services	Faisal Ahmad	Anirban Sarkar	DEGREE AWARDED	2017-09-12
Functional Specification of Microservice based Framework for IoT Applications	Chauhan Kumar Rath	Anirban Sarkar, Amit Kr. Mandal	ONGOING	-
Software Integrated Framework design for Internet of Things based Applications	Sugyan Kumar Mishra	Anirban Sarkar	ONGOING	-
Functional Specification for User- Centric Service Oriented Enterprise Architecture Framework	Priyanka Chakraborty	Anirban Sarkar	ONGOING	-



Topic Name	Scholar	Supervisor	Status	<b>Status Date</b>
A Multi-modal Approach for Detection of Anomaly in Human Action Through Imaging	Soumya Ranjan Mishra	Anirban Sarkar, Goutam Sanyal	DEGREE AWARDED	2021-09-22
Analysis and Specification of an Inter-Cloud Architecture: An Abstraction Model	Gitosree Khan	Anirban Sarkar, Sabnam Sengupta	DEGREE AWARDED	2020-05-06
Ontology Driven Domain Specific Software Design	Shreya Banerjee	Anirban Sarkar	DEGREE AWARDED	2019-08-21
A Study on Design Specification for Component Based Software System	Prasenjit Banerjee	Anirban Sarkar	DEGREE AWARDED	2019-05-22
Functional Specification of Software as a Service for Data Centric Cloud Applications	Amit Kr. Mandal	Anirban Sarkar	DEGREE AWARDED	2018-08-22
Study of Urban Outdoor Air Quality using Multi-modal data sources	Prithviraj Pramanik	Mousumi Saha	ONGOING	-
Air Quality Monitoring using Mobile Crowd Sensing	Pritisha Sarkar	Mousumi Saha	ONGOING	-
Characterization of Cellular Automata for Pattern Classification	Khitish Gadnayak	Mousumi Saha	ONGOING	-
Non-invasive Multiple Human Activity Recognition using Heterogeneous Sensors	Arindam Ghosh	Mousumi Saha Sujoy Saha Subrata Nandi	DEGREE AWARDED	2021-07-23
Theory and Application of Cellular Automata for CMP Cache Design	Sutapa sarkar	Mousumi Saha Biplab Kumar Sikdar	DEGREE AWARDED	2023-03-17
Universal Design for the Web	Hasim Ali	Dr. Abhijit Sharma	ONGOING	-
Linux Memory Forensics: Methods and Techniques	Trushna Parida	Suvrojit Das	DEGREE AWARDED	2022-09-29
NLP based Knowledge Management systems in Bengali language	Kailash Pati Mondal	Baisakhi Chakraborty	ONGOING	-
Software approach to investigate some phenomenon of dyslexia in children	Jaya Banerjee	Baisakhi Chakraborty and Prof Anupam Basu	ONGOING	-
Design and Analysis of Context- aware Middleware for Service Oriented Computing over Internet of Things	Nandan Banerji	S. Choudhury	ONGOING	-
Policy Formulation for Residential Integration based on Agent based Simulation	Sushma	S. Choudhury	ONGOING	-
Cooperative Routing for Heterogeneous WAN	Pratik Sinha	S. Choudhury	ONGOING	-
Capturing the Impact of Embedded Social Networks in Real Social Systems - A Model Agnostic Approach	Pradipta Banerjee	S. Choudhury	ONGOING	-
A Study on Recommendation for Academic and scientific Literature	Avick Kumar Dey	Prasenjit Choudhury	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status Date
Deep Learning-based Price Forecasting for Horticulture Produce.	Tumpa Banerjee	Prasenjit Choudhury	ONGOING	-
IoT Enabled Pest and Plant Disease Detection Using Machine Learning and Deep Learning Approaches.	Monalisha Mishra	Prasenjit Choudhury	ONGOING	-
Some Aspects of Community Structures in Real Networks and Its Applications	Dhananjay Kumar Singh	Prasenjit Choudhury	ONGOING	-
Efficient Device-to-Device (D2D) Communication for Fifth Generation (5G) Cellular Network	Poulomi Mukherjee	Tanmay De	ONGOING	-
Studied on the Mobile Edge Computing	Anindita Ghosh	Tanmay De	ONGOING	-
Studies in optical and wireless networks	Deepa Naik	Tanmay De	SUBMITTED	2022-11-18
Study of Evolutionary Algorithms for Neural Architecture Search	Arjun Ghosh	Nanda Dulal Jana	ONGOING	-
Audio- Visual Speech synthesis using Deep Learning Models: Some Advanced Approaches	Subhayu Ghosh	Nanda Dulal Jana	ONGOING	-
Speech Synthesis using Deep Generative Models: Some Advanced Approaches	Sandipan Dhar	Nanda Dulal Jana and Swagatam Das	ONGOING	-
The Impact of Rational Party in Multiparty Computation and the Counteracts	Dhaneshwar Mardi	Jaydeep Howlader	DEGREE AWARDED	2022-09-28
Theory and Applications of Cellular Automata for Detection and Mitigation of Hardware Trojan Attacks Targeting Cache Performance in a Many-core System	Suvadip Hazra	Dr. Mamata Dalui	DEGREE AWARDED	2022-09-12
Analysing the Bibliometric Dataset to understand the Impact of Co- authorship Relations in Scientific Publications	Sovan Bhattacharya	Subrata Nandi, Dinesh Pradhan	SUBMITTED	2023-01-31
Intelligent Pervasive Computing of Biomechanical Attributes With Heterogeneous Sensing	Subhrangshu Adhikary	Subrata Nandi, Arindam Ghosh	ONGOING	-
A Cost-effective Framework for Indoor and Outdoor Air Quality Monitoring and Prediction	Praveen Kumar Sharma	Sujoy Saha and Tanmay De	DEGREE AWARDED	2022-09-27
Traffic Congestion Control and Data Communication in Vehicular Networks	Rangaballav Pradhan	Tanmay De	SUBMITTED	2022-11-30

# 4.4.23 Ongoing Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Amount (in Rs.)	Starting Year
System for Automatic Evaluation of Handwritten Answer Books in	Sujan Kumar Saha	SERB	2001190.0	2022
Bengali				

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Title of the Project	Investigator	Sponsor Authority	Amount (in Rs.)	Starting Year
Automatic Speech Recognition System in Santali and Nagpuri Languages: Resource Creation and System Development	Sujan Kumar Saha	SERB	2961112.0	2022
Geometric facility optimization problems in Imprecise domain	Ankush Acharyya	SERB-DST	1345300.0	2022
Cognitive load assessment methods for the blind, in adaptation to new assistive technologies	Prof. Anupam Basu, Dr. Dakshina Ranjan Kisku, Prof. Tandra Pal, Dr. Tushar Kanti Bera	TCS Mumbai	2992000.0	2021
Neurocomputing and Cognitive Intelligence- Developing a model for Analysing the Learning Disabilities of Dyslexic Child	Dr. Suvrojit Das, Prof. Suchismita Roy, Prof. Anupam Basu	MeitY, Govt. of India	4948000.0	2020
Neuro Computing and Computational Intelligence: Developing a model for analyzing the reading disability of the Dyslexic child	Dr. Bibhash Sen (PI), Prof Anupam Basu (Co-PI) Dr. S Das (Co-PI), Dr. S Bhattacharjee (Co-PI) Dr. T Pal (Co PI) Dr. S Roy (Co-PI) Dr. P K Guhathakurta (Co-PI) Dr. M Dalui (Co PI)	Meity	4950000.0	2020
QoE Optimized Multimedia Content Delivery through Caching in D2D underlay Network	Suvadip Batabyal	SERB-CRG	2159696.0	2021
Assistive Technology on multimodal disabilities	Dr. Nilanjan Chattaraj, Dr. Sujoy Saha, Dr. Mousumi Saha	TCS	3000000.0	2021
Developing ICT-based kiosks for post disaster situational information management using opportunistic networking framework	Prof. Subrata Nandi, Dr.Sujoy Saha, Dr. Indrajit Bhattacharya, Dr. Atanu Maity	Department of Science & Technology and Biotechnology, Government of West Bengal	1496000.0	2018
IntAirSense: Intelligent Air Pollution Monitoring for Smart Cities using Low-Cost Sensors	Dr. Sujoy Saha, Dr. Mousumi Saha, Dr. Jaydeep Howlader	Department of Science & Technology and Biotechnology, Government of West Bengal	127000.0	2019
Performance Evaluation of Open Source LID, Speaker Diarization and Speech Enhancement Algorithm	Dr. Nilanjan Chattaraj, Dr. Sujoy Saha, Dr. Suman Samui	Dr Suman Samui	3000000.0	2023
Visvesvaraya PhD Scheme for Electronics and IT: Phase-II	Animesh Dutta	MeitY, Govt of India	10892000	2023
Erasmus + ICM (International Credit Mobility)	Animesh Dutta	European Union	1690687.0	2021
Gender Advancement for Transforming Institutions (GATI) Pilot Project	Animesh Dutta	DST, Govt of India	799000.0	2021

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Title of the Project	Investigator	Sponsor Authority	Amount (in Rs.)	Starting Year
Cognitive Load Assessment of Visually Impaired Person during Adaptation of New IT Product as well as Assistive Technology	Bibhas Sen, Dakshina Ranjan Kisku, Tushar K. Bera and Tandra Pal	Tata Consultancy Service	2992000.0	2021
STEM accessibility (from web) for the visually impaired	Dr. Abhijit Sharma and Dr. Suvrojit Das	TCS Mumbai	2786300.0	2021
STEM Accessibility (From Web) For the Visually Impared	Abhijit Sharma and Suvrojit Das	TCS Mumbai	27.863	2021
An Approach towards Conservation of Birds of West Bengal through Creating an Intelligent Bird Identification System	Dr. Suvamoy Changder (PI) and Dr. M. Chakraborty (Co-PI)	Science and Technolo gy and Biotechnology Department, Govt. of West Bengal	690000.0	2019
Connected Smart Health Services for Rural India	Nabendu Chaki (CU, PI), Anirban Sarkar (Co-PI), Sankhayan Choudhury	Interdisciplinary Cyber Physical Systems (ICPS) Programme, Department of Science & Technology (DST), Govt. of India.	1527000.0	2019

# 4.4.24 Completed Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Complete Year
Development of Basic Natural Language Processing Tools and Resources for Maithili	Sujan Kumar Saha	SERB	2020
Automatic Question Generation and Evaluation Based System for Instant Assessment of Learning in School Level	Sujan Kumar Saha	SERB	2019
Design of lightweight and cost-effective PUF-Enabled secure architecture for authentication	Dr. Bibhash Sen, Prof. Suchismita Roy	Department of Science & Technology, Government of West Bengal	2022
Secure Architecture for FPGA based IoT Applications with enhanced physical unclonable function	Dr. Bibhash Sen, Prof. Suchismita Roy	DST-SERB (Core Research/ EMR scheme), Govt. of India	2023
ADKit: Smartphone Based Artificial Intelligence Enabled Portable Low-cost Anaemia Detection Kit based on Observation of Nail and Palm Pallor	Dr. Mamata Dalui (PI), Dr. Bibhash Sen (Co- PI), Dr.Suchismita Roy (Co-PI), Dr. akshina Ranjan Kisku (Co-PI), Prof. Dr. Anupam Basu (Co-PI)	Ministry of Electronics and Information Technology (MeitY)	2022
Artificial Intelligence (AI) in Education Focus: Children with Learning Disability	Prof. T. Pal (PI), Prof. Anupam Basu (Co- PI),Prof. Chiranjib Koley(Co-PI), Dr. Suman Halder (Co-PI), Dr. Tushar Kanti Bera(Co-PI), Dr. Mamata Dalui (Co- PI), Dr. Parag Kumar Guha Thakurta (Co-PI)	Ministry of Electronics and Information Technology (MeitY)	2023



Title of the Project	Investigator	Sponsor Authority	Complete Year
Artificial Intelligence (AI) in Education Focus: Children with Learning Disability	Prof. T Pal (Chief Investigator), Prof. A	Ministry of Electronics & Information Technology (MeitY),	2023
	Basu, Prof. C Koley, Dr. S Halder, Dr. T K	GoI	
	Bera, Dr. M Dalui, Dr. P K Guha Thakurta		
ADKit: Smartphone-Based Artificial Intelligence Enabled	Mamata Dalui, Anupam Basu, Suchismita Roy,	MeitY, Govt. of India	2023
Portable Low-cost Anaemia Detection Kit based on Observation of Nail and Palm Pallor	Bibhas Sen, Dakshina Ranjan Kisku		
Design and Development of Electro- Hydrodynamic Inkjet Printing System	Shibendu Sekhar Roy, Naresh Chandra urmu, Dakshina Ranjan Kisku	DST	2019
Remote Health: A Framework for Healthcare Services using Mobile and Sensor-Cloud Technologies	Anirban Sarkar (PI)	Information Technology Research Academy (ITRA) Ministry of Communications and Information Technology, Govt. of India.	2018

# 4.4.25 Reviews of Manuscripts for Publication in Journal

Reviewer	Name of the Journal	Publisher	Date of Final Review
Sujan Kumar Saha	IEEE Transactions on Learning Technologies	IEEE	2023-07- 18
Sujan Kumar Saha	PLOS ONE	PLOS	2023-07- 16
Sujan Kumar Saha	Expert Systems With Applications	Elsevier	2022-11- 18
Ankush Acharrya	Theoretical Computer Science	ELSEVIER	2023-07- 21
Suchismita Roy	Microelectronics Journal	Elseviers	2023-03- 24
Debashis Nandi	Sensors	MDPI	2023-02- 22
Debashis Nandi	Applied Sciences	MDPI	2022-08- 19
Sanghita Bhattacharjee	Adhoc and Sensor Wireless Networks	Old city publishing	2022-07- 22
Parag Kumar Guha Thakurta	EAAI	Elsevier	2022-12- 20
Narayan Murmu	Inter Journal of Computing and Digital Systems	University of Bahrain	2022-06- 28
Mamata Dalui	TURKISH JOURNAL OF ELECTRICAL	Scientific and	2022-09-
	ENGINEERING & COMPUTER SCIENCES	Technological Research Council of Turkey (TUBITAK)	10
Ankush Acharrya	Journal of Combinatorial Optimization	Springer	2022-10- 01
Ankush Acharrya	International Journal of Foundations of Computer Science	World Scientific	2023-03- 03
Goutam Sarker	Journal of The Institution of Engineers	IE(I) Springer	2022-09- 01
Goutam Sarker	Journal of The Institution of Engineers	IE(I) Springer	2022-06- 27





Name of the Faculty	Name of the Committee	Place of Visit	From	To Date
			Date	
Suchismita Roy	AICTE Committee for CSE Model Curriculum	Online	2022-07-	2022-12-
			01	31
Dakshina Ranjan	LITD 32 Biometrics Sectional Committee	Online	2023-01-	2023-01-
Kisku			04	04
Dakshina Ranjan	Electronics and IT Sector for Standards	Online	2022-08-	2022-08-
Kisku	National Action Plan (SNAP)		26	26

## 4.4.27 Invited Examiners/Paper-Setters/Board of Studies

Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Mamata Dalui	Department of Computer Science & Engineering (Artificial Intelligence & Machine Learning)	Haldia Institute of Technology, Haldia	2021-10- 27	2023- 08-06
Tandra Pal	Evaluation of M.Tech. Theses including viva- voce of eight students of final year dual degree, Centre for Excellence in Artificial Intelligence	IIT Kharagpur	2022-04- 28	2022- 04-28
Tandra Pal	External Member of UG BoS of Computer Science & UG BoS of Computer Application	Kazi Nazrul University, Asansol, West Bengal	2020-04- 07	2024- 04-06
Tandra Pal	External Member of PG BoS of the Department of Computer Science	University of Gour Banga, Malda, West Bengal	2021-06- 06	2025- 06-05
Tandra Pal	External Member of BoS of the Department of IT	MCKV Institute of Engineering, Department of IT, Liluah, Howrah, West Bengal	2020-05- 29	2024- 05-28
Tandra Pal	External Member of UG BoS of Computer Science & UG BoS of Computer Application	Sidho-Kanho-Birsha University, Purulia, West Bengal	2019-07- 01	2023- 06-30
Subhrabrata Choudhury	PhD Scholar Selection	CMERI, Durgapur	2022-11- 03	2022- 11-03
Animesh Dutta	Examination of PhD thesis "Schema-aware indexes for JSON document collections"	NITK Surathkal	2023-01- 07	2023- 01-31
Animesh Dutta	Examination of PhD thesis "Detection and Classification of Fabric Defects for Textile Industry"	NMIIMS Mumbai	2022-05- 02	2022- 05-31
Sanjib Sadhu	B. E. (Computer Science & Engineering)	Vivekananda College of Engineering for Women (Autonomous), Tiruchengode-637205	2022-07- 01	2023- 03-30
Subrata Nandi	Project Review and Steering Group (PRSG)	Ministry of Electronics & Information Technology (MeitY)	2022-05- 09	2022- 05-09
Goutam Sarker	PhD Thesis	CSVTU - Bhilai	2022-07- 20	2022- 08-17
Tanmay De	Board of Research Studies	Centre of IoT and AI Integration with Education-Industry- Agriculture, Kazi Nazrul University	2022-11- 09	2023- 09-01



Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Tanmay De	PhD Thesis Evaluation including Defense Viva-Voce	Sathyabama Institute of science And technology	2022-04- 19	2022- 08-26
4.4.28 Invited Ex	spert in Selection Committees			
Name of the Faculty	pert in Selection Committees  Discipline	University/Institute	From Date	To Date
	•	University/Institute  DR. B. C. ROY POLYTECHNIC		To Date 2023-05

# 4.4.29 Invited Lectures

Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Saravanan Chandran	Special Talk on Information Security	IEEE SMC Society, CHENNAI	ONLINE	2023-03- 28	2023-07- 28
Saravanan Chandran	Expert Lecture, Introduction to Computer Vision and its Applications	Two-week hybrid Faculty Development Program (FDP) on "Computer Vision and Image Processing using Deep Learning: Research Issues and Applications	ONLINE	2022-12- 19	2022-12- 30
Saravanan Chandran	Expert talk on Cloud based Reversible Dynamic Secure Steganography Model for Embedding Pathological Report in Medical Images	AICTE FDP	ONLINE	2022-04- 09	2022-04- 09
Mamata Dalui	AI in health care - past, present and future	National webinar on Artificial Intelligence in Health Care: The aspiration, Hype and Jeopardy	IQ City Institute of Nursing Science, Durgapur	2022-07- 30	2022-07- 30
Sujoy Saha	Societal Computing with IoT	Online Faculty Development Program in AMITY University	Kolkata	2022-08- 04	2022-08- 04
Dakshina Ranjan Kisku	Learning and Classification with CNN	One-Day Hands-on Workshop in the area of "Applications of Machine Learning"	The Neotia University	2023-03- 25	2023-03- 25
Dakshina Ranjan Kisku	Introduction to Biometrics: Face and Palmprint	FDP on "AI and Machine Learning for Biometric Recognition	NIT Warangal	2022-08- 16	2022-08- 25
Dakshina Ranjan Kisku	Non-invasive Haemoglobin Prediction using Nail Colour Features	Asia Symposium on Image Processing (ASIP'22)	Guangzhou, China	2022-07- 08	2022-07- 10



Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Dakshina Ranjan Kisku	Restricted Boltzmann Machine for Recommender System	FDP on Machine Learning and Deep Learning Approach towards Computer Vision	Dr. B. C. Roy Engineering College, Durgapur	2022-03- 28	2022-04- 02
Tandra Pal	Clustering: Soft vs. Hard	International Conference on Nonlinear Dynamics and its Applications in Physical and Biological Sciences (NDAPBS-2023)	Durgapur Govt. College, Durgapur	2023-03- 16	2023-08- 18
Tandra Pal	Generalization and Robustness of Neural Networks	High-End Workshop (Karyashala) on Stochastic Modelling Techniques"	IIT (ISM), Dhanbad	2023-02- 20	2023-08- 24
Sujan Kumar Saha	NLP and Data Analysis	5-day Training Program on Introduction to data analytics	BIT Lalpur, Ranchi	2022-12- 16	2022-12- 16
Subhrabrata Choudhury	Computational Social Science - Scopes and Trends	International Conference, ICACCP 2023	SMIT, Sikkkim	2023-02- 17	2023-02- 17
Ankush Acharrya	Path towards Theoritical Computer Science from IT	Departmental Induction Programme for UG 1st year students, 2022 (ITP- 22)	Jadavpur University	2022-12- 05	2022-12- 05
Animesh Dutta	Application of AI & ML Techniques in Robotics	SERB KARYASHALA' in "Application of AI & ML Techniques in Robotics"	CSIR-CMERI	2023-01- 10	2023-01- 10
Animesh Dutta	Global Science for Global Well-being	On the occasion of National Science Day 2023	Sido Kanhu Murmu University, Dumka	2023-02- 28	2023-01- 28
Animesh Dutta	Distributed AI and Agent Technology	Karyashala (High- End Workshops) entitled "Highend workshop on Internet- of-thing (IoT) and Artificial Intelligence (AI) and its Industrial Applications	CSIR-CMERI	2022-11- 29	2023-01- 29
Animesh Dutta	Resource person to conduct 2-days training programme on skill development	Skill Development Programme	NGO Agragati, Ramgarh Jharkhand	2023-03- 18	2023-03- 19
Animesh Dutta	Resource person to conduct 2-days training programme on skill development	Skill Development Programme	Badlao Foundation, Mihijam Jharkhand	2022-09- 26	2022-09- 27

### 4.4.30 Session Chair/Convenor

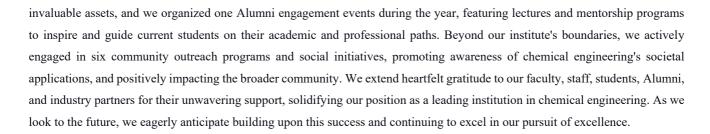
Name of the Faculty	Programme	Place	Session	From Date	To Date
Sajal Mukhopadhyay	The 16th International	Kitakyushu	IoT and Social	2022-06-	2022-07-
	Conference on	Convention Center	Networking (Track	29	01
	Innovative		Co-chair)		
	Mobile and Internet				
	Services in Ubiquitous				
	Computing (IMIS-2022)				
Sujoy Saha	24th International	IIT khragpur	Workshop Chair	2023-01-	2023-01-
	Conference On			04	07
	Distributed Computing				
	And Networking				
Sujoy Saha	3rd International	IIT Ropar	Track Chair	2022-12-	2022-12-
	Conference on Frontiers			19	21
	in Computing and				
	Systems (COMSYS2022)				
Dakshina Ranjan	Special Session on	Xi'an, China	Online	2022-08-	2022-08-
Kisku	"Artificial Intelligence in			07	11
	Real World applications"				
	at the 18th nternational				
	Conference on Intelligent				
	Computing (ICIC' 22)				
Tanmay De	International conference	Kolkata	Soft Computing	2022-06-	2022-06-
·	on Advances in Data		Techniques	23	23
	Science and Computing		•		
	Technologies (ADSC-				
	2022)				

### 4.5 Department of Chemical Engineering

#### 4.5.1 Department at a Glance:

In the academic year 2022-23, the Department of Chemical Engineering at NIT Durgapur excelled in research and teaching, emphasizing innovation, and nurturing skilled chemical engineers. Offering a comprehensive range of programs, including BTech, two MTech, and Dual Degree options, a total of 239 students benefitted from our cutting-edge curriculum and the expertise of our eighteen dedicated faculty members. These accomplished faculty members, recognized for four awards or recognitions, have significantly elevated the department's education quality. Supported by a diligent team of five staff members, the smooth functioning of departmental activities facilitated seamless academic and research operations. Research remained at the forefront of our endeavors, with twelve significant projects addressing critical challenges in chemical engineering. The impact of our research was amplified by securing substantial research grants and forging collaborations with prestigious institutions and industries. This dedication resulted in 67 publications, and our contributions were presented at twenty-one various national and international conferences, garnering recognition for the department's achievements. In addition to academic pursuits, we actively fostered ties with the industry, establishing eight meaningful partnerships with prominent companies. These collaborations provided our students valuable opportunities for joint projects, internships, and industrial training, enriching their learning experiences with practical exposure. Our students' outstanding performance in academics and extracurricular activities further showcased the department's excellence. Acknowledged through one awards and accolades, they demonstrated an unwavering dedication to chemical engineering. Moreover, participation in national and international competitions displayed their passion and talent, enhancing the department's reputation. In pursuing academic excellence, we invested in modernizing our infrastructure by introducing state-of-the-art laboratories and advanced equipment four numbers. These enhancements significantly bolstered our research capabilities and enriched the practical education we provide to our students. Furthermore, our Alumni continued to be





#### 4.5.2 Mission & Vision

#### Mission:

- 1) To produce highly qualified, well- rounded and motivated graduates possessing fundamental understanding and knowledge in Chemical Engineering who can provide service and leadership to the nation and the world.
- 2) To pursue creative research and new technologies in Chemical Engineering in order to serve the needs of industry, government & society.
- To achieve visibility by active participation in conferences and technical activities.

#### Vision:

To impart quality technical education in Chemical Engineering and focus on research and innovation in thrust areas of Chemical and related areas of engineering.

#### 4.5.3 **Faculty**

Name	Designation	Email-id
Parimal Pal	HAG-Professor	Ppal.che@nitdgp.ac.in
Parthapratim Gupta	Professor	Kcghanta.che@nitdgp.ac.in
Kartik Chandra Ghanta	Professor	Tmandal.che@nitdgp.ac.in
Tamal Mandal	Professor	Aksadhukhan.che@nitdgp.ac.in
AnupkumarSadhukhan	Professor	Ghalder.che@nitdgp.ac.in
GopinathHalder	Professor	Sdutta.che@nitdgp.ac.in
Susmita Dutta	Professor	Jsikder.che@nitdgp.ac.in
Jaya Sikder	Associate Professor	Sklahiri.che@nitdgp.ac.in
Sandip Kumar Lahiri	Associate Professor	Mkmandal.che@nitdgp.ac.in
MrinalKanti Mandal	Associate Professor	Sparuya.che@nitdgp.ac.in
Swapan Paruya	Associate Professor	Bdas.che@nitdgp.ac.in
Bimal Das	Assistant Professor	Ahens.che@nitdgp.ac.in
Abhiram Hens	Assistant Professor	Rgchaudhuri.che@nitdgp.ac.in
Rajib Ghosh Chaudhuri	Assistant Professor	Ddas.che@nitdgp.ac.in
Bikash Kumar Mondal	Assistant Professor	Bkmondal.che@nitdgp.ac.in
Debayan Das	Assistant Professor	Mbal.che@nitdgp.ac.in
Manisha Bal	Assistant Professor	Ppal.che@nitdgp.ac.in

#### 4.5.4 **Equipments**

Sl. No.	Name of the equipment	Date of Purchase	Amount (₹)
1	LCD PROJECTOR	GEMC-511687729267028 & 17.08.2022	1,30,217
	[Item installed-03 PC]		
2	COMPUTER-UG Lab	GEMC-511687773863635 & 22.11.2022	339767
	[Item installed- 05 PC]		
3	COMPUTER-UG Lab	GEMC-5116877992771 & 06.01.2023	266994
	[Item installed- 03 PC]		
4	Printer	GEMC-511687717352174 & 23.09.2022	14,000
5	Datalogger PG-Lab	NITD/CH/OH35 Equipment and Tools - 24,190	
		PG LAB/2022-23/01 & 04.11.2022	
6	OVEN	GEMC-511687773419465 & 24.11.2022	47400
7	MUFFLE FURNACE	GEMC-511687725684827 & 11.01.2023	34950



Sl. No.	Name of the equipment	Date of Purchase	Amount (₹)
8	Resitance Tem. Detector (RTD)	GEMC-511687764463135 & 07.12.2022	9,900
9	Digital Temperature Indicator	GEMC-511687759860242 & 07.12.2022	11600
10	S. S. TUBE BENDER	NITD/CH/OH35 Equipment and Tools -	16438
		PG LAB/2022-23/02 & 24.01.2023	
11	Double beam UV-VIS Spectrophotometer	GEMC-511687780027596 & 20.01.2023	498000
12	Centrifuge	GEMC-511687737256087 & 06.02.2023	95934
13	REMI Microprocessor Laboratory Stirrer	GEMC-5116877722018421 & 10.01.2023	12389
14	Multiparameter Meters with GPS and	GEMC-511687737256087 & 06.02.2023	314099
	Autonomously Logging Probe		
15	Link Interactive Flat Panel for class room	GEMC-511687759048166 & 10.02.2023	297738
16	UPS-AKS [Item installed]	GEMC-511687794890780 & 13.11.2022	2125
17	Desktop Computer UG Computing	GEMC-511687772556406 & 17.02.2023	4,40,875
	Laboratory & New Faculty Online UPS of		
	Rating 1.0 KVA with Battery of Backup time		
	15 Minutes		
18	POURPOINT Instrument	GEMC-51168779440279 & 14.12.2022	64328
19	Multifunction Laser Printer	GEMC-511687728231560 & 14.02.2023	34320
20	Online UPS of Rating 1.0 KVA With Battery	GEMC-511687713535013 & 18.02.2023	24,843
	Of Backup Time		
	15 Minutes	GENTS -14 (010-10)	405000
21	Centrifuge- Double Rotor, max speed 20,000	GEMC-511687740751062 & 13.02.2023	195000
22	RPM or above	OFN 60 511 (0771050 4700 0 0 0 0 1 0000	40.000
22	Unsteady State Heat Transfer	GEMC-511687718504792 & 04.01.2023	48,000
22	Set up	CEMC 511(077220(0410 0 04 01 2022	41.760
23	Composite Wall Setup For Heat Transfer Lab	GEMC-511687732868419 & 04.01.2023	41,760
24	Industrial Oven	GEMC-511687751614951 & 10.02.2023	48,700
25	Autoclave Reactor	GEMC-511687764246335 & 09.02.2023	19,500
26	Water Bath	GEMC-511687791568530 & 13.02.2023	22000
27	Double Effect Evaporator	GEMC-511687764119146 & 24.02.2023	110000
28	Setup for Forced Convection	GEMC-511687756777726 & 07.02.2023	390000
29	Double Distillation Unit	GEMC-511687791240497 & 09.02.2023	61300
30	Setup for natural Convection	GEMC-511687706850214 & 21.01.2023	41760
31	pH Meter	GEMC-511687706172783 & 23.02.2023	11170
32	COD Digester and Measurement	GEMC-511687732221871 & 01.03.2023	2,50,700
33	Water Proof, Dust Proof Interactive Panel	NITD/CH/OH35 /2022-23/03 & 02.03.2023	17,450
33	Enclosure	N11D/C11/O1133/2022-23/03 & 02.03.2023	17,430
34	IC Engine Combustion Analysis Kit	GEMC-511687789406695 & 09.03.2023	129790
35	Plate and Frame Filter	GEMC-511687746341904 & 28-Feb-2023	88,500
36	Non-Conventional Energy Lab	GEMC-511687754841650 & 06-Mar-2023	1,16,702
37	Vacuum Dryer	GEMC-511687709626504 & 18-Mar-2023	90,990
38	Batch Crystallizer	GEMC-511687717788123 & 18-Mar-2023	52,000
39	Packed Bed Loading-Flooding	GEMC-511687755747008 & 18-Mar-2023	58,000
40	Experimental Water-Cooling Tower	GEMC-511687763514397 &18-Mar-2023	58,000
41	York Scheibel's Extraction Column	GEMC-511687767340483 &18-Mar-2023	67000



### 4.5.5 Labs

Heat Transfer  1. Double Pipe Heat Exchanger  2. Forced convection apparatus  3. Drop wise and Film Wise Condensation  4. Emissivity Measurement Apparatus  5. Thermal Conductivity of Metal Rod  6. Shell and Tube Heat Exchanger  7. Natural Convection Apparatus  8. Composite Wall Apparatus  9. Unsteady State Heat Transfer Unit  10. Double Effect Evaporator  Mass Transfer  1. Tray Dryer  1. Heat Transfer Laboratory and Mass Transfer  Laboratory  1. Heat Transfer Laboratory and Mass Transfer  2. Open Pan Evaporator  3. Distillation Column  4. Rotary Dryer  5. Diffusion Experiment	1
2. Forced convection apparatus 3. Drop wise and Film Wise Condensation 4. Emissivity Measurement Apparatus 5. Thermal Conductivity of Metal Rod 6. Shell and Tube Heat Exchanger 7. Natural Convection Apparatus 8. Composite Wall Apparatus 9. Unsteady State Heat Transfer Unit 10. Double Effect Evaporator  Mass Transfer 1. Tray Dryer 1. Heat Transfer Laboratory and Mass Transfer 1. Tray Dryer 2. Open Pan Evaporator 3. Distillation Column 4. Rotary Dryer 5. Diffusion Experiment	1
3. Drop wise and Film Wise Condensation 4. Emissivity Measurement Apparatus 5. Thermal Conductivity of Metal Rod 6. Shell and Tube Heat Exchanger 7. Natural Convection Apparatus 8. Composite Wall Apparatus 9. Unsteady State Heat Transfer Unit 10. Double Effect Evaporator  Mass Transfer 1. Tray Dryer 1. Heat Transfer Laboratory and Mass Transfer 1. Tray Dryer 2. Open Pan Evaporator 3. Distillation Column 4. Rotary Dryer 5. Diffusion Experiment	1
4. Emissivity Measurement Apparatus 5. Thermal Conductivity of Metal Rod 6. Shell and Tube Heat Exchanger 7. Natural Convection Apparatus 8. Composite Wall Apparatus 9. Unsteady State Heat Transfer Unit 10. Double Effect Evaporator  Mass Transfer 1. Tray Dryer 1. Heat Transfer Laboratory and Mass Transfer Laboratory 2. Open Pan Evaporator 3. Distillation Column 4. Rotary Dryer 5. Diffusion Experiment	1
5. Thermal Conductivity of Metal Rod 6. Shell and Tube Heat Exchanger 7. Natural Convection Apparatus 8. Composite Wall Apparatus 9. Unsteady State Heat Transfer Unit 10. Double Effect Evaporator  Mass Transfer 1. Tray Dryer 1. Heat Transfer Laboratory and Mass Transfer Laboratory 2. Open Pan Evaporator 3. Distillation Column 4. Rotary Dryer 5. Diffusion Experiment	
6. Shell and Tube Heat Exchanger 7. Natural Convection Apparatus 8. Composite Wall Apparatus 9. Unsteady State Heat Transfer Unit 10. Double Effect Evaporator  Mass Transfer 1. Tray Dryer 2. Open Pan Evaporator 3. Distillation Column 4. Rotary Dryer 5. Diffusion Experiment	
7. Natural Convection Apparatus 8. Composite Wall Apparatus 9. Unsteady State Heat Transfer Unit 10. Double Effect Evaporator  Mass Transfer 1. Tray Dryer 1. Heat Transfer Laboratory and Mass Transfer Laboratory 2. Open Pan Evaporator 3. Distillation Column 4. Rotary Dryer 5. Diffusion Experiment	
8. Composite Wall Apparatus 9. Unsteady State Heat Transfer Unit 10. Double Effect Evaporator  Mass Transfer 1. Tray Dryer 2. Open Pan Evaporator 2. Open Pan Evaporator 3. Distillation Column 4. Rotary Dryer 5. Diffusion Experiment	
9. Unsteady State Heat Transfer Unit 10. Double Effect Evaporator  Mass Transfer 1. Heat Transfer Laboratory and Mass Transfer Laboratory  Heat Transfer Laboratory and Mass Transfer Laboratory  2. Open Pan Evaporator 3. Distillation Column 4. Rotary Dryer 5. Diffusion Experiment	
10. Double Effect Evaporator  Mass Transfer  1. Tray Dryer  2. Open Pan Evaporator  Laboratory  3. Distillation Column  4. Rotary Dryer  5. Diffusion Experiment	
Heat Transfer Laboratory and Mass Transfer Laboratory  Heat Transfer Laboratory and Mass Transfer Laboratory  Laboratory  Laboratory  Laboratory  Mass Transfer 1. Tray Dryer 2. Open Pan Evaporator 3. Distillation Column 4. Rotary Dryer 5. Diffusion Experiment	
1. Heat Transfer Laboratory and Mass Transfer Laboratory  Heat Transfer Laboratory and Mass Transfer 2. Open Pan Evaporator 3. Distillation Column 4. Rotary Dryer 5. Diffusion Experiment	
1. Heat Transfer Laboratory and Mass Transfer Laboratory  2. Open Pan Evaporator 3. Distillation Column 4. Rotary Dryer 5. Diffusion Experiment	
Laboratory  3. Distillation Column  4. Rotary Dryer  5. Diffusion Experiment	
Laboratory 3. Distillation Column 4. Rotary Dryer 5. Diffusion Experiment	
5. Diffusion Experiment	
6. Cooling Tower Experiment	
7. Concentric Pipe Heat Exchanger	
8. Bubble cap Distillation column	
9. Simple batch distillation column	
10. Crystallizar	
11. Vaccum Dryer	
12. Vaccum Drum Dryer	
13. Solid Liquid Extraction Column	
14. Liquid –Liquid Extraction in Packed c	olumn
15. Vaccum Crystallizer unit	
Fluid Mechanics  1. Packed Bed	
2. Hydraulic Bench Apparatus	
3. Reynolds Experiment	
4. Helical Coil Apparatus	
5. Bernoulli Apparatus	
6. Pipe Friction Apparatus	
7. Pitot Tube Apparatus	
8. Parallel Friction Pipe Experiment	
9. Pipe Fittings Apparatus	
10. Pipes in Parallel	
11. Reciprocating Pump	
Fluid Mechanics Laboratory and Mechanical 12 Pine Friction apparatus	
2. Operations Laboratory Mechanical Operations  Mechanical Operations	
1. Elutriator Experiment	
2. Cyclone Separator Experiment	
3. Vibrating Screening Experiment	
4. Ball Mill Apparatus	
5. Jaw Crusher Apparatus	
6. Agitated Vessel Experiment	
7. Kneader Mixer	
8. Plate & Frame filter Press	
9. Roll Crusher	
10. Cone Classifier	
11. Screening	
12. Thickener	
Hardware: 30 number of Desktop Comput	ers with windows
OS	
3. UG Computing Laboratory Software: Matlab, Aspen Plus, Ansys, CO	MSOL
Multiphysics etc.	



Sl. No	Name of Laboratory	Major Equipment
		1. Clean Air Station (Biosafety)
		2. Electronic balance
		3. Autoclave
		4. Air compressor
		5.Vacuum Pump
	Fusing an antal and Manchagas Task and and	6. Solar Heater
4.	Environmental and Membrane Technology	7. Rotameters-3Nos
	Laboratory	8. Streaming Pot.Device
		9. Memb-integrated Hybrid Bioreactor
		10. Thermostatic bath with circulator 2 Nos.
		11. High Press SS pump
		12. Commercial Membranes
		13. Electrodes with stds (Na, Cl)
		1.Performance Liquid Chromatography System with
		computer Accessories (HPLC)
		Model: Agilent 1200 series, Make: Agilent Technologies
		2.Gas Chromatograph (GC)
		Model: GC7700, Make: Techcomp
		3.Thermo Gravimetric Analyzer
		Model: DTG-60, Make: Shimazu,
		4. High speed Refrigerated Ultra Centrifuge with accessories
_	Central Research Laboratory -I	5. Rheometer with Pentium IV computer, colour inkjet
5.	<b>,</b>	printer, oil free compressor (0.5 hp) and driver software.
		6. Variable band with double beam UV-VIS,
		Spectrophotometer
		7.TOC Analyzer
		Make: O.I. Analytical (USA), Model: TOC 1030W
		8.HPLC grade de-ionized water purifier
		Make: Millipore, Model: Direct-Q® 3
		9.Laboratory Freezer with wheel
		Brand: Elanpro, Model: ECG 374
		1.ASTM Distillation
		2.Pensky mortens apparatus
		3. Aniline point apparatus
		4. Reid vapour pressure app.
		5. Able App.
		6.Solar collector
		7.Redwood viscometer
		8.Bomb calorimeter
		9.Conradson carbon residue
5.	Fuel Laboratory	10. Shattering index app.
·	1 del Edocidiory	11.Dean Stark Apparatus
		12.Furnace
		13.Air-oven
		14.Desicator
		15.O <sub>2</sub> -cylinder
		16. Weight Balance
		17. Muffle Furnace
		18.Gas cylinder for Oxygen
		19.Gas cylinder for Nitrogen
		20.Autoclave
		Hardware: 15 No. of Desktop Computers and 04 number of
		Computing Workstations
7.	PG Computing Laboratory	Software: Matlab, Aspen Plus, Ansys, COMSOL
		Multiphysics LAMMPS etc. OS: Windows and Linux



Sl. No	Name of Laboratory	Major Equipment
8.	Chemical and Bio-Chemical Reaction Engineering Laboratory	1.Isothermal Batch Reactor 2.Plug-Flow Reactor 3.Continuous Stirrer Tank Reactor 4.RTD Studies CSTR 5.Removal of Methylene Blue Die Using 6.Fenton's Reagent 7.Adiabatic reactor 8.Rtd study with packed bed reactor(old) 9.Rtd study with packed bed reactor(New) 10.Cascade reactor 11.Autoclave 12.Shaker 13.D O meter 14.PH meter 15.Deep Freeze 16.Double distillation Column 17.Bod Incubator 18.Bio safety cabinet 19.Air compressor 20.BOD Incubator Shaker
9.	Process Control & Instrumentation Laboratory	1.Control valve characteristic 2.Intetacting non-interacting System 3.Level control trainer 4.Temp.Control Trainer 5.Damping coefficient of manometer 6.Calibration of thermocouple 7.Pressure control trainer
10.	Central Research Laboratory -II	<ol> <li>Atomic Absorption Spectroscopy with Graphite furnace Model: iCE 3500 AA Spectrometer (Wide PMT), True dual Atomizer for Flame and Furnace System, (True Double Beam Optics)</li> <li>Fluoroscence Spectrophotometer Model: Agilent model Cary Eclipse Fluorescence Spectrophotometer with Polarizer and Accessories Make: Agilent Technologies</li> <li>Gas Chromatography Mass Spectrophotometer (GC-MS) with S/SI Injector Model: Agilent model GC+5977B – High Performance Turbo QUADRUPOL GC-MS Spectrometer, Make: Agilent Technologies</li> <li>Surface Area Analyzer</li> </ol>
11.	Research Laboratory	1.TGA with interconnected with FTIR Model: STA6000 Simultaneous Thermal Analyser (TGA- DTA-DSC) System, Make: PerkinElmer
Research	Laboratory inside Fluid Mechanics Laboratory	
12.	Combustion Engineering Laboratory	<ol> <li>DropTube Furnace with Thermocouple (1400°C) and all other accessories.</li> <li>Cylindrical mass loss furnace with micro balance and all other accessories.</li> </ol>
13.	Multi-phase Flow Modelling Laboratory	<ol> <li>Horizontal and vertical recirculating pipeline for flow study of solid-liquid mixture</li> <li>Horizontal and vertical recirculating pipeline for flow study of gas-liquid/liquid-liquid mixture</li> <li>Rheometer with Pentium IV computer, colour inkjet printer, oil free compressor (0.5 hp) and driver software.</li> <li>Data acquisition system including computer, printer and driver software</li> <li>Pressure Transducer</li> <li>Magnetic flowmeter</li> <li>Magnetic flowmeter</li> </ol>

#### 4.5.6 PhD degree awarded till 2022-23

Five.

### 4.5.7 Any other relevant information

Prof. P. Pal of the Department has been recognized as one among the top 0.5% of the scientist across all streams as per Stanford University report 2022. Department has fetched prestigious awards under the leadership of Prof. P. Pal such as HIYOSHI Environment award 2018 from Hiyoshi Corporation Japan, Best research award on Clean Technology and Environmental Policy by Springer Verlag, Germany, IIChE best research award in the millennium Chemical Engineering Congress etc. Prof. Pal also earned 9 copy and patent rights on several green technologies for application in process industries. Three books authored by Prof. P. Pal have been published by the world's largest and most reputed publisher, the Elsevier Science. Prof. Pal has been selected Fellow of the Royal Society Chemistry, London. He is the top most scientist of NIT Durgapur as per AD Scientific Index with around 150 SCI publications.

#### 4.5.8 Specialization

- · Application of AI in chemical industry
- Development and deployment of online optimizer for chemical plants
- · Heat Transfer
- · Fluid Mechanics
- Air Pollution Control, Flue gas treatment, Computational Fluid Dynamics, Waste Water Treatment
- · Chemical Engg Thermodynamics, Separation Processes, Biofuel Technology, Polymer grafting, Process optimization
- · Interface Engineering, Material Science
- Process modeling and Simulation
- Thermodynamic and Kinetic Modeling of Chemical Absorption process
- Process Development for CO2 capture and conversion
- Pinch Technology based process integration
- Chemical and Biochemical Engineering
- Chemical Engineering; Environmental Engineering; Petroleum Refining; Mass Transfer; Membrane Technology; Green Technology; Water Treatment Technology; Membrane-based Biofuel
- Pyrolysis, Gasification and Combustion
- Membrane Synthesis, Wastewater Treatment, Biomass Pretreatment for Bioethanol Production
- Multiphase flow, Slurry flow modeling, Wastewater Treatment
- Composite nano-material, Membrane-based separations technologies, Catalytic Membrane Reactor Biochemical Engineering
- Process Modelling & Simulation, Combustion, Pyrolysis & Gasification
- Multiphase Flow, Waste Treatment, Nano particle Synthesis
- Bubble Dynamics
- Two-phase boiling flow
- · Multiphase flow
- · Fluid Mechanics

#### 4.5.9 Proposed Plan for Research

- Development and deployment of online optimizer for commercial chemical plants across world
- Biohydrogen production from water splitting employing advanced technological contrivance
- Developing low cost adsorbent for liquid phase application
- Process modeling and scale up of adsorption process
- Activated carbon preparation from RHA and STW and use in industrial wastewater treatment. Integrated treatment system
  design for Coke oven and leather industrial wastewater treatment. Development of catalyst (iron based) with higher scale
  from rice mill solid waste and chemically synthesized for different industrial wastewater treatment. Bio-organic fertilizer
  production from leather and solid waste in combination with their industrial / agricultural waste and efficacy of fertilizer
  has been successfully tested in plant system.
- Developing more green technologies; Sea water Desalination; Li and potable water extraction from Sea Water; Transfer of already developed and patented technologies
- · Phycoremediation of pollutants, Downstream processing of algal biomass for extraction of nutraceuticals



- Extraction of liquid fuel from plastic wastes
- · Research and Consultancy on CFD and MD based Process Modelling and Simulations
- 1) Studying the viscous and thermal fingering instabilities in porous media (PhD work) 2) Developing a paper-based heater for point-of-care applications (Btech work) 3) Detection and quantification of heavy metal ions in a distance-based Paper Analytical Devices (M.Tech Work) 4) Flow control on paper membranes with intermittent wax layering (BTech Work)
- · Development of sustainable technology for Industrial wastewater treatment and biofuel production
- Multiphase flow, Slurry flow modeling, Wastewater Treatment
- Synthesis of Thin film Nano-composite, Energy Material
- Characterization and modification of nano-silica obtained from rice husk Gas-Solid reaction kinetics in converging vertical riser Novel Technoeconomic Evaluation for Conversion & Re-refining of Used Lubricating Oils to Base Oil Effect of Waste Plastics on the Physical Structure and Subsequent Anaerobic Digestion of Vegetable Waste Landfill Bed
- To develop and implement cutting-edge flue gas treatment technologies that significantly reduce flue gas emissions from industrial sources, contributing to global efforts to combat climate change
- To develop innovative and scalable methods for efficient and sustainable microplastic removal from aquatic environments, safeguarding the health of ecosystems and human populations

#### 4.5.10 Area of Research Interest

- Advance process control
- Online optimizer for commercial chemical plants
- Application of Machine learning for commercial chemical plants
- · Air Pollution Control, Flue gas treatment, Computational Fluid Dynamics, Waste Water Treatment, Microplastic Removal
- Flow through porous media
- Paper-microfluidics
- · Coating, Wetting, Super hydrophobic surface, hetero structured nanomaterials, packaging films, phototcatalyst
- Wastewater remediation, Advanced techniques of biodiesel generation, Biopolymer composite development, Green hydrogen production
   Chemical Absorption process
- Thermodynamic modeling
- Kinetic modeling of Bioprocess and reactor design
- Advanced technologies for wastewater treatment, Biodegradation of industrial wastewater, integrated wastewater treatment system, Kinetics and Reactor design for specific toxic molecules treatment, Waste valorization, Biofertilizer production
- Innovation of Green Technology; Advanced Membrane-based Separation; Process Intensification; Energy-saving Technology innovation
- Biochemical Reaction Engineering. Environmental Engineering. Bioremediation and Phycoremediation
- Reaction kinetics, yield and catalytic effect
- CFD and Heat Transfer , Molecular Dynamics Simulation, Process modelling and Simulation, Microfluidics and Nanotechnology Holistic development
- Multiphase flow, Slurry flow modeling, Wastewater Treatment
- · Membrane separation Processes, Catalytic Membrane Reactor, Nano-Membrane for Energy and Water
- Modelling of thermochemical reactions of carbonaceous materials and waste plastics
- Multiphase Flow, Waste Treatment, Nano particle Synthesis
- Bubble Dynamics
- Two-phase boiling flow
  - · Multiphase flow

#### 4.5.11 Institute Industry Collaboration

Collaborating Institute Organization	Areas of collaboration	Collaboration Activities
Scientific Design Company,USA	Technical consultancy to build various AI based online optimizer for glycol plants	Development of machine learning based applications for commercial petrochemical plant
M/s Matix Fertilizer Company Ltd, West Bengal	Technical consultancy	Root cause analysis of failure of turbine
Sreema Rice mill, Maa Bhabatarini Rice mill, Leder Chemiche Kolkata	Industrial effluent treatment	Collection of wastewater and batch scale treatment of 40L
Matix Fertilizer, Panagarh	Wastewater Treatment	Training to industry people



Collaborating Institute Organization	Areas of collaboration	Collaboration Activities
Durgapur Steel Plant, SAIL	Effluent Treatment Plant	Failure Analysis
NIT Durgapur and IOCL Haldia Refinery	Training and Research	Provided training to more than hundred operators of IOCL Haldia Refinery. Some area of collaborative research were identified
Essar Oil & Gas Exploration & Production (EOGEPL)	Treatment of Produced Water	Started with the financial support from DST
IOCL, Haldia; Haldia Petrochemicals Ltd	Wastewater treatment, Employee's training	Employee's training
Eureka Forbes Ltd, (R & D) Centre	RO Based Water Treatment System	Reducing Scaling in RO Based Water Treatment System
Gloster Jute Mills Ltd	Research Work	Project work

### 4.5.12 Collaboration with Academic and Research Institutions

Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
University of Cincinnati, Ohio	Paper Microfluidics	Dr. Aashish Priye	Developing the paper-based assays for Biological reaction and studying the effect of moisure and shape on the imbibition dynamics
Sanjay Gandhi Postgraduate Institute of Medical Sciences	Paper Microfluidics	Prof. Amit Goel	Developing Paper-based assays for Hepatitis C virus
Indian Institute of Technology Kharagpur, Kharagpur, India & University of Kwazulu-Natal (UKZN), Durban, South Africa	Research Publication	Caitlyn Chetty, David Lokhat, Manisha Bal, BC Meikap	Publications
National Institute of Technology Silchar	Biofuel synthesis and heterogeneous catalyst development	Dr. Samuel Rokhum	Biodiesel production
Indian Institute of Agricultural	Microalgal fuel synthesis	Dr. O. N. Tiwari	Biodiesel production and
Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
Research, New Delhi			biofertilizer design
Thapar Institute of Engineering and Technology, Chandigarh	Wastewater remediation	Dr. Sanghamitra Barman	Endocrine disruptive compounds removal
Indian Institute of Technology Jodhpur	Biohydrogen production	Dr. Angan Sengupta	Photocatalyst development, Instrumental analysis
Indian Institute of Technology Delhi	Pharmaceutical wastewater treatment	Prof. K. K. Pant	Book editing on wastewater management
Cambridge University	Biofuel production	Prof. Andrew E. Wheatley	Process optimisation
American University of the Middle East, Kuwait	Research collaboration	Dr. Eldhose Iype	Joint research publication
Amity University, Noida	Research collaboration	Dr. Sandip Chakraborty	External funding and joint research publication
Brainware university	Research	Dr. Deepshikha Datta	Collaborative research



Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
IIT Kharagpur, Jadavpur University, IIT Guwahati, CSIR IICT Hyderabad; Water Treatment Technology for Rice Mill Wastewater in association with Prof. Sirshendu De and Group IIT KGP, NITD Group	Wastewater treatment	Prof. Sirshendu De, Prof. Tamal Mandal	40000L wastewater treatment/Day in Sree MAA Rice Mill, Burdwan.
Hanyang University, Seoul, South Korea	Biofuel production and resource recovery from waste	P.Pal, R.Kumar, B.H.Jeon	Research & Publication
KIIT Bhubaneswar	Carbon capture and conversion to biofuel	P.Pal, S.Chakrabortty, S.K.Tripathy	Research & publication
Institute of Environmental Protection, Vilniaus Gedimino technikos universitetas, VILNIUS TECH	Environmental Engineering	Prof. Edita BALTRĖNAITĖGEDIENĖ	Paper Publication, Supervision of students
Izmir Institute of Technology	Environmental Engineering	Abhishek DUTTA	Paper publication
Central Mechanical Research Institute Durgapur	Environmental Engineering	Dr. Biswajit Ruj	Paper publication, Joint supervision of students
Maharshi Dayanand Saraswati University, Ajmer	Phycoremediation technology	Ashish Bhatnagar and Monica Bhatnagar	Writing proposal, Joint research
CSIR-CMERI	Fuel recovery from Plastic wastes	Dr. Biswajit Ruj	Joint research on development pyrolysis model
IIT Kanpur and CMERI Durgapur	Research and publication	Prof. Gautam Biswas (IIT Kanpur), Dr. Nripen Chanda (CSIR-CMERI Durgapur), Dr. Priyabrata Banerjee (CSIR-CMERI Durgapur), Dr. Samik Dutta (CSIR-CMERI Durgapur)	Joint Publications
Indian Institute of Petroleum & Energy, Visakhapatnam, Andhra Pradesh, 530003	Water Treatment and membrane synthesis	Dr. Dipankar Pal	Joint PhD Supervision
Vilnius Gediminas Technical University (VILNIUS TECH), Vilnius, Lithuania	Waste Treatment	Edita Baltrenaite	Joint PhD supervision
Amity University, Noida	Material and Membrane	Prof Sandip Chakrabarti	Research work
IIT BHU	Bio Energy	Dr. Jyotiprasad Chakrabarti	Research work
JNU, New Delhi	Bio-Membrane for water	Prof Kashyap Kumar Dubey	Research work
Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
IIT Madras, India (terms to be renewed)	Multiphase flow; Fluid Mechanics	Puspavanam, S.	Academic Research
Texas A&M University, USA (in discussion)	Bubble dynamics; Two-phase boiling flow; Multiphase flow	Yassin Hassan	Academic Research



Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
IIT Kanpur, India (in discussion)	Multiphase flow; Bubble dynamics	XYZ (confidential)	Academic Research

## 4.5.13 Innovations and Technology Transfer (Patents filed during)

Title	Inventors	Application Nos	Date of Filling
An Assembly Having Metal-	Sandip Chakrabarti,	TEMP/E-1/36638/2022-	2022-06-08
Organic Framework Based	Abhyavartin Selvam,	DEL, 06/2022	
Solar Absorber For Effective	Geetika Jain, Rajib Ghosh		
Photothermal Desalination	Chaudhuri, Mrinal Kanti		
	Mandal, Abhiram Hens		
An assembly having Metal-	Sandip Chakrabarti,	Ref No: 2147483647	2022-06-08
organic Framework based	Abhyavartin Selvam,		
solar absorber for effective	Geetika Jain (AINT), Rajib		
photothermal Desalination	Ghosh Chaudhuri, Mrinal		
	Kanti Mandal, Abhiram		
	Hens		

# 4.5.14 Workshops/Seminars Organized

Name of Key Speaker(s)	Name of the Programme	Date of the Programme
Prof. Kaustubha Mohanty IIT Guwahati, Prof. Rajat Chakraborty Jadavpur University, Prof. Dhanapati Deka Tezpur University, Dr. Samuel Lalthazuala Rokhum NIT Silchar, Dr.Sumit Dhawane, MANIT Bhupal	Challenges and opportunities in Sustainable Biodiesel synthesis and its application towards greener future	2023-03-02
Prof Sadhan Kr. Ghosh	Emerging Technologies in Chemical Engineering: From Theory, Experiments to Industry Applications. STUTI program, DST Government of India	2022-08-22
Prof. Sadhan Kumar Ghosh, Jadavpur University	Emerging Technologies in Chemical Engineering: From Theory, Experiments to Industry Applications, Under STUTI program, DST Government of India	0028-02-12
Dipankar Chatterjee	ESMOC 2021 (International Congress held in 2022)	2022-12-05
Nirmal K Roy	ESMOC 2021 (International Congress held in 2022)	2022-12-06
Papiya Mukherjee	ESMOC 2021 (International Congress held in 2022)	2022-12-05
Tarkeshwar Kumar	ESMOC 2021 (International Congress held in 2022)	2022-12-06
Swapan Paruya (Program Chair)	ESMOC 2021 (International Congress held in 2022)	0012-06-13

### 4.5.15 Journal: Published in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Paruya, S., Bhati, J.,	A Numerical Investigation	Chemical Engineering	Volume:181 Issue No:1 Page
Ghoshal, T., Mankar, B.	on Heat	Science	No:326-340 Year:2016 Month:
	Transfer Dynamics of a		
	Periodically		
	Forced Boiling Channel in		
	Low Amplitudes		



Author(s) Name	Paper Name	Journal Name	Others Info
Sayantan Sarkar, Deepshikha Datta, Somnath Chakraborty, Bimal Das,	Comprehensive analysis of reclamation of spent lubricating oil using green solvent: RSM and ANN approach	Chemical and Process Engineering	Volume:43 Issue No:2 Page No:119–135 Year:2022 Month:Oct
Deepshikha Datta, KS Deepak, Bimal Das	Progress in the synthesis, characterisation, property enhancement techniques and application of gold nanoparticles: A review	MRS Communications	Volume:12 Issue No: Page No:700–715 Year:2022 Month:Aug
Deepshikha Datta, , Divakar Pamanji , Bimal Das	Isolation of nanocellulosic fibrils from allium cepal skin biowaste food residues  – extraction and characterization	Indian Chemical Engineer	Volume:65 Issue No:2 Page No:1- 17 Year:2023 Month:Feb
Deepshikha Datta , D. Tejeswara Rao K S Deepak , Mahima Mutsuddi , Bimal Das	Jute fiber reinforced unsaturated polyesters laminate preparation using egg shells filler	Asia-Pacific Journal of Chemical Engineering	Volume:18 Issue No:3 Page No:1- 13 Year:2023 Month:Feb
Joseph VL Ruatpuia; Gopinath Halder; Sakar Mohan; Baskar Gurunathan; Hui Li; Fang Chai; Sanjay Basumatary; Samuel Lalthazuala Rokhum	Microwave-assisted biodiesel production using ZIF-8 MOF-derived nanocatalyst: A process optimization, kinetics, thermodynamics and life cycle cost analysis	Energy Conversion and Management	Volume:292 Issue No: Page No:117418 Year:2023 Month:Mar
Joseph VL Ruatpuia, Bishwajit Changmai, Ayush Pathak, Lana A Alghamdi, Thomas Kress, Gopinath Halder, Andrew EH Wheatley, Samuel Lalthazuala Rokhum	Green biodiesel production from Jatropha curcas oil using a carbon-based solid acid catalyst: A process optimization study	Renewable Energy	Volume:206 Issue No: Page No:597-608 Year:2023 Month:Feb
Indradev Kumar, Abhiram Hens, Sandip K Lahiri, and Gautam Biswas	Study of Cryogenic Film Boiling in the Presence of External Electric Field Using a Variant of Volume of Fluid- Based Interface Tracking Algorithm	Industrial and Engineering Chemistry Research	Volume:61 Issue No:49 Page No:18176-18186 Year:2022 Month:Dec
Kashyap Dubey, Ankush Yadav; Eldon R Rene; Manisha Sharma; Indu Jatain; Mrinal Kanti Mandal	Valorization of wastewater to recover value-added products: A comprehensive insight and perspective on different technologies	Environmental Research	Volume:214 Issue No: Page No:113957 Year:2022 Month:Apr
Manisha Sharma, Mrinal Kanti Mandal, Shailesh Pandey, Ravi Kumar, and Kashyap Kumar Dubey	Visible light-driven photocatalytic degradation of tetracycline using heterostructured Cu2O-TiO2 nanotubes, kinetics and toxicity evaluation of degraded products on cell lines	ACS Omega	Volume:7 Issue No: Page No:33572 Year:2022 Month:Aug



Author(s) Name	Paper Name	Journal Name	Others Info
Abhyavartin Selvam, Geetika Jain, Rajib Ghosh Chaudhuri, Mrinal Kanti Mandal, Sandip Chakrabarti	Avant-Garde Solar— Thermal Nanostructures: NascentStrategy into Effective Photothermal Desalination	Sol. RRL	Volume: Issue No: Page No:2200321 Year:2022 Month:Oct
Paruya, S., Roy, K.	Isothermal and non- isothermal growth of a vapor bubble in pool boiling – Effect of translational velocity of bubble	International Journal of Heat and Mass Transfer	Volume:216 Issue No:124570 Page No:14 Year:2023 Month:
Paruya, S., Naik L, J., Bhati, J.	High-Speed Visualization of Trajectory and Shape Change of Vapor Bubble in Subcooled Flow Boiling	Multiphase Science and Technology	Volume:34 Issue No:4 Page No:15–40 Year:2022 Month:
Paruya, S., Bhati, J.	Numerical Simulation of Bubble Growth and Collapse in Pool Boiling: Effect of Bubble Motion	Heat Transfer Research	Volume:52 Issue No:1 Page No:57-76 Year:2021 Month:
Paruya, S.,Bhati, J., Akhtar, F.	Numerical Model of Bubble Shape and Departure in Nucleate Pool Boiling	International Journal of Heat and Mass Transfer	Volume:180 Issue No:121756 Page No:14 Year:2021 Month:
Naik L, J.,Bhati, J., Paruya, S.	Onset of Flow Oscillation in Natural Circulation Boiling Loop- Role of Bubble Dynamics	Industrial & Engineering Chemistry Research	Volume:60 Issue No:2021 Page No:955-968 Year:2021 Month:
Bhati, J., Paruya, S.,Naik L, J.	Numerical simulation of bubble dynamics in subcooled flow boiling in a channel	Nuclear Engineering and Design	Volume:371 Issue No:110945 Page No:14 Year:2020 Month:
Bhati, J., Paruya, S.	Numerical Simulation of Bubble Dynamics in Pool Boiling at Heated Surface	International Journal of Heat and Mass Transfer	Volume:152 Issue No:119645 Page No: Year:2020 Month:
Bhati, J., Paruya, S., Pushpavanam, S.	Numerical Simulation of Vapour-Bubble Collapse – Heat Transfer and onlinear Dynamics Issues	Journal of Heat Transfer	Volume:142 Issue No:32001 Page No:16 Year:2020 Month:
Bhati, J., Paruya, S.	A Semi-Analytical Method for Computing the Dynamics of Bubble Growth: The Effect of Superheat and Operating Pressure	Industrial & Engineering Chemistry Research	Volume:57 Issue No:44 Page No:15159–15171 Year:2018 Month:
Rithuparna Devasan, Joseph Ruatpuia, Shiva Prasad Gouda, Pravin Kodgire, Sanjay Basumatary, Gopinath Halder, Samuel Lalthazuala Rokhum	Microwave-assisted biodiesel production using bio-waste catalyst and process optimization using response surface methodology and kinetic study	Scientific Reports	Volume:13 Issue No: Page No:2570 Year:2023 Month:Feb
Supongsenla Ao, Lana A. Alghamdi, Thomas Kress, Manickam elvaraj, Gopinath Halder, Andrew E.H. Wheatley, Samuel Lalthazuala Rokhum	Microwave-assisted valorization of glycerol to solketal using biomass- derived heterogeneous catalyst	Fuel	Volume:345 Issue No: Page No:128190 Year:2023 Month:Mar



Author(s) Name	Paper Name	Journal Name	Others Info
Subhasish Majee, Kalyan Sarkar,Rwiddhi Sarkhel, Gopinath Halder, Dalia Dasgupta Mandal, N. K Rathinam, Tamal Mandal	Bio-organic fertilizer production from industrial waste and insightful analysis on release kinetics	Journal of Environmental Management	Volume:325 Issue No: Page No:116378 Year:2022 Month:Sep
Sumona Show, Priyanka Sarkar, Sanghamitra Barman, Gopinath Halder	Microbial remediation of ibuprofen contaminated water using novel isolate Microbacterium araoxydans	Chemical Papers	Volume:77 Issue No:1 Page No:517-531 Year:2022 Month:Sep
Babatunde E. Olubunmi, Saka H. Bamidele, Aderibigbe F. Alade, Yusuff Adeyinka, Bisheswar Karmakar, Samuel Lalthazuala Rokhum, Gopinath Halder	Valorization of restaurant waste oil and cow-bone doped siliceous termite hills towards biodiesel production: Kinetics and thermodynamics, , 30 (2022), .	Sustainable Chemistry and Pharmacy	Volume:30 Issue No: Page No:100895 Year:2022 Month:Nov
Sucharita Samanta, Deepshikha Datta, Onkar Nath Tiwari, Gopinath Halder	Microbial enhancement of biodegradability inoculating Bacillus tropicus and Staphylococcus cohnii onto LDPE/Starch blended films	Biomass Conversion and Biorefinery	Volume:3 Issue No: Page No:272- 287 Year:2022 Month:Oct
Nabanita Ghosh, Gopinath Halder	Current progress and perspective of heterogeneous nanocatalytic transesterification towards biodiesel production from edible and inedible feedstock: A review	Energy Conversion and Management	Volume:270 Issue No: Page No:116292 Year:2022 Month:Sep
Kankana Saikia, Kalyani Rajkumari, N. Shaemningwar Moyon, Sanjay Basumatary, Gopinath Halder, Umer Rashid, Samuel Lalthazuala Rokhum	Sulphonated biomass-based catalyst for solketal synthesis by acetalization of glycerol – A byproduct of biodiesel production	Fuel Processing Technology	Volume:238 Issue No: Page No:107482 Year:2022 Month:Aug
Arpita Das, Da Shi, Gopinath Halder, Samuel Lalthazuala Rokhum	Microwave-assisted synthesis of glycerol carbonate by transesterification of glycerol using Mangifera indica peel calcined ash as catalyst	Fuel	Volume:330 Issue No: Page No:125511 Year:2022 Month:Jul
Shiva Prasad Gouda, Kanokwan Ngaosuwan, Suttichai Assabumrungrat, Manickam Selvaraj, Gopinath Halder, Samuel Lalthazuala Rokhum	Microwave assisted biodiesel production using sulfonic acid-functionalized metalorganic frameworks UiO-66 as a heterogeneous catalyst	Renewable Energy	Volume:197 Issue No: Page No:161-169 Year:2022 Month:Jul
Sumona Show, Somnath Chowdhury, Moumita Maji, Priyanka Sarkar, Monidipa Ghosh, Mika	Sorptive elimination of ibuprofen using activated biochar: modelling, nonlinear isotherm and kinetic, cost assessment and	Biomass Conversion and Biorefinery	Volume:11 Issue No: Page No:370-382 Year:2022 Month:Aug

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Author(s) Name	Paper Name	Journal Name	Others Info
Sillanpää, Gopinath Halder	toxicity analysis		
Shraboni Mukherjee, Satyajit Panda, Sumona Show, Anoar Ali Khan and Gopinath Halder	Fluoride remediation by Staphylococcus lentus (KX941098) and Providencia vermicola (KX926492) beads in upward low packed bed reactor	Biomass Conversion and Biorefinery	Volume:7 Issue No: Page No:172- 183 Year:2022 Month:May
Sumona Show, Rwiddhi Sarkhel, Gopinath Halder	Elucidating sorptive eradication of ibuprofen using calcium chloride caged bentonite clay and acid activated alginate beads in a fixed bed upward flow column reactor,	Sustainable Chemistry and Pharmacy	Volume:27 Issue No: Page No:100698 Year:2022 Month:Apr
Prasanna Kumar Desu, Bisheswar Karmakar, Vanitha Kondi, Onkar Nath Tiwari, Gopinath Halder	Optimizing formulation of green tea extract-loaded chitosan nanogel	Biomass Conversion and Biorefinery	Volume:8 Issue No: Page No:211- 219 Year:2022 Month:Apr
Debayan Das, Manaswini Masetty, and Aashish Priye	Paper-Based Loop Mediated Isothermal Amplification (LAMP) Platforms: Integrating the Versatility of Paper Microfluidics with Accuracy of Nucleic Acid Amplification Tests	Chemosensors	Volume:11 Issue No:3 Page No:163 Year:2023 Month:Feb
D Das, T Singh, I Ahmed, M Masetty, A Priye	Effects of relative humidity and paper geometry on the imbibition dynamics and reactions in lateral flow assays	Langmuir	Volume:38 Issue No:32 Page No:9863-9873 Year:2022 Month:Aug
Indradev Kumar, Abhiram Hens, Sandip K Lahiri, Gautam Biswas	Study of Cryogenic Film Boiling in the Presence of External Electric Field Using a Variant of Volume of Fluid- Based Interface Tracking Algorithm	Industrial & Engineering Chemistry Research	Volume: Issue No: Page No:18176-18186 Year:2022 Month:Dec
Tithli Sadhu, Somanth Chowdhury, Shubham Mondal, Jagannath Roy, Jitamanyu Chakrabarty, Sandip Kumar Lahiri	A comparative study of metaheuristics algorithms based on their performance of complex benchmark problems	Decision Making: Applications in Management and Engineering	Volume: Issue No: Page No: Year:2022 Month:Oct
Tithli Sadhu, Sandip K Lahiri, Ashish Bhattacharjee, Jitamanyu Chakrabarty	Application of artificial neural network with metaheuristic optimization for improving the nutritive value of fried fish	Journal of Food Processing and Preservation	Volume: Issue No: Page No:17190 Year:2022 Month:Oct



Author(s) Name	Paper Name	Journal Name	Others Info
Sabyasachi Pramanik, Biswajit Sarkar, Sandip Lahiri, Kartik Chandra Ghanta, Susmita Dutta	Application of hybrid artificial neural network (ANN)—particle swarm optimization (PSO) for modelling and optimization of the adsorptive removal of cyanide and phenol from wastewater using agrowaste-derived adsorbent	Applied Water Science	Volume:12 Issue No:8 Page No:184 Year:2022 Month:Aug
Abhyavartin Selvam, Geetika Jain, Rajib Ghosh Chaudhuri, Mrinal Kanti Mandal, Sandip Chakrabarti	Avant-Garde solar-thermal nanostructures: nascent strategy into effective photothermal desalination	Solar RRL	Volume:6 Issue No: Page No:2200321 Year:2022 Month:
S Majee, G Halder, D.D. Mandal, O.N. Tiwari, T. Mandal	Transforming wet blue leather and potato peel into an ecofriendly bioorganic NPK fertilizer for intensifying crop productivity and retrieving value-added recyclable chromium salts.	Hazardous Materials	Volume: Issue No:411 Page No: Year:2022 Month:
S.Majee, K.K. Sarkar, R. Sarkhel, G.Halder, T.Mandal	Bioorganic fertilizer production from industrial waste and insightful analysis on release kinetics	Environmental Management	Volume: Issue No:325 Page No: Year:2023 Month:
Majumdar, S., Mandal, T., Mandal, D. D Mandal	Comparative performance evaluation of chitosan based polymeric microspheres and nanoparticles as delivery system for bacterial β-carotene derived from Planococcus sp. TRC1	International Journal of Biological Macromolecules	Volume: Issue No: Page No:384397 Year:2022 Month:
P.Pal, M.Malhotra	Emerging technologies for Selenium Separation and Recovery from aqueous systems: A Review for Sustainable Management Strategy	Canadian Journal of Chemical Engineering, Wiley	Volume:101 Issue No: Page No:2859–2877 Year:2023 Month:Feb
R.Kumar, A.Basu, S.Chakrabortty, P.Pal	Management of tannery waste effluents towards the reclamation of clean water using an integrated membrane system: A state-of-the-art review	Environmental Research, Elsevier	Volume:229 Issue No: Page No:115881 Year:2023 Month:Jan
S.Pal, Z.Ahamed, P.Pal	Removal of Antibiotics and Pharmaceutically Active Compounds from Water Environment: Experiments Towards Industrial Scale Up, Separation and Purification Technology	Separation & purification Technology, Elsevier	Volume: 295 Issue No:15 Page No:121249 Year:2022 Month:May
R. Kumar, B. Basak, PP. Pal, S. Chakrabortty, Young-Kwon Park et al.	Feasibility assessment of bioethanol production from humic acid-assisted alkaline pretreated Kentucky bluegrass	Bio-resource Technology, Elsevier	Volume:360 Issue No: Page No:127521 Year:2022 Month:Jun



Author(s) Name	Paper Name	Journal Name	Others Info
	(Poa pratensis L.) followed by downstream enrichment using direct contact membrane distillation		
Rai, A., Bishayee, B., Dey A., Kumar, A., Lahiri, S. K., Chakrabarty, J., Dutta, S.	Tertiary Treatment of Coke-oven Wastewater Using Suspended and Immobilized Whole Live Cells of Constructed Bacterial-Microalgal Consortium: Modeling and Optimization Using ANN- GA Hybrid Methodology	Water Science & Technology	Volume:87 Issue No:3 Page No:509 Year:2023 Month:Feb
Useviciute, L., BaltrenaiteGediene, E., Baltrenas, P. and Dutta, S.	Acetone, Xylene and Ammonia removal enhancement in the biofilter packed with steam modified biochar	Journal of Environmental Engineering and Landscape Management	Volume:30 Issue No:3 Page No: Year:2022 Month:Oct
Rai, A, Kamila, B., Dutta, S. and Chakrabarty, J	Macromolecules assessment from spent biomass during phycoremediation of pollutants from coke-oven wastewater: A prospective approach for production of value added products	Journal of the Indian Chemical Society	Volume:99 Issue No:100555 Page No: Year:2022 Month:Jul
Joy, V. M., Feroz, S. and  Dutta, S.	Artificial intelligence-based multiobjective optimization of reverse osmosis desalination pretreatment using a hybrid ZnO-immobilized/photo-Fenton process	Chemometrics	Volume:DOI: 10.1002/cem.3434 Issue No: Page No: Year:2022 Month:Jun
Sarkar, B., Dutta, S. and Lahiri, S. K.	Modeling and optimization of phycoremediation of heavy metals from simulated ash pond water through robust hybrid artificial intelligence approach	Chemometrics	Volume:DOI: 10.1002/cem.3427 Issue No: Page No: Year:2022 Month:May
Pramanik, S., Sarkar, B., Lahiri, S. K., Ghanta, K. C. and Dutta, S.	Application of hybrid artiicial neural network (ANN)—particle swarm optimization (PSO) for modelling and optimization of the adsorptive removal of cyanide and phenol from wastewater using agrowaste-derived adsorbent	Applied Water Science	Volume:12 Issue No:184 Page No: Year:2022 Month:May
Mondal P., *Sadhukhan A. K., Gupta P., Ganguly A.	Bioethanol-gasoline blend a promising fuel for motorized two-wheelers: optimization of operating conditions for minimum regulated emissions	International Journal of Environmental Science and Technology	Volume:- Issue No:- Page No:https://doi.org/10.1007/s13762022- 04623-9 Year:2022 Month:November



Author(s) Name	Paper Name	Journal Name	Others Info
Mondal P., *Sadhukhan A. K., Ganguly A., Gupta P.	Production of Blending Quality Bioethanol from Broken Rice: Optimization of Process Parameters and Kinetic Modeling	Applied Biochemistry and Biotechnology	Volume:194 Issue No: Page No:5474–5505 Year:2022 Month:Jul
Prabhakar A., Sadhukhan A. K., Gupta P.	Study of co-pyrolysis kinetics, synergetic effects, and thermodynamics of coal and biomass blends	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	Volume:44 Issue No:3 Page No:7095-7108 Year:2022 Month:Jul
Singh R. K., Pannase A. K., Joshi M. P., Ruj B., Sadhukhan A. K., Gupta P.	Pyrolysis of marine waste to pyrolytic oil and its application in Compression Ignition engine: Engine Performance, Combustion and Emission Analysis	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	Volume:44 Issue No:3 Page No:6758-6776 Year:2022 Month:Jul
Sandip Mondal, Kaustav Aikat, Gopinath Halder	Sorptive uptake of Ranitidine hydrochloride by Parthenium hysterophorus based chemically treated N-biochar in static bed continuous flow system	Results in Surfaces and Interfaces	Volume:8 Issue No: Page No:100071 Year:2022 Month:Jul
Prabhakar A., Sadhukhan A. K., Gupta P.	Study of Pyrolysis Kinetics of Coal Fines using Model Free Method	Materials Today: Proceedings	Volume:68 Issue No:4 Page No:910-915 Year:2022 Month:Jul
Anjali, K.P., Raghunathan, R., Devi, G. and Dutta, S	Photocatalytic degradation of methyl red using seaweed mediated zinc oxide nanoparticles,	Biocatalysis and Agricultural Biotechnology	Volume:43 Issue No:102384 Page No: Year:2022 Month:Aug
Wasi Ur Rahman, Abu Mustafa Khan, Abdul Hakeem Anwer, Bisheswar Karmakar, Gopinath Halder	Parametric optimization of calcined and Zn-doped waste egg-shell catalyzed biodiesel synthesis from Hevea brasiliensis oil,	Energy Nexus	Volume:6 Issue No: Page No:100073 Year:2022 Month:Apr
Nabanita Ghosh, Rhithuparna D., Rexona Khatoon, Samuel Lalthazuala Rokhum, Gopinath Halder	Sulphonic-acid functionalized novel Limonia acidissima carbonaceous catalyst for biodiesel synthesis from Millettia pinnata oil: Optimization, kinetics, thermodynamics and cost analysis	Journal of Cleaner Production	Volume:394 Issue No: Page No:136362 Year:2023 Month:Feb
Prabhakar A., Gupta A. K., Sadhukhan A. K., Gupta P.	Estimation of Gasification Kinetics of Coal Char Fines in Steam Ambience	Materials Today: Proceedings	Volume:68 Issue No:4 Page No:905-909 Year:2022 Month:Jul
Caitlyn Chetty, David Lokhat, Manisha Bal, BC Meikap	Development of improved correlations for shell side heat transfer co-efficient in multi-tubular reactors network heat exchanger	Thermal Science and Engineering Progress	Volume:39 Issue No: Page No:101733 Year:2023 Month:Mar
Rajneesh Anand, Mrinal Kanti Mandal, Rajib Ghosh Chaudhuri, Abhiram Hens	Optimisation of geometry and surface wettability for enhanced efficiency of the solar still-based desalination unit	Int. Journal of Ambient Energy	Volume:1 Issue No: Page No:1-8 Year:2023 Month:



Author(s) Name	Paper Name	Journal Name	Others Info
Raj Kumar Arya, G	Low-cost removal of basic	Chemical and Process	Volume:43 Issue No:2 Page No:1-
Meena, D Thapliyal, S	red 9 using cow dung ash	Engineering	14 Year:2022 Month:Aug
Barman, Gopinath			
Halder, P Shandilya			
Deepshikha Datta,	Comparative analysis of the	Materials Today:	Volume:57 Issue No:4 Page
Aditya Shetty, Bimal	quantity and quality of both	Proceeding	No:1798-1804 Year:2022
Das	synthetic and biodegradable		Month:Apr
Dan dryana dhayay A	films on kitchen waste	Dani Caref Hairranita	Valuma 12 Ianua Na 7 Daga Na
Bandyopadhyay, A.,	Microbial repairing of	Beni-Suef University	Volume: 12 Issue No: 7 Page No:
Saha, A., Ghosh, D.,	concrete & its role in CO2	Journal of Basic and	Year:2023 Month:Jan
Dam, B., Samanta, A.	sequestration: a critical	Applied Science	
K. and Dutta, S.	review		
Rajneesh Anand, Mrinal	Optimisation of geometry	International Journal of	Volume:44 Issue No:1 Page
Kanti Mandal, Rajib	and surface wettability for	Ambient Energy	No:1549-1556 Year:2023
Ghosh Chaudhuri,	enhanced efficiency of the		Month:Feb
Abhiram Hens	solar still-based desalination		
	unit		
Biswajit Sarkar,	Modeling and optimization	Journal of	Volume:36 Issue No:7 Page No:3427
Susmita Dutta, Sandip	of phycoremediation of	Chemometrics	Year:2022 Month:Jul
Kumar Lahiri	heavy metals from		
	simulated ash pond water		
	through robust hybrid		
	artificial intelligence		
	approach		

## 4.5.16 Journal: Accepted for Publication in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
S. Sarkar, D. Datta, K. S. Deepak, B. K. Mondal Bimal Das	Comparative assessment efficacy of yield maximization of recovered used lubricating oil by Ca(OH)2-Iso-butanol/KOH-1- butanol extractiveflocculative process by Central Composite Design approach	Int. J. of Environment and Waste Management	Volume:DOI: 10.1504/IJEWM.2023.10048105, 2023 Issue No: Page No: Year:2023 Month:
Sakhile K, Sarkar J P, Gupta P, Feroz S.	Removal of major pollutants from petroleum wastewater by adsorption with activated carbon derived from date seed in an inverse fluidized bed.	Arabian Journal for Science and Engineering	Volume: Issue No: Page No: Year:2022 Month:Jun

### 4.5.17 Conference: Published in 2022-2023 DOI/ISBN

Author(s) Name	Paper Name	Conference Name	Others Info
Anoar Ali	Capacity utilization of	International	DOI/ISBN:
Khan, G. N.	aqueous 2-amino-	Conference on Materials	https://doi.org/10.1063/5.0108935
Halder, K.	2methyl-1-propanol	Research in Science and	Volume: Issue No: Page
Sundararaj, A.	(AMP) and methyl	Engineering	No:100014 Year:2022 Month:Sep
K. Saha	diethanolamine		Presenter:CO-AUTHOR
	(MDEA) for CO		
	capture with		
	piperazine (PZ)		



Author(s)	Paper Name	Conference Name	Others Info
Name			
Kumar R, Das	Experimental Study on	Eighth International	DOI/ISBN:
P,*Sadhukhan	catalytic pyrolysis of	Conference on	https://doi.org/10.1007/978-98199-2279-6-58 Volume:
AK, Singh	waste polypropylene	Advances in Energy	Issue No:
RK, Ruj B,	at different	Research At IIT	Page No:6661-668 Year:2022
Gupta P	temperatures.	Bombay 2022	Month:Jul Presenter:CO-
			AUTHOR

## 4.5.18 Conference: Published in Others in 2022-2023

Author(s) Name	Paper Name	Conference Name	Others Info
Deepshikha Datta; Sampurna Santra; Bimal Das	Role of Extracted Nano silica from Rice Rusk on the structure, property and biodegradability of LDPE/Starch biodegradable film	International Conference on Advanced in Chemical &Material Science (ACMS-2022)	DOI/ISBN: Volume: Issue No: Page No: Year:2022 Month:Apr Presenter:CO- AUTHOR
Sayantan Sarkar, Deepshikha Datta, and Bimal Das	Factorial optimisation for maximising the yield of re-refined lubricant from waste lubricating oil through extractive-	Energy System Modeling and Optimization Conference, (ESMOC) 2021	DOI/ISBN: Volume: Issue No: Page No: Year:2022 Month:Dec
Dilliai Das	flocculative approach- a comparative assessment of RSM and Taguchi		Presenter:CO- AUTHOR
Deepshikha Datta, Bimal Das, Rakesh Patnaik	Jute Fiber reinforced unsaturated polyesters laminate preparation using egg shells filler	International Conference on Advanced in Chemical &Material Science (ACMS-2022)	DOI/ISBN: Volume: Issue No: Page No: Year:2022 Month:Apr Presenter:CO- AUTHOR
Deepshikha Datta, Shefali Mumtaj, Bimal Das	Synthesis of Gold Nano Particles Using Oldenlandia Corymbose Plant Extract	International Conference on Advanced in Chemical &Material Science (ACMS-2022)	DOI/ISBN: Volume: Issue No: Page No: Year:2022 Month:Apr Presenter:CO- AUTHOR
Deepshikha Datta, Divakar Pamanji, Bimal Das	Production and Optimization of LDPE with Bio & Inorganic Filler Polyblend through Response Surface Methods using Central Composite Design	International Conference on Advanced in Chemical &Material Science (ACMS-2022)	DOI/ISBN: Volume: Issue No: Page No: Year:2022 Month:Apr Presenter:CO- AUTHOR
Sayantan Sarkar, Deepshikha Datta, and Bimal Das	Comprehensive study of method optimization of re-refining spent lubricating oil	International Conference on Sustainable Waste Management & Circular Economy and IPLA Global Forum 2022	DOI/ISBN: Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:CO- AUTHOR
Ashiskumar R. Kale, Deepshikha Datta, Bimal Das	E-waste utilization from waste printed circuit board & cable wires	International Conference on Sustainable Waste Management & Circular Economy and IPLA Global Forum 2022	DOI/ISBN: Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:CO- AUTHOR



Author(s) Name	Paper Name	Conference Name	Others Info
Deepshikha Datta,	Enhancement in the structure,	International Conference on	DOI/ISBN:
Mahima Mutsuddi,	properties and application of jute	Sustainable	Volume: Issue No:
Bimal Das	fiber reinforced unsaturated	Waste Management & Circular	Page No:
	polyesters laminate by the	Economy and IPLA Global Forum	Year:2022 Month:Nov
	incorporation of egg shell powder as property enhancing filler	2022	Presenter:CO- AUTHOR
Shardul Srivastava,	Sequestration of Carbon dioxide	CUChE Alumni Symposium 2022	DOI/ISBN: - Volume:
Bulti Kandar, Susmita	through Microbial Route	On "Circular Economy on	Issue
Dutta, Bikash Kumar		Sustainable Basis: The Role of	No: Page No:
Mondal		Chemical Engineers"	Year:2022
			Month:Dec
			Presenter:CO-
			AUTHOR
Sayantan Adak, Rajib	Synthesis of graphitic carbon	3rd Energy System Modeling and	DOI/ISBN: xx
Ghosh Chaudhuri,	nitride (g-C3N4) and metal organic	Optimization Conference ESMOC	Volume:
Mrinal Kanti Mandal	framework based heterostructure	2021	Issue No: Page No:
	and its application in dye		Year:2022 Month:Dec
	removal and photocatalytic		Presenter:CO-
	hydrogen production		AUTHOR
Kumar R, *Sadhukan	Comparative Experimental Study	75th Chemical Engg. congress	DOI/ISBN:
AK, Singh RK, Ruj B,	on catalytic pyrolysis of waste	CHEMCON 2022	OP/RAE/1/203
Gupta P	polypropylene with zeolite and		Volume: Issue No:
	kaolin catalyst		Page
			No:OP/RAE/1/203
			Year:2022 Month:Dec
			Presenter:CO-
			AUTHOR

## 4.5.19 Conference: Accepted in Others in 2022-2023

Author(s) Name	Paper Name	Conference Name	Others Info
Debayan Das	Effective Heating Solution Strategy for Building up a Paper- based DNA Amplification Detection Device	International Heat Transfer Conference 2023	DOI/ISBN: Will be published after the Presentation Volume: Issue No: Page No: Year:2023 Month:Aug Presenter:SELF

## 4.5.20 Books Authored

Author Name	Co-Author	Title of the Book	Title of the Chapter	<b>Publication Details</b>
Sandip Kumar lahiri		Seven mental models to regain your happiness for ever		Publisher: Good read publisher, India Publication Date: 2022-06-17
Manisha Bal	Vikas B. Kabburi	Sustainable Nanomaterials for Biomedical Engineering Impacts, Challenges, and Future Prospects	Graphene - Based Nanomaterial Conjugates: Importance, Classification and Applications	Publisher: AAP,CRC PRESS (Taylor & Francis Group) Publication Date: 2023-05-23
Halder Gopinath	Sarkar G. S., Rathi A., Basu S., Arya R.K., Barman S.	Advanced Industrial Wastewater Treatment and Reclamation of Water. Environmental	Removal of Endocrine- Disrupting Compounds by	Publisher: Springer Publication Date: 2022-0621



<b>Author Name</b>	Co-Author	Title of the Book	Title of the Chapter	Publication Details
		Science and Engineering	Wastewater Treatment	
Gopinath Halder	Bisheswar Karmakar	Biodiesel Production: Feedstocks, Catalysts and Technologies	Green Technologies in valorization of waste cooking oil to biodiesel	Publisher: Springer Publication Date: 2022-0712
Gopinath Halder	Dipanwita Deb, Aratrika Roychowdhury, Sumit H Dhawane, Biswajit Kamila	Enzymes in the Valorization of Waste	An Overview of Pretreatment Strategies for the Development of Enzyme-based Biorefinery with Special Emphasis on Pectinases	Publisher: Springer Publication Date: 2023-0205
Gopinath Halder	Sumit H Dhawane, Arka Ghosh, Piyush Dwivedi, Sneha Dey, Biswajit Kamila	Thermochemical and Catalytic Conversion Technologies for Future Biorefineries	Critical Evaluation of the Role of Enzymes in the Integrated Biorefinery	Publisher: Springer Publication Date: 2023-0210
Gopinath Halder	Joyita Mitra, Biswajit Kamila, Praveen Kumar Ghodke, Sumit H Dhawane	Thermochemical and Catalytic Conversion Technologies for Future Biorefineries	Waste Derived Supports for Immobilization of Lipase Towards Enhancing Efficiency and Reusability of Enzymes	Publisher: Springer Publication Date: 2023-0119
Bimal Das	Deepshikha Datta, Krishna Priyadarshini Das, K S Deepak,	Membranes with Functionalized Nanomaterials, Current and Emerging Research Trends in Membrane echnology	Candidates of functionalized nanomaterials based membranes	Publisher: Elsevier Publication Date: 2022-0415
Bimal Das	Deepshikha Datta, K S Deepak, Krishna Priyadarshini Das	Membranes with Functionalized Nanomaterials, Current and Emerging Research Trends in Membrane echnology	Theoretical Concepts of Membrane Nanomaterial Composites	Publisher: Elsevier Publication Date: 2022-0415
Bimal Das	Deepshikha Datta, K S Deepak	Membranes with Functionalized Nanomaterials, Current and Emerging Research Trends in Membrane echnology	Future Prospects of Sustainable Membranes	Publisher: Elsevier Publication Date: 2022-0415
Bimal Das	Deepshikha Datta, K S Deepak	Membranes with Functionalized Nanomaterials, Current and Emerging Research Trends in Membrane echnology	Membranes With FNMS for Sustainable Development	Publisher: Elsevier Publication Date: 2022-0415
Rwiddhi Sarkhel, Uttarini Pathak, Aniruddha Chowdhury, Aishani Ray,Tamal Mandal		Bioreactors for Upstream processes	Selection of Bioreactors	Publisher: Springer Publication Date: 2023-1027



<b>Author Name</b>	Co-Author	Title of the Book	Title of the Chapter	<b>Publication Details</b>
Parimal Pal & Ramesh	R.Kumar	Sustainable	Chapter: Membrane-	Publisher: John Wiley
Kumar		Separation	enabled Sustainable	& Sons Limited
		Engineering:	production of Bio-	Publication
		Materials, Techniques	fuels	Date: 2022-04-10
		and Process		
		Development,		
		Publication: February		
		2022		
ManishaSharma,		Environmental	Chapter 7: Wastewater	Publisher: Elsevier
AnkushYadav,		Engineering	treatment and sludge	Publication Date:
ShaileshPandey,			management strategies	2022-1007
SupriyaPal,			for environmental	
HirokChaudhuri,			sustainability in	
SandipChakrabarti,			Circular Economy and	
Kashyap KumarDubey			Sustainability	
Punit Kumar, Mrinal		circular bioeconomy	Chapter 9: Membrane	Publisher: Elsevier
Kanti Mandal,			bioreactor for the	Publication Date:
Supriya Pal, Hirok			treatment	2022-0705
Chaudhuri, Kashyap			of emerging	
Kumar Dubey			pharmaceutical	
,			compounds in a	
			circular bioeconomy	

# 4.5.21 Seminars, Summer/Winter Schools, Short Term Courses Attended

Name of the Programme	Organized By	From Date	To Date	Organizing Country
IIC regional meet organized by Ministry of Education's Innovation Cell and AICTE	Ministry of Education's Innovation Cell and AICTE	2022-08-02	2022-08- 02	India
SERB,DST Karyashala on Artificial Intelligence and data science for industrial applications	CMERI,Durgapur	2023-01-16	2023-01- 22	India
ISSUE'22	UPES Dehradun	2022-10-11	2022-10- 14	India
Global Congress on Process Safety	AICHE	2023-03-12	2023-03- 15	Houston, USA
Word Sustainable Development Summit at TERI, New Delhi	TERI, NEW DELHI	2023-02-22	2023-02- 24	India
A Hand-on Workshop on OpenFOAM and LAMMPS	IIT Ropar	2022-07-18	2022-07- 20	India
CUChE Alumni Symposium – 2022 on "Circular Economy on Sustainable Basis: The Role of Chemical Engineers"	Department of Chemical Engg., University of Calcutta	2022-12-22	2022-12- 24	India
International Symposium on Circular Economy on Sustainable Basis: The Role of Chemical Engineers	Calcutta University Chemical Engineering Alumni Association	2022-12-22	2022-12- 24	India
Advances in Chemical and Material Sciences, (ACMS 2022).	IICHE	2022-04-14	2022-04- 16	India
International Conference on Challenges in Environmental Science & Engineering (CESE 2022)	LJS ENVIRONMENT, AUSTRALIA	2022-11-27	2022-12- 01	DUBAI, UAE



## 4.5.22 Ph.D. Supervisor

Topic Name	Scholar	Supervisor	Status	Status Date
Experimental investigation on catalytic transesterification of natural feedstocks towards biodiesel production	Wasi Ur Rahman	Prof. Gopinath Halder	DEGREE AWARDED	2022-06- 30
Microplastic removal from aqueous system	Payal Das	Manisha Bal	ONGOING	-
Comparative Assessment of Ibuprofen Removal through Biosorption and Bioremediation Technique	Sumona Show	Prof. Gopinath Halder	DEGREE AWARDED	2023-02- 20
Biodiesel production from non-edible and waste oils through catalyzed and superheated uncatalyzed approaches	Bisheswar Karmakar	Prof. Gopinath Halder	DEGREE AWARDED	2022-07- 22
Application of Artificial Intelligence in chemical process industry	Somnath Chowdhury	Sandip Kumar lahiri, Abhiram Hens	ONGOING	-
Process modeling and optimization in chemical process industry	Somasish Saha,	Sandip Kumar lahiri, Abhiram Hens	ONGOING	-
Optimization in industry	Pratush Pal	Sandip Kumar Lahiri, Abhiram Hens	ONGOING	-
Application of machine Learning in chemical industries	Sumona Roy	Sandip Kumar lahiri	ONGOING	-
Study of viscous fingering in paper membranes	Chandra Bhushan	Debayan Das	ONGOING	-
Investigation of cryogenic boiling under the influence of external fields	Indradev Kumar	Abhiram Hens , Sandip Kumar Lahiri	ONGOING	-
Reclamation of spent engine oil using environment-friendly approach	Sayantan Sarkar (18CH1105)	Dr Bimal Das and Dr Bikash Kumar Mondal	ONGOING	-
Solvent development for Post- Combustion CO2 capture	Sirshendu Banerjee (19CH1104)	Dr Bikash Kumar Mondal and Dr Bimal Das	ONGOING	-
Utilization and assimilation of inorganic carbon using micro algae and production of biomass, extraction of essential value added products and biofuel	Sukhen Das (21CH1109)	Dr Bikash Kumar Mondal and Dr Mukesh Singh (HIT Haldia))	ONGOING	-
Bioreactor Analysis for biomolecule production	Anwesha Mukherjee (22CH1107)	Dr Bikash Kumar Mondal	ONGOING	-
Photo-Catalytic membrane for hospital waste water treatment	Shailesh Pandey	M.K.Mondal, P.Pal	ONGOING	-
Strategy development for sustainable energy use towards net zero economy	Iman Ghosh Dastidar	P.Pal & M.Roy	ONGOING	-
Advance Separation through Ionic Liquids	Asish K.Kale	B.Das, P.Pal	ONGOING	-
Development of Sustainable Membrane- Based Technologies for Selenium Abatement towards Reutilization from Aqueous System	Meenakshi Malhotra	P.Pal	DEGREE AWARDED	2023-06- 23
Adsorptive Removal of Cyanide and Phenol from Wastewater	Sabyasachi Pramanik	Prof. Kartik Chandra Ghanta and Prof. Susmita Dutta	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status Date
Removal of Organic Pollutants from Seawater using Solar Nano Photocatalysts	M. J. Varghese	Prof. Susmita Dutta and Professor S. Feroz, Caledonian College of Engg, Oman	ONGOING	-
Layer-by-layer Fabricated Multi-layered Ultrathin Polyelectrolyte Films from Poly Styrene Sulphonate (PSS) and Poly Allylamine Hydrochloride (PAH) onto Zinc Oxide (ZnO), and Titanium Dioxide (TiO2) for the Photocatalytic Degradation of Refinery and Textile Mill Effluents	B.M. Sangeetha	Prof. Susmita Dutta and Dr. M. Geetha Devi, Caledonian College of Engg, Oman	ONGOING	-
Seaweed mediated synthesis of Nanoparticles: its Characterization and application	Anjali, K. P.	Prof. Susmita Dutta and DR. GEETHA DEVI, National University of Science and Technology, Oman	DEGREE AWARDED	2023-03- 29
Study of bubble and droplet dynamics at different length and time scale	Shilpi Chatterjee	A. Hens and K C Ghanta	DEGREE AWARDED	2022-09- 14
Study of size-based isolation and detection of circulating tumour cells (cancer cells) using microfluidics and image processing	Puja Mitra	Dr. S Dutta (CMERI) and Dr. A. Hens (NIT Durgapur)	DEGREE AWARDED	2022-06- 28
Catalytic pyrolysis of plastic wastes	Ravindra Kumar	Prof. A. K. Sadhukhan Dr. B. Ruj	ONGOING	-
Thermal Treatment of Plastic Wastes and Recovery of Value-Added Products	Ankita Mukherjee	Prof. P. Gupta, Dr. B. Ruj, Prof. A. K. Sadhukhan	ONGOING	-
Modeling and Experimental Investigation on Pyrolysis and Gasification of Biomass	Biswajit Kamila	Prof. A. K. Sadhukhan Prof. P. Gupta	SUBMITTED	2023-02- 06
Studies on the Hydrodynamics of two- phase system	Tanushree Ghosh	Prof. A. K. Sadhukhan Prof. J. P. Sarkar	SUBMITTED	2023-02- 06
Ethanol Production from Waste Starchy Biomass and its' Utilization	Payel Mondal	Prof. A. K. Sadhukhan Prof. P. Gupta Dr Amit Ganguli	SUBMITTED	2022-12- 27
Hydrodynamics and Thermal Study on Two Phase Flow	Prantik Mandal	Prof. K.C.Ghanta & Dr. S.K.Lahiri	ONGOING	-
Treatment of Coke Oven Waste Water Using Hybrid Technology	Sabyasachi Pramanik	Prof. K.C.Ghanta & Prof. Susmita Dutta	DEGREE AWARDED	2023-04- 26
Bioremoval of heavy metals from Industrial Effluent using algae and cyanobacteria	Padma Seragadam	Prof. Susmita Dutta, Prof. K.C.Ghanta & Prof. (Dr.) B. Srinivas, Gayathri Vidya Parisad College of Engg, Vishakapatnam	ONGOING	-
Treatment of Industrial Wastewater	Bulti Kandar	Prof. K.C.Ghanta & Prof. Susmita Dutta	ONGOING	-
A sustainable way to treat chicken slaughterhouse wastewater	Arnab Sau	Prof. Susmita Dutta & Prof. K.C.Ghanta	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status Date
Application of Artificial Intelligence in insurance industry	Nibedita sarkar	Sandip Kumar Lahiri	ONGOING	-
Application of Artificial intelligence in metal industries	Narottam Behera	Sandip Kumar lahiri, Bimal das	ONGOING	-
An Integrated Membrane System for Destruction of Antineoplastic Drugs in Hospital Waste Water	Shailesh Kumar Pandey	Dr Mrinal Kanti Mandal	ONGOING	-
Study of degradation and ecotoxicity of	Ankush Yadav	Dr Mrinal Kanti	DEGREE	2022-06-
antineoplastic (parent and degraded) compounds from urine sample of cancer patients/hospital aqueous waste using Fungi		Mandal, Dr K. K. Dubey	AWARDED	07
H2 Production using Catalytic thin film reactor	Sayantan Adak	Dr Mrinal Kanti Mandal, Dr. Rajib Ghosh Chaudhary	ONGOING	-
Photo-thermal material synthesis	Geetika Jain	Dr Mrinal Kanti Mandal, Dr. Sandip Chakraborti	ONGOING	-
Nano-composite coating on jeo-textile	Tapabrata Chakraborty	Dr Mrinal Kanti Mandal, Dr. Supriya Pal	ONGOING	-
Phycoremediation of heavy metals from simulated ash pond water	Biswajit Sarkar	Prof. Susmita Dutta and Dr. S. K. Lahiri	ONGOING	-
Synthesis of Nano Composite Membrane for Removal of Azo Dye Using Micellarenhanced Ultrafiltration Coupled with Membrane Distillation and Photocatalytic Dye Degradation	JOYEETA BOSE	Dr. Jaya Sikder & Dr. Utpal Adhikari, Asst. Prof., Dept. of Chemistry	ONGOING	-
Tannery wastewater treatment by forward osmosis integrated hybrid treatment method	Chhanda Mondal Roy	Dr. Jaya Sikder, Dr. Dipankar Pal Assistant Professor Chemical Engineering Indian Institute of Petroleum and Energy	ONGOING	-
Studies on the Treatment of Industrial Wastewater by Adsorption Technique using Palm seed Charcoal as adsorbent in a Two-Phase Inverse Fluidized Bed	S. Karunya	Parthapratim Gupta, J P Sarkar, S Feroz	SUBMITTED	2023-02-
Numerical Simulation of Bubble Dynamics in Boiling	Jyoti Bhati	Swapan Paruya	DEGREE AWARDED	2021-12- 01

# 4.5.23 Ongoing Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Amount(in Rs.)	Starting Year
Experimental studies and mathematical modelling of paper-based DNA amplification reaction	Dr. Debayan Das	DST-INSPIRE	3500000.0	2018
Microwave-Irradiated Continuous Biodiesel Production under Subcritical Condition towards Fuel Performance Assessment and	Prof. Gopinath Halder	Department of Science and Technology, Govt. of India	4075764.0	2022



Title of the Project	Investigator	Sponsor Authority	Amount(in Rs.)	Starting Year
Glycerol Valorization				
Technological frontier towards sustainable treatment of Coal bed Methane Produced Water via Integrated Desalination Contrivance	Dr. Jaya Sikder, Prof. Gopinath Halder, Prof. Dalia Dasgupta Mandal	Department of Science and Technology, Govt. of India	7436678.0	2023
Photo-Therm: Solar Converted Thermal Energy Harvesting Mangrove and Composite Layer Mechanistic Photothermal Material in Interfacial Water Evaporator-Collector Desalination System to Potable Water	PI: Dr. Rajib Ghosh Chaudhuri Co-PI: Dr. Mrinal Kanti Mandal and Dr. Abhiram Hens	DST, GoI	4497378.0	2021
Development of guidelines to adopt the process of height increment of overburden dumps at open cast coal mines in India using jute-geotextile as reinforcing material	PI: Dr. Supriya Pal Co-PI: Dr.Rajib Ghosh Chaudhuri, Dr. Mrinal Kanti Mandal and Dr. Hirak Chaudhuri	National Jute Board A Statutory Body, Ministry of Textiles, GoI	7172264.0	2021
Nanotechnological intervention on jutegeotextile to adapt long term sustainability and enhanced durability for its cost-effective and wide application in flexible pavement systems	PI: Dr. Supriya Pal Co-PI: Dr.Rajib Ghosh Chaudhuri, Dr. Mrinal Kanti Mandal and Dr. Hirak Chaudhuri	National Jute Board A Statutory Body, Ministry of Textiles, GoI	6952264.0	2021
Scientific and Technological Aspect of Electromagnetic Field (EMF) for Reducing Scaling in RO Based Water Treatment System	PI: Dr. Mrinal Kanti Mandal Co- PI: Dr. Rajib Ghosh Chaudhuri and Dr. Abhiram Hens	Eureka Fobes R & D, Bangalore	100000.0	2022
Upcycling of Agricultural Waste management	Prof Sirshendu De, Prof Tamal Mandal	DST WTI	5844000.0	2019
Solar Converted Thermal Energy Harvesting Mangrove and Composite Layer Mechanistic Photo-thermal Material in Interfacial Water Evaporator-Collector Desalination System to Potable Water	Dr. R. Ghosh Chaudhuri, Dr. A. Hens, Dr. M.K. Mondal	DST (GOI)	4497378.0	2021
Environmental geochemistry and treatment of organic pollutants in aquatic systems in the selected areas of China, India and Russia.	Mrinal Kanti Mandal, Supriya Pal, Hirok Chaudhuri, Kashyap Kumar Dubey	DST- Govt. of India, under BRICS Calls	5000000.0	2019
Solar Converted Thermal Energy Harvesting Mangrove and Composite Layer Mechanistic Photo-thermal Material in Interfacial Water Evaporator-Collector Desalination System to Potable Water	Rajib Ghosh Chaudhuri, Mrinal Kanti Mandal, Dr Abhiram Hens	DST- Govt. of India under SERD -2019	4500000.0	2021



Title of the Project	Investigator	Sponsor Authority	Amount(in Rs.)	Starting Year
Nanotechnological intervention on jutegeotextile to adapt long term sustainability and enhanced durability for its cost-effective and wide application in flexible pavement systems	Supriya Pal, Rajib Ghosh Chaudhuri, Mrinal Kanti Mandal, Hirok Chaudhuri	National Jute Board, Ministry of Textiles, GoI	6952000.0	2021
dumps at open cast coal mines in India using jute-geotextile as reinforcing material	Supriya Pal, Rajib Ghosh Chaudhuri, Mrinal Kanti Mandal, Hirok Chaudhuri	National Jute Board, Ministry of Textiles, GoI	7172000.0	2021
Scientific and Technological Aspect of Electromagnetic Field (EMF) for Reducing Scaling in RO Based Water Treatment System	Mrinal Kanti Mandal , Rajib Ghosh Chaudhuri, Abhiram Hens	Eureka Forbes Ltd, (R & D) Centre	95000.0	2022
Forward-osmosis integrated membrane distillation coupled with solar-photocatalytic reactor for textile wastewater treatment: A sustainable approach for commercial exploitation	Dr. J. Sikder Co-PI- Dr. Utpal Adhikari	Government of West Bengal, Department of Science & Technology and Biotechnology	1465800.0	2019

## 4.5.24 Completed Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Complete Year
Green Approach for Extraction of Nanocellulose and its Potential Application in Waste Water Treatment	Manisha Bal	IIChE BRC	2021
Scientific and Technological Aspect of Electromagnetic Field for Reducing Scaling in RO Based Water Treatment System	Dr. M. K. Mondal, Dr. R Ghosh Chaudhuri, Dr. A. Hens	Eureka Forbes	2023

## 4.5.25 Testing & Consultancy Services Rendered

Sponsoring Industry / Institute Name	Title of the Project	Total Amount (in Rs.)	Remarks
Scientific Design Company Inc, USA	Soft sensor at drying column overhead	980875.0	Ongoing
Scientific Design Company Inc, USA	Argon Purge optimization module	980875.0	Ongoing
Scientific Design Company Inc, USA	Cost based performance dashboard of ethylene glycol plant	1438618.0	Ongoing
Scientific Design Company Inc, USA	Energy dashboard of ethylene glycol plant	1438618.0	Ongoing
Scientific Design Company Inc, USA	Ethylene glycol reactor optimization module	1569400.0	Ongoing
Scientific Design Company Inc, USA	Ethylene oxide reactor optimization module	1642500.0	Ongoing
Matix Fertilizer Ltd	Root cause analysis of Air turbine failure in fertilizer plant	500000.0	Ongoing

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## 4.5.26 Reviews of Manuscripts for Publication in Journal

Reviewer	Name of the Journal	Publisher	Date of Final Review
Manisha Bal	International Journal of Environmental Science and Technology	Springer	2023-03-22
Manisha Bal	Materials Today: Proceedings	Elsevier	2023-03-28
Gopinath Halder	Energy Conversion and Management	Elsevier	2022-04-12
Gopinath Halder	Journal of Cleaner Production	Elsevier	2022-04-14
Gopinath Halder	Science of the Total Environment	Elsevier	2022-04-16
Gopinath Halder	Fuel	Elsevier	2022-04-18
Gopinath Halder	Journal of Environmental Chemical Engineering	Elsevier	2022-04-19
Gopinath Halder	Process Safety and Environmental Protection	Elsevier	2022-04-21
Gopinath Halder	Biofuel	Taylor & Francis	2022-04-23
Gopinath Halder	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	Taylor & Francis	2022-04-25
Gopinath Halder	Frontiers in Bioengineering	Frontiers	2022-04-27
Gopinath Halder	Alexandria Engineering Journal	Elsevier	2022-04-29
Gopinath Halder	Applied Catalysis A, General	Elsevier	2022-05-03
Gopinath Halder	Asia-Pacific Journal of Chemical Engineering	Wiley- Blackwell	2022-05-04
Gopinath Halder	International Journal of Environmental Analytical Chemistry	Taylor & Francis	2022-05-07
Gopinath Halder	Biocatalysis and Agricultural Biotechnology	Elsevier	2022-05-10
Gopinath Halder	Biomass Conversion and Biorefinery	Springer	2022-05-13
Gopinath Halder	Biochar	Elsevier	2022-05-16
Gopinath Halder	BioEnergy Research	Springer	2022-05-23
Gopinath Halder	Biofuels, Bioproducts & Biorefining	Wiley	2022-05-26
Gopinath Halder	Bioresource Technology Reports	Elsevier	2022-05-30
Gopinath Halder	Catalysis Communications	Elsevier	2022-06-02
Gopinath Halder	Catalysis Letters	Springer	2022-06-10
Gopinath Halder	Chemical Engineering & Technology	John Wiley	2022-06-18
Gopinath Halder	Chemical Engineering Journal	Elsevier	2022-06-23
Gopinath Halder	Chemical Engineering and Processing - Process Intensification	Elsevier	2022-06-29
Gopinath Halder	Chemosphere	Elsevier	2022-07-12
Gopinath Halder	Chemical Engineering Research and Design	Elsevier	2022-07-20
Gopinath Halder	Chemical Papers	Springer	2022-07-29
Gopinath Halder	The Canadian Journal of Chemical Engineering	John Wiley	2022-10-12



Reviewer	Name of the Journal	Publisher	Date of Final Review	
Gopinath Halder	Energy & Fuels	American Chemical	2022-09-21	
Gopinath Halder	Energy Reports	Society Elsevier	2022-11-23	
Gopinath Halder	Environmental Advances	Elsevier	2022-12-22	
Gopinath Halder	Environmental Pollution	Elsevier	2022-09-26	
Gopinath Halder	er Environmental Progress & Sustainable Energy		2022-09-06	
Gopinath Halder	Environmental Quality Management	Wiley	2023-01-12	
Gopinath Halder	Environmental Science and Pollution Research	Springer	2023-01-01	
Gopinath Halder	Environmental Technology & Innovation	Elsevier	2022-11-14	
<u> </u>				
Gopinath Halder	International Journal of Coal Preparation and Utilization	Elsevier	2023-02-15	
Gopinath Halder	International Journal of Environmental Analytical Chemistry	Taylor & Francis	2023-02-22	
Gopinath Halder	Journal of Hazardous Materials Advances	Elsevier	2023-02-27	
Gopinath Halder	Heliyon	Elsevier	2022-10-23	
Gopinath Halder	International Journal of Green Energy	Taylor & Francis	2023-03-14	
Gopinath Halder	Industrial Crops & Products	Elsevier	2023-01-02	
Gopinath Halder	Journal of the American Oil Chemists' Society	American Chemical Society	2023-02-15	
Gopinath Halder	Journal of Chemical Technology & Biotechnology	Wiley	2022-08-26	
Gopinath Halder	Renewable Energy	Elsevier	2022-09-28	
Gopinath Halder	Journal of Environmental Management	Elsevier	2022-10-21	
Gopinath Halder	Journal of the Indian Chemical Society	Elsevier	2022-12-24	
Gopinath Halder	Journal of Science and Technology	Pertanika	2022-10-03	
Gopinath Halder	Journal of Water Process Engineering	Elsevier	2023-01-18	
Gopinath Halder	Journal of Chemistry	Hindawi	2023-02-07	
Gopinath Halder	Materials Today: Procedings	Elsevier	2022-09-11	
Gopinath Halder	Reviews in Environmental Science and Bio/Technology	Springer	2022-11-09	
Gopinath Halder	Environmental Science: Advances	Royal Society of Chemistry	2022-12-10	
Parimal Pal	Separation and Purification Review	Taylor and Francis	2022-04-05	
Parimal Pal	Water Resource Management	Elsevier	2022-04-11	
Parimal Pal	Journal of Cleaner Production	Elsevier	2022-04-14	
Parimal Pal	1. Journal of Cleaner Production	Elsevier	2022-05-22	
Parimal Pal	Chemical Engineering Science	Elsevier	2022-05-23	



Reviewer	Name of the Journal	Publisher	Date of Final Review
Parimal Pal	Separation and Purification Technology	Elsevier	2022-06-14
Parimal Pal	Separation and Purification Reviews	Taylor and	2022-07-02
	•	Francis	
Parimal Pal	Separation and Purification Reviews	Taylor and Francis	2022-06-27
Parimal Pal	Journal of Cleaner Production	Elsevier	2022-07-14
Parimal Pal	Journal of Environmental Management	Elsevier	2022-07-14
Parimal Pal	Separation & Purification Review	Taylor and Francis	2022-08-13
Parimal Pal	Bioresource Technology	Elsevier	2022-07-10
Parimal Pal	Biochemical Engineering Journal	Elsevier	2022-09-03
Parimal Pal	Biochemical Engineering Journal	Elsevier	2022-09-23
Parimal Pal	Journal of Environmental Management	Elsevier	2022-09-23
Parimal Pal	Biochemical Engineering Journal	Elsevier	2022-11-05
Parimal Pal	Biotechnology and Genetic Engineering Reviews	Taylor and Francis	2022-11-22
Parimal Pal	Chemical Engineering and Processing: Process Intensification	Elsevier	2022-12-04
Parimal Pal	Journal of Environmental Management	Elsevier	2022-12-11
Parimal Pal	Chemical Engineering Journal	Elsevier	2023-01-02
Parimal Pal	Chemical Engineering Science	Elsevier	2023-02-13
Parimal Pal	Journal of Cleaner Production	Elsevier	2023-03-19
Susmita Dutta	Chemical Engineering journal	Elsevier	2022-09-26
Susmita Dutta	Critical Reviews in Environmental Science and Technology	Taylor and Francis	2022-04-22
Susmita Dutta	Environmental Modeling & Assessment	Springer	2022-06-06
Susmita Dutta	Environmental Pollution	Elsevier	2022-08-25
Susmita Dutta	South African Journal of Botany	Elsevier	2022-09-28
Anup Kumar Sadhukhan	Heliyon	Elsevier	2022-05-15
Anup Kumar Sadhukhan	International Journal of Green energy	Taylor & Francis	2022-07-17
Debayan Das	International Journal of Numerical Methods for Heat and Fluid Flow	Emerald	2022-05-26
Debayan Das	International Journal of Numerical Methods for Heat and Fluid Flow	Emerald	2022-12-15
Abhiram Hens	Applied Surface Science	Elsevier	2022-06-15
Abhiram Hens	Journal of Colloid and Interface Science	Elsevier	2022-09-03
Abhiram Hens	Journal of Colloid and Interface Science	Elsevier	2023-01-18
Abhiram Hens	Physics of Fluids	AIP	2022-07-01
Abhiram Hens	Materials Today	Elsevier	2023-02-05



Reviewer	Name of the Journal	Publisher	Date of Final Review
Abhiram Hens	Chemical Engineering Transactions	AIDIC	2023-02-22
Kartik Chandra Ghanta	Journal of Water Process Engineering	Science Direct	2022-07-25
Swapan Paruya	International Journal of Thermal Sciences	Elsevier	2023-04-08
Swapan Paruya	International Journal of Heat and Mass Transfer	Elsevier	2023-03-24

### 4.5.27 Invited Examiners/Paper-Setters/Board of Studies

Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Gopinath Halder	PhD Thesis Examination	Cambridge University	2023-02-16	2023-03-15
Gopinath Halder	PhD Thesis Examination	Calcutta University	2022-05-12	2022-05-12
Parimal Pal	PhD	National Environmental	2023-01-01	2023-08-05
		Engineering Research Institute		
Parimal Pal	PhD	KIIT, Bhubaneswar	2022-10-08	2023-08-09
Susmita Dutta	PhD Open Viva-voce Exam	Jadavpur University	2023-02-16	2023-02-16

## 4.5.28 Invited Expert in Selection Committees

Name of the Faculty	Discipline	University/Institute	From Date	To Date
Susmita Dutta	Chemical Engineering	Jadavpur University	2023-02-15	2023-02-15

### 4.5.29 Invited Lectures

Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Sandip Kumar Lahiri	Innovation : The new Mantra	The young entrepreneurship Orientation session organized by ATL of DAV Model	Durgapur	2022-08-	2022-08- 27
Sandip Kumar Lahiri	Innovation: The New Mantra	Seminar at Brainware university	Kolkata	2022-08- 19	2022-08- 19
Sandip Kumar Lahiri	Application of Artificial Intelligence in Chemical Process Industries	SERB,DST Karyashala on Artificial Intelligence and data science for industrial applications	CMERI, Durgapur	2023-01-	2023-01-
Rajib Ghosh Chaudhuri	Surface Area and Size Analysis	Characterization of Materials	Central Institute of Petrochemicals Engineering & Technology: IPT – Bhubaneswar	2022-02- 24	2022-02- 25



Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Rajib Ghosh Chaudhuri	Nanomaterials: Synthetic Approach and Its Characterization	Emerging Technologies in Chemical Engineering: From Theory, Experiments to Industry Applications, STUTI, Department of Science and Technology (DST), GoI.	NIT Durgapur	2022-08-	2022-08- 28
Tamal Mandal	Waste valorization	ISSUE'22	UPES Dehradun	2022-10- 11	2022-10- 14
Parimal Pal	'Process Intensification through Membrane Technology Adoption: Possibilities and Hurdles in Implementation''	International Workshop and Conference on Membrane Assisted Water Purification Processes (ICMW - 2023) March 9, 10, 11 and 12, 2023	M.G.University, Kerala	2023-03- 09	2023-08-
Susmita Dutta	Treatment of Coke- oven Wastewater through Microbial Route as a Polishing Step	One-week training program on "Emerging Technologies in Chemical Engineering: From Theory, Experiments to Industry Applications"	Chemical Engineering Department, NIT Durgapur	2022-08- 22	2022-08- 28
Susmita Dutta	Abatement of Fluoride from groundwater	One-week training program on "Emerging Technologies in Chemical Engineering: From Theory, Experiments to Industry Applications	Chemical Engineering department, NIT Durgapur	2022-08- 22	2022-08- 28
Abhiram Hens	Application of Fluid Dynamics	Invited Talk	UEM kolkata	2022-09- 09	2022-09- 09
Gopinath Halder	Biofuel: A sustainable alternative towards mitigation of energy crisis	e-Faculty / Scholars Development Program on Recent Development in Science and Technology Innovations	Vignan's Foundation for Science, Technology & Research, Guntur, Andhra Pradesh	2022-06- 20	2022-06- 24
Gopinath Halder	Biowaste to Wealth:  A Special Reference to Biofuel Generation	Hands-on-training: Recent Advances in Microbes & Plants: Basic to Applied Aspects	Vignan's Foundation for Science, Technology & Research, Guntur, Andhra Pradesh	2022-08- 16	2022-08- 18
Gopinath Halder	Waste valorization through biogas generation	Hands-on-training: Recent Advances in Microbes & Plants: Basic to Applied Aspects	Vignan's Foundation for Science, Technology & Research, Guntur, Andhra Pradesh	2022-08- 16	2022-08- 18
Gopinath Halder	Role of Biofuel: A sustainable waste-to- wealth approach towards alleviation of energy demand	Emerging Technologies in Chemical Engineering: From Theory, Experiments to Industry Applications	National Institute of Technology Durgapur	2022-08-	2022-08- 28



Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Gopinath Halder	Utilization of agro- residues for alternative energy synthesis	UGC Refresher Course. in Environment Science	The University of Burdwan	2022-08-	2022-09- 02
Gopinath Halder	Biogenic Waste to	UGC Refresher Course	The University	2022-08-	2022-09-
	Biogas		of Burdwan	25	23

#### 4.5.30 Session Chair/Convenor

Name of the Faculty	Programme	Place	Session	From Date	To Date
Tamal Mandal	Waste treatment, management and valorization	NIT Durgapur	Convenor for the program	2023- 07-17	2023-07- 21
Parimal Pal	International Conference on 'environment, Water, agriculture, Sustainability and health (ewash-2022):  Strategizing a Greener fut Jointly Organized by: Hindu College, University of Delhi, Save The Environment, Delhi	New Delhi	2	2023- 01-12	2023-01-
Parimal Pal	International Workshop and Conference on Membrane Assisted Water Purification Processes (ICMW - 2023)	Kerala	1	2023- 03-09	2023-03-
Susmita Dutta	National Symposium on Recent Trends in Sustainable Technology: Techno-Commercial Development	Heritage Institute of Technology, Kolkata	CB 314	2022- 09-09	2022-09- 09
Swapan Paruya	ESMOC 2021- 3rd Energy System Modeling and Optimization Conference	NIT Durgapur	Nuclear Science and Engineering	2022- 12-05	2022-12- 07
Abhiram Hens	International Chemical Engineering Conference 2021	NIT Jalandhar	Technical Session Chair	2021- 09-16	2022-09- 19

#### 4.6 Department of Electronics and Communication Engineering

#### 4.6.1 Department at a Glance:

The Department started its journey in the year 1983 with the introduction of an undergraduate course. Apart from the four years B. Tech, course the Department also offers two full-time M. Tech, courses, one in Next Generation Communication & Networks and another in Microelectronics and VLSI. The Department also offers Ph.D. in several areas. The faculties are engaged in diverse research on Telecommunication, Antenna and Microwave, Microelectronics and VLSI, Signal and Image processing, and Computational Systems Biology. It is well equipped with sophisticated laboratories in the areas of VLSI, Signal Processing, Microwave, Antenna, and Wireless Communication. The Department has been supported by large-scale projects such as C2S and SMDP for VLSI, DST-FIST for Wireless Communications, and NPMASS for MEMS Research. Sponsored research from DST and SERB has been initiated over the years. The research strength has been reflected by the quality publications of the Department. Faculties of the Department are involved in outreach activities by organizing several short-term courses, and workshops. Faculty members also have academic collaborations with Universities in and outside India. The Department is committed to imparting quality education at undergraduate and postgraduate levels and promulgating quality research in diverse fields of application of electronics engineering.

#### 4.6.2 Mission & Vision

Mission:



- To advance and cater knowledge in the areas of Communication, Signal Processing and VLSI.
- To teach state of the art technologies to meet the growing challenges.
- To carry out research in frontier areas.

#### Vision:

- To produce highly competent and resourceful young engineers who can perform well in varied professions.
- To develop a strong fundamental base which enable students to explore academic and collaborative interactions with industry, academia and research organizations.
- To develop excellent research facilities.

### 4.6.3 Faculty

Name	Designation	<b>Email-id</b>
Bhattacharjee Anup Kumar	Professor	anup.bhattacharjee@ece.nitdgp.ac.in
Chandra Aniruddha	Associate Professor	aniruddha.chandra@ece.nitdgp.ac.in
Chattaraj Nilanjan	Assistant Professor	nilanjan.chattaraj@ece.nitdgp.ac.in
Biswas Nilanjan	Assistant Professor	nilanjan.biswas@ece.nitdgp.ac.in
Dhar Roy Sanjay	Associate Professor	sanjay.dharroy@ece.nitdgp.ac.in
Das Rajashree	Assistant Professor	rajashree.das@ece.nitdgp.ac.in
Ghatak Rowdra	Professor	rowdra.ghatak@ece.nitdgp.ac.in
Kar Rajib	Associate Professor	rajib.kar@ece.nitdgp.ac.in
Kundu Sumit	Professor	sumit.kundu@ece.nitdgp.ac.in
Mahanti Gautam Kumar	Professor	gkm@ece.nitdgp.ac.in
Mahapatra Rajat	Professor	rajat.mahapatra@ece.nitdgp.ac.in
Maji Bansibadan	Professor	bansibadan.maji@ece.nitdgp.ac.in
Majumder Aurpan	Assistant Professor	aurpan.majumder@ece.nitdgp.ac.in
Mal Ashis Kumar	Professor	akmal@ece.nitdgp.ac.in
Mandal Durbadal	Associate Professor	durbadal.mondal@ece.nitdgp.ac.in
Mandal Sujit Kumar	Assistant Professor	sujit.mandal@ece.nitdgp.ac.in
Mondal Hemanta Kumar	Assistant Professor	hemanta.mondal@ece.nitdgp.ac.in
Ranwa Sapana	Assistant Professor	sapana.ranwa@ece.nitdgp.ac.in
Samui Suman	Assistant Professor	suman.samui@ece.nitdgp.ac.in
Sadhukhan Tapas	Associate Professor	tapas.sadhukhan@ece.nitdgp.ac.in

### 4.6.4 Equipments

Sl. No.	Name of the equipment	Date of Purchase	Amount (INR)
1	Ka band testbench	21.10.2022	10,82,296
2	Wireless Insite modeling software	11.10.2022	7,08,000
3	Four-channel DSO X1204G	07.11.2022	1,84,670
4	High-end function generator (2 nos)	07.11.2022	1,69,920
5	Benchtop 1000 KHz Multimeter (10 nos)	08.06.2022	3,49,965
6	CST Studio Suite Research Base Pack (01 user)	17.08.2022	4,49,525
7	Spectrum Analyzer, up to 20 GHz (01 no)	30.09.2022	10,99,500

### 4.6.5 Labs

Sl. No.	Name of Laboratory	Major equipment	
1	VLSI Design Lab	EDA Tools: Cadence, Synopsys, Siemens, Ansys	
		Multiple FPGA Development Boards	
		Analog Discovery Kits	
2	Microwave and Antenna	Vector Network Analyzer (40 GHz)	
	Research Laboratory	Spectrum Analyzer (9KHz-1.5GHz)	
	•	NRP2 Power Meter	
		Power Sensor NVR-Z51	
		FEKO, ANSYS HF Suite, MWO	



Sl. No.	Name of Laboratory	Major equipment	
3	Cognitive Radio	MIMO test bench	
	Networks Research	USRP LAB View	
	Laboratory	Qualnet	
4	Nano Device Laboratory	Sputtering system (RF and DC)	
	DC probe station with high temperature system		
		Silvaco TCAD Device Simulator	
		Source measure unit	

#### 4.6.6 PhD degree awarded till 2022-23

61.

#### 4.6.7 Any other relevant information

NIL

#### 4.6.8 Specialization

- Wireless Communications
- Microwave mm Wave and THz Communication Circuits and Systems
- Wireless Communication
- · Communication Engineering
- · Electromechanical Devices and systems
- · Semiconductor device
- · VLSI Design
- · Wireless Communication
- · Analog and Mixed Signal VLSI
- · Microstrip Antenna
- · Antenna Array Synthesis
- · Microprocessors and Microcontrollers
- · Microelectronics & VLSI
- · Audio Signal Processing and Machine Learning based Applications
- · Antenna Optimization, Signal Processing, Soft Computing
- · Microelectronics and VLSI
- Signal Procesing
- VLSi
- Biological Signal Processing Antenna, Optimization
- Communication Engineering
- · Semiconductor devices
- Signals, Systems, and Transmission

#### 4.6.9 Proposed Plan for Research

- To develop mm wave and THz circuit design laboratory
- Vehicular communication, 6G
- · Studies on radio resource management and mobility issues in future Heterogenous Wireless Network
- HCI systems using multidisciplinary mechanisms
- 3D On-Chip Interconnection Architecture for next generation 3D SoC
- Hybrid Satellite Terrestrial Network, Spiking Neural Networks
- · Circuit Design for Low Power Analog / Mixed Signal Systems
- Investigation of Microwave Antenna for Next Generation Wireless Applications
- · Array antenna failure detection and Correction
- Antenna Array Synthesis using Evolutionary Algorithms
- On-Chip Antenna Design and Fabrication
- Development of 2D Transition Metal Dichalcogenides based environmental sensor
- Implementation of quantum optical logic system using photonic crystal
- Meta materials based mm wave based devices



- · Design of Advanced Antenna Arrays for 5G and B5G
- 1. Self-Supervised Learning based Noise Reduction for Hearing-Impaired Listeners 2. Development of an AI-powered Voice-enabled Virtual Assistant in the Indian Language for a Smart Remote Healthcare System
- · Electronic Materials and Devices
- · Signal processing in Medical Domain
- Design of Sub- nm Semiconductor Device for Enhanced Sensitivity in Biosensing Applications
- Understanding the role of protein-protein or gene protein interaction networks in cancer therapy
- Communication Engineering
- · Semiconductor devices
- -NA-

#### 4.6.10 Area of Research Interest

- Integrated Circuits for Transceivers, Fractal antenna, metamaterials, application of evolutionary algorithms to electromagnetic optimization problems, RFID and computational electromagnetics and wideband microwave component design
- · Cross layer optimization for wireless networks, Statistical signal processing
- Vehicular communication, 6G
- · D2D Communication, Het Net, Relay networks, Handoff algorithms, Cognitive Radio Networks etc.
- · Multidisciplinary Mechanisms
- Simulation and modeling of sub-nm semiconductor devices
- VLSI Design, High-performance computing, Energy-efficient interconnect architectures for manycore systems, Heterogeneous System Architecture (HSA) and AI-ML.
- IRS-UAV NOMA Networks, Energy Harvesting, Symbiotic Communication, Physical Layer Security, D2D Networks
- Low Power Analog CMOS, ADC/DAC Design
- · RF and Microwave
- · Antenna Array Synthesis
- · On-Chip Antenna
- 2D Materials
- · Semiconductor Devices based Sensors
- Nanotechnology
- · optical logic gates using Photonic crystals
- mm wave based devices
- · Antenna Optimization, Signal Processing, Soft Computing
- Speech Enhancement, Spoken Language Identification, Computational Intelligence, Digital System Design
- Resistive Memory, Sensors, Synaptic Devices
- Bio medical Signal Processing
- · Computational Biology and Bioinformatics
- · Machine learning and Artificial Intelligence
- · Communication Engineering
- · Semiconductor devices
- Broadband Communication

#### 4.6.11 Institute Industry Collaboration

Collaborating Institute Organization	Areas of collaboration	Collaboration Activities
TCS	Assistive Technology	Sponsored Project
DRDO	Speech Processing	Sponsored Project
TCS Research	5G mm wave radio design	development of transceivers, radiating systems as well as intelligent surfaces



### 4.6.12 Collaboration with Academic and Research Institutions

Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
MUT, Warsaw, Poland	6G channel sounding	A Chandra	Joint experiment
VUT, Brno, Czech Republic	6G channel sounding	A Chandra	Joint experiment
University of Parma, Italy	5G Wireless Communication	Prof. R. Raheli, Prof. G. Ferrari, Prof. S. Kundu, Dr. S. Dhar Roy	Joint publication, Joint research
Vellore Institute of Technology, Vellore	D2D Communication, UAV based Communication, Performance evaluation of wireless communication system	Prof. S. Kundu, Dr. S. Dhar Roy, Dr. A. Bhowmick	Joint research, publication
IIT Patna, NIT Patna, IIIT Allahabad, MNNIT Allahabad	VLSI Chip Design	Hemanta Kumar Mondal, Aniruddha Chandra	C2S Project, MeitY
University of Parma, Italy	Wireless Communication	Prof. Gianluigi Ferrari , Prof. Riccardo Raheli	Writing Joint paper
Kalyani University	RF and Microwave	Prof. P P Sarkar	Research
VIT-AP	RF and Microwave	DR. B Roy	Research
Vignan's University	RF and Microwave	Dr. Arnab De	Research
University of Burdwan	Optical Logic systems using Photonic Band-gap crystal	Prof. Sourangshu Mukhopadhyay	Ongoing PhD student co- supervision
IIT Jodhpur	nano-sensors and2D Materials based gas sensors	Dr. Mahesh Kumar	Research papers and books chapter
NIT Warangal, India	Design of Advanced Antenna Arrays	Dr. Gopi Ram	PhD program
DRDO-CAIR	Speech Signal Processing - Speech Enhancement, Speaker Diarization, and Language Identification	Dr. Suman Samui, Dr. Nilanjan Chattaraj, and Dr. Sujoy Saha	Project guidance and consultancy
C V Raman Global University,Bhubaneswar	Machine learning	Prof.Ganapati Panda	Ph.D supervision as a coguide

## 4.6.13 Workshops/Seminars Organized

Name of Key Speaker(s)	Name of the Programme	Date of the Programme
D Michelson	Special Session, IEEE AP-S/USNC-URSI	2022-07-11
S. Das (IIT ISM Dhanbad))	Synergistic Training Program Utilizing the Scientific & Technological Infrastructure (STUTI)	2022-09-19
Prof. Sudeshna Sarkar, IIT Kharagpur	"Research Scholar Day-22"	2022-09-23

Prof. Sudeshna Sarkar, IIT Kharagpur. 2. Dr. Sudhan Majhi, IISc Bangalore, 3. 11. Dr. Susrut	A one-week training workshop on "Design and Characterization of Devices and Circuits for	0025-03-14
Das, IIT (ISM) Dhanbad, 4. Prof. G. K.	Electronic Systems (DC2ES)" under the aegis	
Mahanti, 5. Prof. R. Ghatk, 6. Prof.	of 'Synergistic Training program Utilizing the	
R. Mahapatra, 7. Prof. A. K. Mal	Scientific & Technological Infrastructure	
	(STUTI)' project of Department of Science and	
	Technology (DST), Government of India	
	partnered with IT (ISM) Dhanbad during	
	September 19, 2022 to September 25, 2022.	
Swami Chidrupananda Saraswati, Prof.	One Day workshop on Value The Values	2022-08-22
Anupam Basu		
Prof. Sadanand S. Gokhale , Prof. Anupam	One Day Workshop on International Day for the	2022-11-25
Basu, Mrs.	Elimination of Violence against Women	
Beena Gokhale		

## 4.6.14 Innovations and Technology Transfer (Patents filed during)

Title	Inventors	Application Nos	Date of Filling
Multi-port, multi-functional metasurface antenna for beam steering	Rowdra Ghatal and TCS Research	IN202221040497	2022-07-14

## 4.6.15 Workshops/Seminars Organized

NIL

### 4.6.16 Journal: Published in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Jayanta Pal, Soumen	Mathematical Approach to Protein	ACS omega	Volume:7 Issue No:43
Ghosh, Bansibadan	Sequence Comparison Based on		Page No:39446-39455
Maji and Dilip Kumar	Physiochemical Properties.		Year:2022 Month:
Bhattacharya.			
S. Ghosh, A.	Performance of a cognitive D2D	International Journal of	Volume:35 Issue No:6
Bhowmick, A.	Network in disaster situation under a	Communication Systems	Page No:1-23
Chandra, S. D. Roy, S. Kundu	collision constraint		Year:2022
			Month:Apr
Sharma,	Secrecy Outage of an Energy	Wireless Personal	Volume:129 Issue No:
Shashibhushan & Dhar Roy,	Harvesting Multi-relay Network	Communications.	Page No:1-22
Sanjay & Kundu, Sumit.	with Multiple-antenna		Year:2023
			Month:Mar
Ghosh, Sayanti &	UAV Assisted SWIPT Enabled	Wireless Personal	Volume:128 Issue No:
Dhar Roy, Sanjay &	NOMA Based D2D Network for	Communications.	Page No: Year:2022
Kundu, Sumit	Disaster Management.		Month:Sep
Baranwal, Alok & Sharma,	Outage Performance of Uplink (UL)	Wireless Personal	Volume:125 Issue No:
Shashibhushan & Dhar Roy,	NOMA Network.	Communications	Page No: Year:2022
Sanjay & Kundu, Sumit.			Month:Jul
Mondal, Soumen & Dhar	Performance of a Hybrid Dual-hop	International Journal of	Volume:110 Issue No:
Roy, Sanjay & Kundu, Sumit	and Multi-hop Network based on	Electronics.	Page No: Year:2022
	NOMA		Month:Apr



Author(s) Name	Paper Name	Journal Name	Others Info
Ghosh, Sayanti & Bhowmick, Abhijit & Chandra, Aniruddha & Dhar Roy, Sanjay & Kundu, Sumit.	Performance of a cognitive deviceto- device network in disaster situation under a collision constraint.	International Journal of Communication Systems.	Volume:35 Issue No: Page No: Year:2022 Month:Apr
Debabrata Bej, Nilanjan Chattaraj, Rajat Mahapatra, Manas Kumar Mondal, Chiranjib Ghosh	Fabrication of a CO2 Gas Sensor Based on ZnO Thin Film from the Perspective of Sensing Vehicle Tailpipe-Emitted Pollution	Journal of Electronic Materials, Springer	Volume:52 Issue No: Page No:3983–3990 Year:2023 Month:
Nilanjan Chattaraj, Ranjan Ganguli	Mechatronic Approaches to Synthesize Biomimetic Flappingwing Mechanisms: A Review	International Journal of Aeronautical & Space Sciences (SCI), Springer	Volume:24 Issue No: Page No:105–120 Year:2023 Month:
Amal Thomas K, Soumyajit Poddar, Hemanta Kumar Mondal	A CNN Hardware Accelerator Using Triangle-based Convolution	ACM Journal on Emerging Technologies in Computing Systems	Volume:18 Issue No:4 Page No:1-23 Year:2022 Month:Oct
Nilanjan Biswas, Zijian Wang, Luc Vandendorpe, Hamed Mirghashemi	On joint cooperative relaying, resource allocation, and scheduling for mobile edge computing networks	IEEE Transactions on Communications	Volume:70 Issue No:9 Page No:5882-5897 Year:2022 Month:Sep
Nilanjan Biswas, Goutam Das, Priyadip Ray	On joint cooperative relaying, resource allocation, and scheduling for mobile edge computing networks	IEEE/ACM Transactions on Networking	Volume:30 Issue No:5 Page No:1940-1954 Year:2022 Month:Oct
Hemanta Kumar Mondal, Sarnava Konar, Poulomi Hore, Ramapati Patra, Pradipta Sarkar, Sujay Deb	Interconnect support for energy efficient and high bandwidth memory access in CMPs	Sustainable Computing: Informatics and Systems, Elsevier	Volume:34 Issue No: Page No: Year:2022 Month:Apr
Sayanti Ghosh, Sanjay DharRoy, Sumit Kundu	UAV assisted SWIPT Enabled NOMA based D2D Network for Disaster Management	Wireless Personal Communication ( Springer)	Volume:128 Issue No:128 Page No:2341– 2362
Sayanti Ghosh, Abhijit Bhowmick, Aniruddha Chandra, Sanjay Dhar Roy, Sumit Kundu	Performance of a cognitive deviceto- device network in disaster situation under a collision constraint	International Journal of Communication systems	Year:2022 Month:Sep Volume:35 Issue No:22 Page No: Year:2022 Month:
Soumen Mondal, Sanjay Dhar Roy, Sumit Kundu	Performance of a hybrid dual-hop and multi-hop network based on NOMA	International Journal of Electronics	Volume:110 Issue No:5 Page No: 898-914 Year:2022 Month:May
A. Mukherjee, P. Chakraborty, S. Prakriya and A. K. Mal,	Cooperative Mode SwitchingBased Cognitive NOMA with Transmit Antenna and User Selection	IEEE Transactions on Signal and Information Processing over Networks	Volume:vol. 8, Issue No: Page No:pp. 932- 945 Year:2022 Month:Aug
A. Mukherjee, P. Chakraborty, S. Prakriya and A. K. Mal,	Performance of Novel Adaptive Schemes for Cognitive Full- Duplex Relaying Based Downlink Cooperative NOMA	IEEE Transactions on Wireless Communications	Volume:vol. 10 Issue No: Page No:pp. 1-18 Year:2022 Month:Oct
S. Mandal, S. K. Mandal, A. K. Mal, and R. Mahapatra	Design of a super-wideband onchip antenna with improved characteristics using bulk micromachining	Microsystem Technologies	Volume:vol. 28 Issue No: Page No:pp. 937- 946 Year:2022 Month:Apr

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Author(s) Name	Paper Name	Journal Name	Others Info
S. Mandal, S. K. Mandal, A. K. Mal, R. Mahapatra	A UWB Dual Band-Notched on- Chip Antenna and Its Equivalent Circuit Model	Progress In Electromagnetics Research B	Volume:vol. 97 Issue No: Page No:pp. 19-35 Year:2022 Month:Oct
S. Goswami, Sujit K. Mandal and S. Banerjee	A compact quad-band sickleshaped monopole antenna for gsm 900/wimax/wlan applications	Computers, Materials & Continua	Volume:73 Issue No:1 Page No:397–410 Year:2022 Month:Mar
Das, A., Mandal, D., Kar, R.	An optimal radiation pattern synthesis and correction of mutually coupled circular dipole antenna array	Scientia Iranica	Volume:29 Issue No:3 Page No:1455–1474 Year:2022 Month:Aug
A. Das, D. Mandal, R. Kar	Side Lobe Suppression of Concentric Circular Antenna Array Using Social Spide Algorithm	IETE Journal of Research	Volume: Vol. 68 Issue No:issue. 6 Page No:pp 4198-4207 Year:2022 Month:Jun
Kailash P.Dutta, Bitan Misra and Gautam K.Mahanti	Meta-heuristic optimization algorithms for placement of multiple nulls and minimization of side lobe level in quadrant symmetric sparse array antenna	International Journal of Communication Systems, Wiley	Volume:35 Issue No:10 Page No:1-15 Year:2022 Month:Jul
P. Sarkar, S. Panda, B. Maji, A. K. Mukhopadhyay	Plasmon induced quantified agglomeration of SiO2 nanoparticles to improve in efficiency in solar cell.	Journal of Ovonic Research, ISSN 1584-9953,	Volume:18 Issue No:6 Page No:723-730 Year:2022 Month:
Jayanta Pal, Sourav Saha, Bansibadan Maji and Dilip Kumar Bhattacharya.	PTGAC Model: A machine learning approach for constructing phylogenetic tree to compare protein sequences.	Journal of Bioinformatics and Computational Biology, 22500282250028. DOI: 10.1142/S02197200225 00287	Volume: Issue No: Pag No: Year:2023 Month:
Ananya Mukherjee, Sujit K. Mandal, and Rowdra Ghatak	A Fractal-Based Time Modulated Multiband Linear Array for Interband Communication	IEEE Antennas & Wireless Propagation Letters	Volume:21 Issue No:5 Page No:918 - 922 Year:2022 Month:May
Harshavardhan Singh and Sujit K Mandal	Current Trends and Future Perspective of Designing On-chip Antenna	International Journal of Microwave and Wireless Technologies	Volume:15 Issue No:3 Page No:535 - 545 Year:2022 Month:Jun
A Mukherjee, S Mandal, Sujit K Mandal, R Ghatak	Trapezoidal pulse-switching strategy for failure correction of multi-pattern time-modulated linear array	International Journal of Microwave and Wireless Technologies	Volume:https://doi.org/ 10.1017/S17590787220 01179 Issue No: Page No:1 - 17 Year:2022 Month:Nov
Sujoy Mandal, Sujit K Mandal	Synthesis of Time-Modulated Array with Reduced Sideband Radiation by Increasing Main- Beam Maximum	IEEE Antennas and Wireless Propagation Letters	Volume:22 Issue No:2 Page No:342 - 346 Year:2023 Month:Feb
Prajit Paul, Bappadittya Roy, Anup Kumar Bhattacharjee	A novel Block Bi-diagonalization based pre-coding scheme for bit error reduction in mutiple input multiple output-orthogonal frequency division multiplexing	International Journal of Communication Systems	Volume:36 Issue No:8 Page No: e5469 Year:2022 Month:Aug
Shashibhushan Sharma, Sanjay Dhar Roy , Sumit Kundu	Secrecy Outage of an Energy Harvesting Multi-relay Network with Multiple-antenna	Wireless Personal Communication ( Springer)	Volume:129 Issue No: Page No:2503-2524 Year:2023 Month:Mar



Author(s) Name	Paper Name	Journal Name	Others Info
Alok Kumar Baranwal, Shashibhushan Sharma, Sanjay Dhar Roy & Sumit Kundu	Outage Performance of Uplink (UL) NOMA Network	Wireless Personal Communication ( Springer)	Volume: 125 Issue No:2 Page No: 1281–1305 Year: 2022 Month: Feb
Arnab De, Bappadittya Roy, Ankan Bhattacharya, and A. K. Bhattacharjee	Investigations on a circular UWB antenna with Archimedean spiral slot for WLAN/Wi-MAX and satellite X-band filtering feature	International Journal of Microwave and Wireless Technologies	Volume:14 Issue No:6 Page No:781-789 Year:2022 Month:Aug
Paromita De , Sapana Ranwa , Sourangshu Mukhopadhyay	Intensity and phase encoding for realization of integrated Pauli X, Y and Z gates using 2D photonic crystal	Optics & Laser Technology	Volume:152 Issue No: Page No:108141(1-8) Year:2022 Month:Apr
Anik Biswas, Kishalaya Mandal, Sapana Ranwa, Rowdra Ghatak	Haferman carpet fractal shaped metasurface enabled with graphene as a THz absorber	Optics Communications	Volume:517 Issue No: Page No:128276 Year:2022 Month:Apr
L. Janjanam, S.K. Saha, R. Kar, D. Mandal	Improving the Modelling Efficiency of Hammerstein System using Kalman Filter and its Parameters Optimised using Social Mimic Algorithm: Application to Heating and Cascade Water Tanks	Journal of the Franklin Institute, Elsevier	Volume:359 Issue No:3 Page No:1239-1273 Year:2022 Month:Feb
Shubham Saini, Arvind Kumar, Sapana Ranwa, A. K. Tyagi	Highly sensitive NO2 gas sensor based on Ag decorated ZnO nanorods	Applied Physics A	Volume:128 Issue No:454 Page No:1-9 Year:2022 Month:May
S. Yadav, S.K. Saha, R. Kar, D. Mandal	EEG/ERP signal enhancement through an optimally tuned adaptive filter based on Marine Predators Algorithm	Biomedical Signal Processing and Control, Elsevier	Volume:73, Issue No: 103427 Page No:1-33 Year:2022 Month:Mar
L. Janjanam, S.K. Saha, R. Kar, D. Mandal	Optimal Design of Cascaded Wiener-Hammerstein System Using A Heuristically Supervised Discrete Kalman Filter with Application to Real-time Benchmark Problems	Expert Systems With Applications, Elsevier	Volume:200 Issue No: Page No:117065 Year:2022 Month:Aug
L. Janjanam, S.K. Saha, R. Kar, D. Mandal	Hammerstein-Wiener Nonlinear System Identification by Using Honey Badger Algorithm Hybridized Sage-Husa Adaptive Kalman Filter with Real-time Applications	AEUE - International Journal of Electronics and Communications, Elsevier	Volume:151 Issue No: Page No:154218 Year:2022 Month:Jul
L. Janjanam, S.K. Saha, R. Kar, D. Mandal	Wiener Model-based System Identification Using Moth Flame Optimised Kalman Filter Algorithm	Signal, Image and Video Processing, Springer	Volume:16 Issue No: Page No:1425–1433 Year:2022 Month:
K. B. Maji, B.P. De, R Kar, D Mandal, SP Ghoshal	CMOS Analog Amplifier Circuits Design Using Seeker Optimization Algorithm	IETE Journal of Research, Taylor & Francis	Volume:68 Issue No:2 Page No:1376-1385 Year:2022 Month:
Madhab Dhali, A Chakraborty, Gopi Ram, D Mandal	Mutual coupling compensation of linear antenna array using evolutionary optimization technique	International Journal of Communication Systems	Volume:36 Issue No:4 Page No:e5401 Year:2022 Month:Nov



Author(s) Name	Paper Name	Journal Name	Others Info
S. Mallick, R. Kar, D. Mandal	Optimal design of second generation current conveyor using craziness-based particle swarm optimisation	International Journal of Bio- Inspired Computation, Inderscience	Volume:19 Issue No:2 Page No:87-96 Year:2022 Month:
L Janjanam, SK Saha, R Kar, D Mandal	Volterra filter modelling of nonlinear system using Artificial Electric Field algorithm assisted Kalman filter and its experimental evaluation	ISA transactions, Elsevier	Volume:125 Issue No: Page No:614-630 Year:2022 Month:
A. Das, D. Mandal, R. Kar	An Optimal Far Field Radiation Pattern Synthesis of Mutually Coupled Antenna Arrays	International Journal of RF and Microwave Computer- Aided Engineering, Wiley	Volume:32 Issue No:e7 Page No:e23198 Year:2022 Month:
Avishek Chakraborty, Gopi Ram, D Mandal	Power pattern synthesis of a moving phase center time modulated antenna array using symmetrically and asymmetrically positioned time schemes	International Journal of RF and Microwave Computer- Aided Engineering	Volume:32 Issue No:12 Page No:e23442 Year:2022 Month:Oct
A. Das, D. Mandal, R. Kar	An Optimal far field Radiation Pattern Synthesis of Mutually Coupled Antenna Arrays	International Journal of RF and Microwave Computer- Aided Engineering, Wiley	Volume:32 Issue No:7 Page No:e23198 Year:2022 Month:
G. Ram, R. Kar, D. Mandal	Control Parameter Based Comparative Study of Radiation Properties of TMCCAA and TMHSCAA	Scientia Iranica	Volume:29 Issue No:4 Page No:1939–1948 Year:2022 Month:
A. Das, D. Mandal, R. Kar	An optimal radiation pattern synthesis and correction of mutually coupled circular dipole antenna array	Scientia Iranica	Volume:29 Issue No:3 Page No:1455–1474 Year:2022 Month:
A. Das, D. Mandal, R. Kar	Side Lobe Suppression of Concentric Circular Antenna Array Using Social Spider Algorithm	IETE Journal of Research	Volume:68 Issue No:6 Page No:4198-4207 Year:2022 Month:
A Chakraborty, Gopi Ram, D Mandal	Time modulation based unconventional phased antenna arrays for monopulse and multifunction radar systems	International Journal of Numerical Modelling: Electronic Networks, Devices and Fields	Volume:36 Issue No:4 Page No:e3074 Year:2022 Month:Oct
Suman Poddar, Prajat Paul, A Chakraborty, Gopi Ram, D Mandal	Design optimization of linear arrays and time-modulated antenna arrays using metaheuristics approach	International Journal of Numerical Modelling: Electronic Networks, Devices and Fields	Volume:35 Issue No:5 Page No:e3010 Year:2022 Month:Apr
A Chakraborty, Gopi Ram, D Mandal	Time-modulated linear array synthesis with optimal time schemes for the simultaneous suppression of sidelobe and sidebands	International Journal of Microwave and Wireless Technologies	Volume:14 Issue No:6 Page No:768-780 Year:2022 Month:
A Chakraborty, Gopi Ram, D Mandal	Phase center motion based time modulated arrays with preprocessed time schemes for selective harmonic beamforming in B5G communication systems	Transactions on Emerging Telecommunications Technologies	Volume:34 Issue No:5 Page No:e4754 Year:2023 Month:Mar



Author(s) Name	Paper Name	Journal Name	Others Info
Arun Raj, D C Dhubkarya, D K Srivastava, D Mandal	Design and analysis of square shape slot cut high gain Sierpinski carpet fractal antenna for wireless applications	Microwave and Optical Technology Letters	Volume:65 Issue No:8 Page No:2337-2343 Year:2023 Month:Mar
Sahoo, Jagamohan; Mahapatra, Rajat	The effect of dual dummy gate in the drift region on the on-state performance of SOI-LDMOS transistor for power amplifier application	Silicon	Volume:14 Issue No:5 Page No:2039-2050 Year:2022 Month:
Mandal, Sanjukta; Mandal, Sujit Kumar; Mal, Ashis Kumar; Mahapatra, Rajat;	Design of a super-wideband onchip antenna with improved characteristics using bulk micromachining	Microsystem Technologies	Volume:28 Issue No: Page No:937–946 Year:2022 Month:
Pal, Himangshu; Mahapatra, Rajat; Datta, Subham; Chatterjee, Somenath;	Cellulosic graphene: growth, characterization, and fabrication toward ambient humidity sensing	Materials and Manufacturing Processes	Volume:37 Issue No:16 Page No:1850-1858 Year:2022 Month:
Mandal, Sanjukta; Mandal, Sujit K; Mal, Ashis K; Mahapatra, Rajat;	A UWB Dual Band-Notched On- Chip Antenna and Its Equivalent Circuit Model.	Progress In Electromagnetics Research B	Volume:97 Issue No: Page No:19–35 Year:2022 Month:
Paul, Argha Deep; Barman, Rabindranath; Nunzi, Jean-Michel; Tameev, Alexey; Mahapatra, Rajat; Mondal, Aniruddha	Ion-Sensitive Three-Terminal Device as a Universal Hybrid Platform With TiO 2 Nanowires on the Channel	IEEE Sensors Journal	Volume:23 Issue No:3 Page No:1917 Year:2023 Month:
Choudhury, Ankita; Dey, Arka; Ghosh, Chiranjib; Dalal, Avijit; Mahapatra, Rajat; Biswas, Saikat; Halder, Nilanjan; Mondal, Aniruddha;	Positive temperature coefficient of resistance of Mg-GeO2 nanowire array film	Journal of Applied Physics	Volume:133 Issue No:4 Page No: 045302 Year:2023 Month:
Anu Samanta, Indranil Hatai, Ashis Kumar Mal,	"An energy-efficient voice activity detector using reconfigurable Gaussian base normalization deep neural network	Multimedia Tools and Applications	Volume:vol. 82, Issue No: Page No:pp. 27861–27882 Year:2023 Month:Feb
Anik Biswas, Kishalaya Mandal, Sapana Ranwa, Rowdra Ghatak	Haferman carpet fractal shaped metasurface enabled with graphene as a THz absorber	Optics Communications	Volume:517 Issue No:August Page No: Year:2022 Month:Aug
Ananya Mukherjee, Sujit K. Mandal, Rowdra Ghatak	A Fractal-Based Time-Modulated Multiband Linear Array for Interband Communication	IEEE Antennas and Wireless Propagation Letters	Volume:21 Issue No:5 Page No:918-922 Year:2022 Month:May
Anjan Bandyopadhyay, Pankaj Sarkar, Rowdra Ghatak	A Bandwidth Reconfigurable Bandpass Filter for Ultrawideband and Wideband Applications	IEEE Transactions on Circuits and Systems II: Express Briefs	Volume:69 Issue No:06 Page No:2747-2751 Year:2022 Month:Jun
Abhik Gorai, Arindam Deb, Jyoti Ranjan Panda, Rowdra Ghatak	Millimeter Wave/5G Multiband SIW Antenna with Metasurface Loading for Circular Polarization and Bandwidth Enhancement	Journal of Infrared, Millimeter, and Terahertz Waves	Volume:43 Issue No:June 22 Page No:366-383 Year:2022 Month:Jun



Author(s) Name	Paper Name	Journal Name	Others Info
Ananya Mukherjee, Sujoy Mandal, Sujit K. Mandal, Rowdra Ghatak	Trapezoidal pulse-switching strategy for failure correction of multi-pattern time-modulated linear array	International Journal of Microwave and Wireless Technologies	Volume:15 Issue No:07 Page No:1188 - 1204 Year:2022 Month:Sep
Shyam Sundar Jash, Rowdra Ghatak	A metasurface enabled dual band antenna exhibiting dual polarizations with reduced beam squint and cross polarization	International Journal of RF And Microwave Computer Aided Engineering	Volume:32 Issue No:12 Page No:e23501 Year:2022 Month:Oct
Jeet Banerjee, Abhik Gorai, Rowdra Ghatak	A novel isolation improvement technique using fractal neutralization line with dual band rejection attributes in a compact UWB MIMO antenna	International Journal of Microwave and Wireless Technologies	Volume:First View Issue No: Page No:1-12 Year:2022 Month:Dec
L. Janjanam, S.K. Saha, R. Kar, D. Mandal	Optimal Design of Cascaded Wiener-Hammerstein System Using A Heuristically Supervised Discrete Kalman Filter with Application to Real-time Benchmark Problems	Expert Systems With Applications, , August 2022, 117065, Elsevier.	Volume:Volume 200 Issue No: Page No: Year:2022 Month:Aug
L. Janjanam, S.K. Saha, R. Kar, D. Mandal	Hammerstein-Wiener Nonlinear System Identification by Using Honey Badger Algorithm Hybridized Sage-Husa Adaptive Kalman Filter with Real-time Applications	AEUE - International Journal of Electronics and Communications	Volume:Volume 151 Issue No:154218 Page No: Year:2022 Month:Jul
L. Janjanam, S.K. Saha, R. Kar, D. Mandal	Wiener Model-based System Identification Using Moth Flame Optimised Kalman Filter Algorithm	Signal, Image and Video Processing	Volume:16 Issue No: Page No:1425–1433 Year:2022 Month:Sep
K. B. Maji, B.P. De, R Kar, D Mandal, SP Ghoshal	CMOS Analog Amplifier Circuits Design Using Seeker Optimization Algorithm	IETE Journal of Research	Volume:68 Issue No:2 Page No:1376-1385, 2022 Year:2022 Month:Jun
Soumen Mallick, Rajib Kar, Durbadal Mandal	Optimal design of second generation current conveyor using craziness-based particle swarm optimisation	International Journal of BioInspired Computation	Volume:19 Issue No:2 Page No:87-96 Year:2022 Month:May
L Janjanam, SK Saha, R Kar, D Mandal	Volterra filter modelling of nonlinear system using Artificial Electric Field algorithm assisted Kalman filter and its experimental evaluation	ISA transactions	Volume: 125 Issue No: Page No: 614-630 Year: 2022 Month: Aug
A. Das, D. Mandal, R. Kar	An Optimal Far Field Radiation Pattern Synthesis of Mutually Coupled Antenna Arrays	International Journal of RF and Microwave Computer-Aided Engineering	Volume:Volume32 Issue No:Issue7 Page No:e23198 Year:2022 Month:Jul
H. Patidar, R. Kar	Generation of cosecant squared pattern from linear array of active and parasitic dipole antennas	Electromagnetics	Volume:Volume 42 Issue No:Issue 4 Page No:pp. 278-294 Year:2022 Month:Aug
P. K. Bera, R. Kar, D. Mandal	Modelling and Analysis of Dual Material Gate Charge Plasma Based Vertical t-shaped TFET	Silicon	Volume:vol. 14 Issue No: Page No:pp. 7667– 7676 Year:2022 Month:Sep



Author(s) Name	Paper Name	Journal Name	Others Info
A. Das, D. Mandal, R. Kar	An Optimal Radiation Pattern	International Journal of	Volume: Vol. 32 Issue
	Synthesis of Mutually Coupled	RF and	No:Issue7 Page
	Concentric Circular Dipole Antenna	Microwave Computer-	No:e23198
	Array	Aided Engineering,	Year:2022 Month:Oct
G. Ram, R. Kar, D. Mandal	Control Parameter Based	Scientia Iranica	Volume:29 Issue No:4
	Comparative Study of Radiation		Page No:pp. 1939-1948
	Properties of TMCCAA and		Year:2022 Month:Dec
	TMHSCAA		
Sanjukta Mandal, Sujit	A UWB Dual Band-notched On-	Progress in	Volume:97 Issue No:
K. Mandal, A. K. Mal, and R.	chip Antenna and It's Equivalent	Electromagnetics	Page No:19 - 35
Mahapatra	Circuit Model	Research B	Year:2022
			Month:Oct
Pallav Dutta, Ananya	Detrended Fractal Analysis of	Journal of Xi'an Shiyou	Volume:65 Issue No:05
Banerjee, Moupali	Dynamics in Non-Linear Domain	University,	Page No:178-188
Roy, Arnima Das,	for HRV While Performing Graded	Natural Sciences	Year:2022 Month:
Bansibadan Maji and Anilesh	Cycling Exercise.	Edition,	
Dey.		ISSN:1673-064X, DOI	
		10.17605/OSF.IO/6C47	
		D	
P. K. Bera, R. Kar, D. Mandal	Modelling and Analysis of Dual	Silicon, Springer	Volume: 14 Issue No:
	Material Gate Charge Plasma		Page No:7667-7676
	Based Vertical t-shaped TFET		Year:2022 Month:
B. Ghosh, A. Chandra, A. K.	Fuzzy logic-based energy-optimal	International Journal of	Volume:29 Issue No:2
Mal	collinear DF relay placement in two-	Wireless Information	Page No:167-179
	hop eta-mu fading channel	Networks	Year:2022
			Month:Jun
Sujoy Mandal, Sujit K	Efficient Computation of Sideband	Progress In	Volume:98 Issue No:
Mandal	Power Losses in Pulse-Shifted Non-	Electromagnetics	Page No:59 - 75
	Uniform Time-Modulated Array	Research B	Year:2023
	with Arbitrary Element		Month:Jan

4.6.17 Journal: Accepted for Publication in 2022-2023 SCI/SCOPUS/Web of Science

NIL

4.6.18 Journal: Published in Others in 2022-2023

NIL

4.6.19 Journal: Accepted in Others in 2022-2023

NIL

4.6.20 Conference: Published in 2022-2023 DOI/ISBN

Author(s) Name	Paper Name	Conference Name	Others Info
D. Chatterjee, A. Dutta, D. Sil, A. Chandra	Deep single shot musical instrument identification using scalograms	International Conference on AI in Information and Communication (ICAIIC)	DOI/ISBN: 10.1109/ICAIIC57133.2023.1006 6992 Volume: Issue No: Page No:386– 389 Year:2023
A Chattanadhyay A	IEEE 802.11ac vs 802.11ad for	IEEE International	Month:Feb Presenter:SELF DOI/ISBN:
A. Chattopadhyay, A. Chandra	V2X: How many frames can we aggregate?	Symposium on Personal, Indoor and Mobile	10.1109/PIMRC54779.2022.9977 545



Author(s) Name	Paper Name	Conference Name	Others Info
		Radio Communications (PIMRC)	Volume: Issue No: Page No:913– 918 Year:2022 Month:Sep Presenter:SELF
A. Chandra, M. Kim, A. Ghosh, J. M. Kelner, A. Prokes, D. G. Michelson	Millimeter wave vehicular communication: From channel sounding to standardization	IEICE Technical Report (AP2022- 53)	DOI/ISBN: 2432-6380 Volume: Issue No: Page No:107–112 Year:2022 Month:Jul Presenter:SELF
R. Shukla, A. N. Sarkar, A. Chandra, T. Mikulasek, A. Prokes, J. M. Kelner, C. Ziololkowski	Deep learning based power delay profile trend generation: A 60 GHz intra-vehicle case study	IEEE International Sym- posium on Antennas and Propagation and USNC-URSI Radio Science Meeting (AP-S/URSI)	DOI/ISBN: 10.1109/AP- S/USNC- URSI47032.2022.9887316 Volume: Issue No: Page No:209–210 Year:2022 Month:Jul Presenter:CO- AUTHOR
Baranwal, Alok & Dhar Roy, Sanjay & Kundu, Sumit.	Performance Analysis of Full- Duplex Cooperative NOMA with Power-Time Splitting Based Energy Harvesting.	4th International Conference on Computing and Communication Systems (I3CS)	DOI/ISBN: DOI:10.1109/I3CS58314.2023.10 127421 Volume: Issue No: Page No: Year:2023 Month: Presenter:CO-AUTHOR
Das, Amitesh & Ghosh, Sayanti & Bhowmick, Abhijit & Dhar Roy, Sanjay & Kundu, Sumit.	Outage Analysis of a D2D Network for MIMO-NOMA- based Downlink Transmission	5th International Conference on Recent Advances in Information Technology (RAIT)	DOI/ISBN: DOI:10.1109/RAIT57693.2023.1 0126590 Volume: Issue No: Page No:1-5 Year:2023 Month:Mar Presenter:CO-AUTHOR
Ghosh, Sayanti & Bhowmick, Abhijit & Dhar Roy, Sanjay & Kundu, Sumit.	UAVs-assisted Multi-Hop D2D Communication using Hybrid PTS for disaster management	5th International Conference on Recent Advances in Information Technology (RAIT)	DOI/ISBN: DOI:10.1109/RAIT57693.2023.1 0127102 Volume: Issue No: Page No: Year:2023 Month:Mar Presenter:CO-AUTHOR
Sanniva Bhattacharjee, Aryan Kanu, Arnab Roy Chowdhury, Soumyadeep Mondal, Nilanjan Chattaraj and Nirmal Baran Hui	Low frequency Vibration Energy Harvester using Compliant Mechanism driven Piezoelectric Transformer	IoP International Conference on Sustainable Energy, Environment, and Green Technologies	DOI/ISBN: DOI 10.1088/1755- 1315/1084/1/012017 Volume: Issue No: Page No:1-12 Year:2022 Month: Presenter:CO- AUTHOR
Bodhisattwa Rakshit, Rounak Das, Nilanjan Chattaraj	Detection-Accuracy Enhancement of COVID-19 from Multi-Class Lung Diseases by Instrumenting CLAHE Integrated Deep Learning Technique	IEEE 2nd International Symposium on Sustainable Energy, Signal Processing and Cyber Security (iSSSC)	DOI/ISBN: DOI: 10.1109/iSSSC56467.2022.10051 405 Volume: Issue No: Page No:1-6 Year:2022 Month: Presenter:CO- AUTHOR
Baranwal, Alok & Dhar Roy, Sanjay & Kundu, Sumit.	Secrecy Outage Analysis of Energy Harvesting Enabled Two User Cooperative NOMA.	RAIT	DOI/ISBN: 10.1109/RAIT57693.2023.10126 578 Volume: Issue No: Page No:1-6 Year:2023 Month:Mar Presenter:CO-AUTHOR
Sahu, Samyat & Ghosh, Sayanti & Nayak, Deepak & Dhar Roy, Sanjay.	Outage Probability and Average Sum Rate of an IoT enabled D2D Communication Network in LTE Environment	2022 International Conference on Smart Generation Computing, Communication and Networking (SMART GENCON)	DOI/ISBN: DOI:10.1109/SMARTGENCON5 6628.2022.10084180 Volume: Issue No: Page No:1-5 Year:2022 Month:Dec Presenter:CO-AUTHOR



Author(s) Name	Paper Name	<b>Conference Name</b>	Others Info
Ghosh, Priyanka & Sharma, Shashibhushan & Dhar Roy, Sanjay & Kundu, Sumit	Energy Harvesting AssistedCooperative Non Orthogonal Multiple Access (NOMA) using Time Switching Relaying (TSR) Protocol	2022 IEEE Calcutta Conference (CALCON)	DOI/ISBN: DOI:10.1109/CALCON56258.20 22.10060403 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR
Nayak, Deepak & Reddy, S & Dhar Roy, Sanjay.	Performance Evaluation of CV2X Communication.	2022 IEEE North Karnataka Subsection Flagship International Conference (NKCon)	DOI/ISBN: DOI:10.1109/NKCon56289.2022. 10126613 Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:CO-AUTHOR
Bal, Ranjeet & Reddy, S & Nayak, Deepak & Dhar Roy, Sanjay.	Seamless Handover Algorithms for Non-Standalone 5G mmW Networks	2022 IEEE 3rd Global Conference for Advancement in Technology (GCAT)	DOI/ISBN: DOI:10.1109/GCAT55367.2022. 9971955 Volume: Issue No: Page No: Year:2022 Month:Oct Presenter:CO-AUTHOR
Hritwika Sarkar, Shashibhushan Sharma, Sumit Kundu	Outage Performance of Two Users Cooperative NOMA with Energy Harvesting Relay	IEEE Indicon	DOI/ISBN: 10.1109/INDICON56171.2022.10 039919 Volume: Issue No: Page No:1-6 Year:2022 Month:Nov Presenter:SELF
Priyanka Ghosh, Shashibhushan Sharma, Sanjay DharRoy, Sumit Kundu	Energy Harvesting AssistedCooperative Non Orthogonal Multiple Access (NOMA) using Time Switching Relaying (TSR) Protocol	IEEE Calcon 2022	DOI/ISBN: doi: 10.1109/CALCON56258.2022.10 060403 Volume: Issue No: Page No: 113-116 Year:2022 Month:Dec Presenter:CO-AUTHOR
Sayanti GhoshAbhijit Bhowmick; Sanjay Dhar Roy; Sumit Kundu	UAVs-assisted Multi-Hop D2D Communication using Hybrid PTS for disaster management	2023 5th International Conference on Recent Advances in Information Technology (RAIT), Dhanbad, India, 2023	DOI/ISBN: 10.1109/RAIT57693.2023.10127 102. Volume: Issue No: Page No:1-6 Year:2023 Month:Mar Presenter:CO-AUTHOR
A. Prakash, A. K. Mal, S. S. Sundram and R. Todani	gm/ID Based Noise Optimization For Folded- Cascode Fully Differential Difference Amplifier,	IEEE Calcutta Conference (CALCON), Kolkata, India, 2022	DOI/ISBN: 10.1109/CALCON56258.2022.10 060484 Volume: Issue No: Page No:pp. 218-222 Year:2022 Month:Dec Presenter:CO- AUTHOR
Alok Baranwal, Sanjay DharRoy, Sumit Kundu	Performance Analysis of Full- Duplex Cooperative NOMA with Power-Time Splitting Based Energy Harvesting, published in	2023 4th International Conference on Computing and Communication Systems (I3CS), NEHU, Shillong.	DOI/ISBN: 10.1109/I3CS58314.2023.101274 21. Volume: Issue No: Page No:1-6 Year:2023 Month:Mar Presenter:CO-AUTHOR
Alok Baranwal, Sanjay DharRoy, Sumit Kundu	Secrecy Outage Analysis of Energy Harvesting Enabled Two User Cooperative NOMA,	5th International Conference on Recent Advances in Information Technology (RAIT), RAIT, Dhanbad.	DOI/ISBN: 10.1109/RAIT57693.2023.10126 578. Volume: Issue No: Page No:1-6 Year:2023 Month:Mar Presenter:CO-AUTHOR





Author(s) Name	Paper Name	Conference Name	Others Info
A. Das, S. Ghosh, A. Bhowmick, S. D. Roy	Outage Analysis of a D2D Network for MIMO-NOMA-	5th International Conference on	DOI/ISBN: 10.1109/RAIT57693.2023.10126
and S. Kundu	based Downlink Transmission	Recent Advances in Information Technology (RAIT),	590. Volume: Issue No: Page No:1-5 Year:2023 Month:Mar
	A.L. W. D L. LINVID	Dhanbad, India, 2023	Presenter:CO-AUTHOR
Aparna Panja, Arnab De, Bappadittya Roy, Partha Pratim Sarkar, Anup Kumar Bbhattacharjee	A Letter Box shaped UWB monopole antenna for future 5G communication systems	2023 3rd International conference on Artificial Intelligence and Signal Processing (AISP)	DOI/ISBN: https://doi.org/10.1109/AISP5799 3.2023.10134995 Volume: Issue No: Page No:1-5 Year:2023 Month:Mar Presenter:CO-AUTHOR
Arijit Bhadra and Suman Samui	Design and Analysis of HighThroughput Two-Cycle Multiply- Accumulate (MAC) Architectures for Fixed-Point Arithmetic	IEEE Calcutta Conference (IEEE CALCON)	DOI/ISBN: 10.1109/CALCON56258.2022.10 059958 Volume: Issue No: Page No:267- 272 Year:2022 Month:Dec Presenter:SELF
Sujit Goswami, Sujit Kumar Mandal, and Soumen Banerjee	A Compact Symmetrically Inverted Slotted T-Shaped Patch Antenna for Tri-band Communications	International Conference on Intelligent Communication and Computational Techniques (ICCT)	DOI/ISBN: 10.1109/ICCT56969.2023.10075 877 Volume: Issue No: Page No:1 - 5 Year:2023 Month:Jan Presenter:CO-
Arghyadip Roy and Nilanjan Biswas	GoPro: a Low Complexity Task Allocation Algorithm for a Mobile Edge Computing System	IEEE National Conference on Communications	AUTHOR  DOI/ISBN: 10.1109/NCC55593.2022.980673 1 Volume: Issue No: Page No: Year:2022 Month:May
S. Chakravarty, A. Kumar, T. Chakravarty, A. Pal and R. Ghatak	A Metasurface-Enabled Lens Antenna Demonstrating Electromechanical Beam- Tilting for 5G Applications	2022 National Conference on Communications (NCC)	Presenter:CO-AUTHOR  DOI/ISBN: 10.1109/NCC55593.2022.980674 3 Volume: Issue No: Page No:30- 35 Year:2022 Month:May Presenter:CO- AUTHOR
Amartya Banerjee, Tapas Chakravarty, Arpan Pal and Rowdra Ghatak	Planar Tapered Metasurface Unit Cell Shaped Array for Augmenting Multiport Radiating Systems for 5G mm-Wave Beam Forming Applications	2022 IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	DOI/ISBN: 10.1109/MAPCON56011.2022.1 0046842 Volume: Issue No: Page No:525- 529 Year:2022 Month:Dec Presenter:CO- AUTHOR
J. Banerjee, A. Gorai and R. Ghatak	A UWB MIMO Antenna using a Y-shaped Extended Ground Structure and Y-shaped Slot for Wideband Isolation	2022 IEEE Microwaves, Antennas, and Propagation Conference (MAPCON)	DOI/ISBN: 10.1109/MAPCON56011.2022.1 0047537 Volume: Issue No: Page No:866- 871 Year:2022 Month:Dec Presenter:CO- AUTHOR



Author(s) Name	Paper Name	Conference Name	Others Info
G.K.Mahanti and Bitan Misra	Concentric Circular Array Antenna for Generation of Flat- Top Beam with Design Constrains in Two Principal Vertical Planes	2nd International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME 2022),Maldives National University,Male,Maldives	DOI/ISBN: 10.1109/ICECCME55909.2022.9 988078 Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:SELF
Ashok Babu Chatla, B. Maji, Habibulla Khan & B.T. P. Madhav.	Intrusion System based node replication detection using trusted energy optimization with dynamic hybrid energy efficient distributed	International Conference on Signal processing, Communication and Electronics Engineering (ICSPCEE), ICSPCEE, Nellore, India on 24th Dec 2022, ISBN: 978-93-90150- 31-1	DOI/ISBN: ISBN: 978-93-90150- 31-1 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO- AUTHOR
Ashok Babu Chatla, B. Maji, Habibulla Khan & B.T. P. Madhav.	Clustering based secure routing using deep anomaly detection with energy aware system by energy efficient routing protocol.	International Conference on Networking, Communication and Computing Technology (ICNCCT), ICNCCT, Vijayawada, India on25th Dec 2022, ISBN: 978-93- 90150-31-1	DOI/ISBN: ISBN: 978-93-90150- 31-1 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO- AUTHOR

### 4.6.21 Books Authored

Author Name	Co-Author	Title of the Book	Title of the Chapter	<b>Publication Details</b>
Hemanta Kumar	Prasenjit Maji, Kunal	Hardware	Survey on Recent	Publisher: CRC Press
Mondal	Dhibar	Acceleration	Trends in	(Accepted dated
		Strategies for Signal	Hardware	21/06/2022)
		and	Acceleration for	Publication
		Image Processing	Signal and Image	Date: 2022-06-21
		Applications	Processing	
Ghosh, Sayanti &		Internet of Things and	Downlink Fronthaul	Publisher: Chapman
Dhar Roy, Sanjay &		Data Mining for	Connectivity for IoT	and Hall/CRC
Kundu, Sumit.		Modern	Devices in Rural	Publication Date:
		Engineering and	Areas with Scheduling	2022-07-15
		Healthcare	Approach.	
		Applications (pp.129-	**	
		140)		
Sumit Kundu	Hritwika Sarkar,	5G and Beyond	Two Users	Publisher: Taylor and
	Shashibhushan	Wireless Networks:	Cooperative	Francis, CRC Press
	Sharma	Technology,	NOMA with a	Publication Date:
		Network	SWIPT	2023-04-04
		Deployments and	Enabled Relay (	
		Materials used for	Accepted)	
		antenna deployments		
Sumit Kundu	Sayanti Ghosh, Sanjay	Advanced Wireless	Network Recovery	Publisher: CRC Press
	DharRoy	Communication and	In Dense And	Publication Date:
		Sensor Networks	Emergency Areas	2023-0712
			Using A T-BS and A	
			UAV	
Arnab De	K.M. Vijaylaxmi,	Internet of Things and	Body Wearable	Publisher: Chapman
	Dinesh Yadav,	Data Mining for	Antennas and	and Hall/CRC, Taylor
	Soufian Lakrit, Raed	Modern	Integration of Internet	and Francis
			of Things in Vehicular	

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<b>Author Name</b>	Co-Author	Title of the Book	Title of the Chapter	<b>Publication Details</b>
	M.Shubair,	Engineering and	Wireless	Publication Date:
	Bappadittya	Healthcare	Communication	2022-08-30
	Roy, Anup Kumar Bhattacharjee	Applications	Systems	
Bipasha Chakrabarti	B. Roy, Priyanka S.	In Advances in	Interpretation of	Publisher: Chapman
	Das, Prajit Paul, and	Communication,	Wireless	and Hall/CRC, Taylor
	A. K. Bhattacharjee	Devices and	Communication	and Francis
		Networking	Using	Publication Date:
			OFDM Technology	2022-08-30
Sapana Ranwa	Mahesh Kumar	Encyclopedia of	Sensing Materials:	Publisher: Elsevier
		Sensors and	Ceramics	Publication Date:
		Biosensors		2023-0111
Sapana Ranwa	Mahesh Kumar	Gas Sensors	ZnO Nanostructures-	Publisher: Elsevier
•		Manufacturing,	Based Resistive Gas	Publication Date:
		Materials, and	Sensors:	2022-1128
		Technologies	Sensing Mechanism	
		C	and Sensor Response	
			Enhancement	
			Approaches	

## 4.6.22 Seminars, Summer/Winter Schools, Short Term Courses Attended

Name of the Programme	Organized By	From Date	To Date	Organizing Country
FDP on Blockchain Technology	EICT, NIT Patna	2023-06-19	2023-06-24	India
Webinar on "Introduction to VLSI Synthesis and STA"	Learn VLSI	2022-11-19	2022-11-19	India
IEEE Indicon 2022	IEEE Kerala section	2022-11-24	2022-11-27	India
IEEE MOVE Talk Series:8: Disaster Management: Reflections on Science, Policy, and Societ	IEEE	2022-09-24	2022-09-24	India
Latest Trends in VLSI Devices, Circuits and Tools	NIT Delhi	2022-09-19	2022-09-24	India
International Union of Materials Research Societies (International Conference in Asia 2022 (IUMRS-ICA-2022) IIT Jodhpur 2022	IIT Jodhpur	2022-12-19	2022-12-23	India
Latest Trends in VLSI Devices, Circuits and Tools	IIT Delhi	2022-09-19	2022-09-24	India

### 4.6.23 Ph.D. Supervisor

Topic Name	Scholar	Supervisor	Status	Status Date
UAV-assisted Energy-aware Multi- hop D2D Networks for Disaster Management.	S. Ghosh	Dr. S. Dhar Roy	Ongoing	null
Air Pollution from Vehicle- Tailpipe Emissions and Diagnostic Approaches through Cyber- Physical Platform	Debabrata Bej	Nilanjan Chattaraj	Ongoing	-



Topic Name	Scholar	Supervisor	Status	Status Date
Audio Signal and Machine Learning	Al mamun Sheikh	Nilanjan Chattaraj, Suman Samui	Ongoing	-
Analog circuit testing and Machine Learning	Suman Biswas	Gautam Kumar Mahanti, Nilanjan Chattaraj	Ongoing	-
FinFET	Aprajita Kumari	Dr. Rajashree Das	Ongoing	-
FinFET	Subarna Mandal	Dr. Rajashree Das	Ongoing	-
Low complexity scheduler design for cellular IoT networks	Anisha Sengupta	Nilanjan Biswas	Ongoing	-
Performance Aware Network-on- Chip Architectures for High Performance Computing Applications	Ramapati Patra	Hemanta Kumar Mondal	Ongoing	-
Intelligent Medical Device for Automatic Beat Identification for Smart Healthcare	Prasenjit Maji	Hemanta Kumar Mondal	Ongoing	-
Efficient 3D Network-on-Chip Architectures for High Performance Computing	Debabrata Das	Hemanta Kumar Mondal	Ongoing	-
3D Network-on-Chip for Next Generation 3D SoC	Suman Kalyan Porel	Hemanta Kumar Mondal	Ongoing	-
Mobility Management in integrated Heterogeneous Networks	S Reddy Vamshidhar Reddy	Dr. S. Dhar Roy	Submitted	2023-07- 13
Mobility and Handoff Issues in NextG Networks	Deepak Nayak	Dr. Sanjay Dhar Roy	Ongoing	-
Structural Health Monitoring using WSNs	P. K. Sahu	Dr. K. Mistry and Dr. Sanjay Dhar Roy	Ongoing	-
D2D Communication with MIMO	Amitesh Das	Dr. Sanjay Dhar Roy	Ongoing	-
IRS Enabled Cooperative CR NOMA with EH Relays	Priyanka Sarkar	Prof. Sumit Kundu	Ongoing	-
Energy Harvesting Enabled NOMA Networks with Half/Full Duplex Cooperative Relaying for Secured Transmission	Alok Kr. Baranwal	Prof. S. Kundu and Dr. Sanjay Dhar Roy	Ongoing	-
Performance Optimization and Security Enhancement in Networks with Co- Channel Interference	Amrita Mukherjee	A. K. Mal and P. Chakraborty	Ongoing	2023-08- 04
Design of Low Power Current Mode Circuits In Nano-CMOS	Satyam Shivam Sundram	A. K. Mal	Ongoing	-
Effect of Magnetic Field on the Large-scale-Characteristics of Millimeter wave IMPATT Sources	Partha Banerjee	A.K Bhattacharjee , Arindam Biswas	Ongoing	-
"Energy Harvesting Enabled NOMA Networks with Half/Full Duplex Cooperative Relaying for Secured Transmission	Alok Kumar Baranwal	Prof. Sumit Kundu and Dr. Sanjay DharRoy	Ongoing	-



Topic Name	Scholar	Supervisor	Status	Status Date
Design and Analysis Of Microgrid With A View to Integrate Renewable Sources	Krittika Mukherjea	A. K. Bhattacharjee	Ongoing	-
Investigation of Low Profile Microwave Antenna for Next Generation Wireless Applications	Aparna Panja	A. K. Bhattacharjee	Ongoing	-
Elimination of Harmonics/Higher order modes in Microstrip Antenna using Stub and / or Defected Ground Structure (DGS)	Subhadra Deb Roy	A. K. Bhattacharjee	Ongoing	-
Design of a super-wideband on- chip antenna with improved characteristics using bulk micromachining	Sanjukta Mandal	S. K. Mandal, R. Mahapatra, A. K. Mal	Degree Awarded	2023-06- 13
Some Studies on Wearable Multiband Antennas	Surajit Batabyal	A. K. Bhattacharjee	Ongoing	-
Statistical signal processing based reconnaissance to explore the kinematics of Coronal Mass Ejection & Earth.	Anirban Chattopadhyay	A. K. Bhattacharjee, Arindam Biswas	Degree Awarded	2022-11- 14
Design and development of Spectrum Sharing in an overlay Cognitive Radio Network	Sukanta Mondal	A.K Bhattacharjee , Arindam Biswas	Ongoing	-
Estimation of Different Parameters for an ARQ Protocol in a Fading Network through Various Codes	PRAJIT PAUL	A. K. Bhattacharjee	Ongoing	-
High Performance CMOS VLSI Circuit Design using Evolutionary Optimization Techniques	Kanchan Baran Maji	R. Kar, D. Mandal, S.P. Ghoshal	Submitted	2022-08- 26
Analysis and Performance Optimization of Innovative Nanowire Tunnel FET for Low Power Sensors Design	Navaneet Kumar Singh	R. Kar, D. Mandal	Submitted	2022-12- 21
Deep Learning based Speech Signal Processing	Soumen Garai	Dr. Suman Samui	Ongoing	-
Machine Learning based Audio Signal Processing	Almamun Sheikh	Dr. Suman Samui and Dr. Nilanjan Chattaraj	Ongoing	-
Studies on 2-D Transition Metal Dichalcogenides Nanostructures Synthesized Using Chemical Vapour Deposition with Controlled Morphology for Sensing Applications	Shreerupa Biswas, Reg. No- 21REC084	Dr. Sapana Ranwa	Ongoing	-
Implementation of some Quantum Optical Logic systems using the switches made of Photonic Band- gap crystal	Paromita De, Reg. No21REC042	Dr. Sapana Ranwa (main supervisor), Prof. Sourangshu Mukhopadhyay (University of Burdwan, Cosupervisior)	Ongoing	-
mm Wave Devices and Circuits	Sayani Bindai (21EC1104)	Prof. Rowdra Ghatak and Dr. Sapana Ranwa	Ongoing	-



Topic Name	Scholar	Supervisor	Status	Status Date
Synthesis of Different Antenna Array Geometries Using Evolutionary Algorithms and Time Modulation Strategies	Ananya Mukherjee	Dr. Sujit Kumar Mandal and Prof. Rowdra Ghatak	Degree Awarded	2022-09- 20
Studies on Designing On-chip Antennas in Silicon IC for Short Range Communication	Sanjukta Mandal	Dr. Sujit Kumar Mandal. Dr. Rajat Mahapatra. and Dr. Ashis Kumar Mal	Submitted	2022-11- 28
Studies on Sideband Radiation Characteristics towards Improving Time-Modulated Antenna Array Performances	Sujoy Mandal	Dr. Sujit Kumar Mandal	Submitted	2023-02- 14
Study on Design of Multiband MicrostripPatch Antennas for Wireless Devices	Sujit Goswami	Dr. Sujit Kumar Mandal and Dr. Soumen Banerjee (Budge Budge Institute of Technology)	Ongoing	-
Antenna Array Synthesis for 5G Communication	Shrabani Sarkar	Dr. Sujit Kumar Mandal	Ongoing	-
Studies on Broadband and Multiband Planar Antennas Based on Reactive Impedance Surface and Composite Right/Left- Handed Transmission Line	Shyam sundar Jash	Rowdra Ghatak	Ongoing	-
Some Studies on Compact UWB MIMO Antenna Systems for Wireless Devices	Jeet Banerjee	Rowdra Ghatak	Ongoing	-
Studies on Multi-GNSS Signal Environment from India Towards Test Range Applications	Mrinal Goswami	Rowdra ghatak and Anindya Bose (Univ of Burdwan)	Ongoing	-
Studies on Multi Mode Filters and Filter Integrated Antennas for Wireless Transceivers	Riya Chakraborty	Rowdra Ghatak	Ongoing	-
THz devices	Sayani Bindai	Rowdra Ghatak and Sapana Ranwa	Ongoing	-
Synthesis of Different Antenna Array Geometries using Evolutionary Algorithms and Time Modulation	Ananya Mukherjee	Sujit Kumar Mandal and Rowdra Ghatak	Degree Awarded	2022-09- 22
Studies on Reconfigurable Multiband and Wideband Microwave Bandpass Filters	Anjan Bandopadhyay	Rowdra Ghatak and Tapas Mondal (Dr. B C Roy College of Engg)	Degree Awarded	2023-02- 20
VLSI Circuit Design optimization using evolutionary optimization techniques	Kanchan Baran Maji	R. Kar, D. Mandal, S P Ghoshal	Submitted	2022-09- 30
Simulation Study of Novel Charge-Plasma Based ArcTFET for Sensing the Breast Cancer Biomarker	Navaneet Kumar Singh	R. Kar, D. Mandal	Submitted	2022-12- 19
Development of Chemiresistive Ethanol Sensors Using	Punam Tiwary	Rajat Mahapatra & Amit K Chakraborty	Degree Awarded	2022-09- 29



Topic Name	Scholar	Supervisor	Status	Status Date
Nanostructured Metal Oxide/Hydroxide Films				
On Use of Signal Processing in Problems of Bioinformatics.	Jayanta Pal	Dr. Bansibadan Maji , Dr. Dilip Kumar Bhattacharya.	Submitted	2023-05- 16
Beamforming for Sensing and Communication towards Intelligent Transportation System	Arun Kumar Singh	Dr. Bansibadan Maji , Dr. R.N. Bera	Submitted	2023-06- 06
Dielectric Engineering on GaN for High Electron Mobility Transistors	Partha Das	Rajat Mahapatra & Amit K Chakraborty	Degree Awarded	2023-02- 15
Resistive Memory Devices based on Al doped HfOx for Flexible Electronics Applications	Argha Deep Paul	Rajat Mahapatra & Amit K Chakraborty	Degree Awarded	2023-02- 21
Natural Cellulosic Graphene: Synthesis, Characterization and Electro Chemistry Application	Himangshu Pal	Rajat Mahapatra and Somenath Chatterjee	Degree Awarded	2023-03- 01
Switching Characteristics of Transitional Metal Oxide based Multilayer Flexible ReRAM devices	Saikat Biswas	Rajat Mahapatra	Ongoing	-
Flexible Resistive Memory Devices	Sameen Azhar	Rajat Mahapatra	Ongoing	-
Optimization of VLSI Circuits.	Dwip Narayan Mukherjee	Dr. Bansibadan Maji , Dr. S. Panda	Submitted	2023-08- 04
Fault detection in circuits using machine learning	Suman Biswas	Gautam Kumar Mahanti and Nilanjan Chattaraj	Ongoing	-
Optimal Synthesis of Elliptical and Hexagonal Antenna Arrays using Metaheuristic Optimization Algorithms	Bitan Misra	Gautam Kumar Mahanti	Degree Awarded	2022-04- 08
Thyroid cancer detection using machine learning	Rohit Sharma	Gautam Kumar Mahanti and Ganapati Panda	Ongoing	-
Some Studies on the Design Issues to Improve Efficiency in Plasmonic Based Solar Cells.	Partha Sarkar	Dr. Bansibadan Maji , Dr. S. Panda	Submitted	2023-08- 31
Genome and Protein Sequence Comparison Based on Representation on a Finite Dimensional Unit Hypercube.	Soumen Ghosh	Dr. Bansibadan Maji , Dr. Dilip Kumar Bhattacharya.	Ongoing	-
Phased MIMO Radar in Hostile Environment	Subhankar Shome	Dr. Bansibadan Maji , Dr. R.N. Bera	Degree Awarded	2022-04- 06
Implementation of Irreversible and Reversible Circuits using Layered Methodology to Design High Performance Digital Logic Circuits based on Quantum Cellular Automata (QCA).	Chiradeep Mukherjee	Dr. Bansibadan Maji , Dr. S. Panda	Degree Awarded	2022-05- 30



Topic Name	Scholar	Supervisor	Status	Status Date
To Design Energy aware and fast	Ashok Babu Chatla	Dr. Bansibadan Maji ,	Submitted	2023-04-
Authentication scheme using		Dr.		03
Identity based Encryption In		Habibulla Khan & Dr.		
Wireless Ad hoc Network For		B.T. P. Madhav.		
NGNs.				

## 4.6.24 Ongoing Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Amount (in Rs.)	Starting Year
Multi-band prediction of millimeter-wave propagation effects for dynamic and fixed scenarios in rugged time-varying environments	J. M. Kelner, A. Prokes, A. Chandra	NCN Poland	49481850	2023
Assistive Technology on multimodal disabilities	Nilanjan Chattaraj, Sujoy Kumar Saha, Moushumi Saha	TCS	2986500.0	2022
Performance evaluation of open source LID, speaker diarization and speech enhancement algorithms	Nilanjan Chattaraj, Sujoy Dey, Suman Samui	DRDO	2998380.0	2022
Performance evaluation of open- source LID, speaker diarization and speech enhancement algorithms	Dr. Suman Samui, Dr. Nilanjan Chattaraj, Dr. Sujoy Saha	DRDO	3000000.0	2023
Design and Implementation of Advanced Antenna Arrays for 5G and Future Generation Wireless Communication Systems	Durbadal Mandal	SERB-DST	34.63417	2022

## 4.6.25 Completed Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Complete Year
Development of UV activated ZnO nanostructures based hydrogen sensor "	Dr. Sapana Ranwa	SERB-DST (NPDF)	2018
Development of Flexible Environmental Gas Sensor based on 2D MoS <sub>2</sub> Nanosheets	Dr. Sapana Ranwa	SERB-DST (SRG)	2021

## 4.6.26 Testing & Consultancy Services Rendered

Sponsoring Industry / Institute Name	Title of the Project	Total Amount (in Rs.)	Remarks
TCS Research	Development of radiating systems for mm Wave wireless communication	93875.0	Consultancy fees per month basis (incl of GST)



## 4.6.27 Reviews of Manuscripts for Publication in Journal

Reviewer Name of the Journal		Publisher	Date of Final Review
Hemanta Kumar Mondal	Sustainable Computing: Informatics and Systems	Elsevier	2022-04-04
Hemanta Kumar Mondal	IEEE Wireless Communications Magazine	IEEE	2022-06-17
Hemanta Kumar Mondal	IET Computers and Digital Techniques	IET	2022-09-29
Hemanta Kumar Mondal	Computer Networks	Elsevier	2022-10-12
Sanjay Dhar Roy	IETE Journal of Research	Wiley	2022-04-04
Sanjay Dhar Roy	IEEE Access	IEEE	2022-04-08
Sanjay Dhar Roy	IEEE Access	IEEE	2022-04-13
Sanjay Dhar Roy	Internet of Things	Elsevier	2022-04-22
Sanjay Dhar Roy	Sustainable Computing: Informatics and Systems	Elsevier	2022-05-02
Sanjay Dhar Roy	Simulation Modelling Practice and Theory	Elsevier	2022-05-06
Sanjay Dhar Roy	IEEE Transactions on Aerospace and Electronic Systems	IEEE	2022-06-0
Sanjay Dhar Roy	IEEE Access	IEEE	2022-06-08
Sanjay Dhar Roy	Ad Hoc Networks	Elsevier	2022-06-13
Sanjay Dhar Roy	IEEE Transactions on Aerospace and Electronic Systems	IEEE	2022-07-1
Sanjay Dhar Roy	IEEE Internet of Things Journal.	IEEE	2022-07-20
Sanjay Dhar Roy	IEEE Transactions on Green Communications and Networking	IEEE	2022-08-10
Sanjay Dhar Roy	IEEE Sensors Journal	IEEE	2022-08-24
Sanjay Dhar Roy	Physical Communication	Elsevier	2022-09-13
Sanjay Dhar Roy	PLOS ONE	the Public Library of Science (PLOS)	2022-10-18
Sanjay Dhar Roy	Digital Communications and Networks	Elsevier	2022-11-25
Sanjay Dhar Roy	Ad Hoc Networks	Elsevier	2022-12-19
Sanjay Dhar Roy	IEEE Transactions on Industrial Informatics	IEEE	2022-12-20
Sanjay Dhar Roy	China Communications	Elsevier	2023-01-23
Sanjay Dhar Roy	AEUE - International Journal of Electronics and	Elsevier	2023-01-3
	Communications		
Sanjay Dhar Roy	Internet of Things	Elsevier	2023-02-13
Sanjay Dhar Roy	Microwave and Optical Technology Letters	Wiley	2023-02-0
Sanjay Dhar Roy	IET Wireless Sensor Systems	Wiley	2023-02-2
Sanjay Dhar Roy	IEEE Transactions on Green  Communications and  Networking	IEEE	2023-03-1
Sanjay Dhar Roy	Internet of Things	Elsevier	2023-03-22
Sanjay Dhar Roy	IEEE Transactions on Green Communications and	IEEE	2023-03-29
	Networking		
Sanjay Dhar Roy	IEEE Access	IEEE	2022-11-10
Sumit Kundu	Computer Networks	Elsevier	2023-06-16
Sumit Kundu	Computer Networks	Elsevier	2023-07-3
Sumit Kundu	Computer Networks	Elsevier	2022-12-17
Sumit Kundu	AEUE - International Journal of Electronics and Communications	Elsevier	2023-07-0
Nilanjan Biswas	IEEE Transactions On Communications	IEEE	2023-03-24
Nilanjan Biswas	IEEE transactions on wireless communications	IEEE	2023-01-23
Nilanjan Biswas	IEEE sensors journal	IEEE	2023-01-04



Reviewer	Reviewer Name of the Journal		Date of Final Review
Nilanjan Biswas	IEEE transactions on aerospace and	IEEE	2023-01-18
1 (11411 <b>)</b> 411 212 (141	electronic system	1222	2020 01 10
Sapana Ranwa	Flexible and Printed Electronics	IOP Sciences	2022-06-25
Sapana Ranwa	Flexible and Printed Electronics	IOP Sciences	2022-10-30
Sapana Ranwa	Materials Research Express	IOP Sciences	2022-05-08
Suman Samui	IEEE Transactions on Neural Networks and	IEEE	2022-10-31
	Learning		
	Systems		
Suman Samui	IEEE Transactions on Neural Networks and	IEEE	2022-12-29
	Learning Systems		
Suman Samui	Transactions on Audio, Speech and	IEEE/ACM	2023-03-22
	Language Processing		
Suman Samui	IEEE Transactions on Neural Networks and	IEEE	2023-07-10
	Learning Systems		
Sujit Kumar Mandal	Microwave and Optical Technology Letters	Wiley	2022-05-29
Sujit Kumar Mandal	Microwave and Optical Technology Letters	Wiley	2022-07-12
Sujit Kumar Mandal	Microwave and Optical Technology Letters	Wiley	2022-08-18
Sujit Kumar Mandal	Microwave and Optical Technology Letters	Wiley	2022-10-25
Sujit Kumar Mandal	Microwave and Optical Technology Letters	Wiley	2023-01-05
Sujit Kumar Mandal	Microwave and Optical Technology Letters	Wiley	2023-03-16
Sujit Kumar Mandal	Antennas and Wireless Propagation Letters	IEEE	2022-05-29
Sujit Kumar Mandal	Antennas and Wireless Propagation Letters	IEEE	2022-07-13
Sujit Kumar Mandal	Antennas and Wireless Propagation Letters	IEEE	2023-01-23
Sujit Kumar Mandal	IEEE Access	IEEE	2023-02-06
Sujit Kumar Mandal	Sensors	MDPI	2023-02-00
Sujit Kumar Mandal	Sensors	MDPI	2023-01-05
Sujit Kumar Mandal	Microwave and Optical Technology Letters	Wiley	2022-04-07
Rowdra Ghatak	Transactions on antennas & propagation	IEEE	2022-05-16
Rowdra Ghatak  Rowdra Ghatak	Transactions on antennas & propagation  Transactions on antennas & propagation	IEEE	2022-03-10
Rowdra Ghatak	Transactions on antennas & propagation  Transactions on antennas & propagation	IEEE	2022-09-09
Rowdra Ghatak  Rowdra Ghatak	Transactions on antennas & propagation  Transactions on antennas & propagation	IEEE	2022-09-30
Rowdra Ghatak	Transactions on antennas & propagation	IEEE	2022-09-30
Rowdra Ghatak	Transactions on antennas & propagation  Transactions on antennas & propagation	IEEE IEEE	2022-12-08
		IEEE IEEE	2023-03-20
Rowdra Ghatak	Microwave and Wireless Technology Letters		
Rowdra Ghatak	Microwave and Wireless Technology Letters	IEEE	2022-08-03
Rowdra Ghatak	Microwave and Wireless Technology Letters	IEEE	2022-08-31
Rowdra Ghatak	Microwave and Wireless Technology Letters	IEEE	2022-12-02
Rowdra Ghatak	Microwave and Wireless Technology Letters	IEEE	2022-12-11
Rowdra Ghatak	Microwave and Wireless Technology Letters	IEEE	2023-02-18
Rowdra Ghatak	Microwave and Wireless Technology Letters	IEEE	2023-03-14
Rowdra Ghatak	Microwave and Wireless Technology Letters	IEEE	2023-03-20
Rowdra Ghatak	Microwave and Wireless Technology Letters	IEEE	2023-03-21
Rowdra Ghatak	RF & microwave computer-aided	Wiley	2022-04-08
	Engineering		
Rowdra Ghatak	RF & microwave computer-aided	Wiley	2022-06-21
n 1 01 1	Engineering	TT 7'1	2022 62 15
Rowdra Ghatak	RF & microwave computer-aided	Wiley	2022-09-12
	Engineering		
Rowdra Ghatak	RF & microwave computer-aided	Wiley	2022-10-23
	Engineering		
Rowdra Ghatak	IEEE transactions on circuits and systems II:	IEEE	2022-05-23
	express briefs		
Rowdra Ghatak	Microwave and optical technology Letters	Wiley-Blackwell	2022-04-11
Rowdra Ghatak	Microwave and optical technology Letters	Wiley-Blackwell	2022-05-16

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Reviewer	Name of the Journal	Publisher	Date of Final
			Review
Rowdra Ghatak	Microwave and optical technology Letters	Wiley-Blackwell	2022-10-06
Rowdra Ghatak	Microwave and optical technology Letters	Wiley-Blackwell	2022-11-16
Rowdra Ghatak	IEEE transactions on vehicular technology	IEEE	2022-04-12
Rowdra Ghatak	IEEE transactions on vehicular technology	IEEE	2022-07-11
Rowdra Ghatak	IEEE transactions on vehicular technology	IEEE	2022-10-24
Rowdra Ghatak	IEEE transactions on vehicular technology	IEEE	2022-12-16
Rowdra Ghatak	IEEE transactions on vehicular technology	IEEE	2023-01-02
Rowdra Ghatak	IEEE transactions on vehicular technology	IEEE	2023-02-08
Rowdra Ghatak	IEEE transactions on vehicular technology	IEEE	2023-03-20
Rowdra Ghatak	IEEE transactions on vehicular technology	IEEE	2023-03-25
Rowdra Ghatak	Transactions on microwave Theory &	IEEE	2022-04-30
	Techniques		
Rowdra Ghatak	Transactions on microwave Theory &	IEEE	2022-08-15
	Techniques		
Rowdra Ghatak	Transactions on microwave Theory &	IEEE	2022-11-10
	Techniques		
Rowdra Ghatak	Transactions on microwave Theory &	IEEE	2022-11-28
	Techniques		
Rowdra Ghatak	Transactions on microwave Theory &	IEEE	2023-01-19
	Techniques		
Rajat Mahapatra	Micromachine	MDPI	2022-05-10
Rajat Mahapatra	Sensors and Actuators A	Sciencedirect	2022-07-19
Rajat Mahapatra	Journal of Alloys and Compounds	Sciencedirect	2023-02-21
Rajat Mahapatra	Micromachine	MDPI	2023-03-13

## 4.6.28 Invited Examiners/Paper-Setters/Board of Studies

Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Aniruddha Chandra	PhD Thesis Viva Voce	SRM University	2023-04-03	2023-04-04
Sumit Kundu	M.Tech Thesis	IIT Kharagpur	2023-05-03	2023-05-03
Sumit Kundu	PhD Thesis	IIT Kharagpur	2022-12-20	2022-12-20
Sanjay Dhar Roy	PhD thesis viva of a student of KLE, Belgaum, Karnataka	KLE, Belgaum, Karnataka	2022-11-18	2022-11-18
Sanjay Dhar Roy	PhD thesis viva of a student	Anna University	2022-11-15	2022-11-15
Sanjay Dhar Roy	PhD thesis examination of a student	CHARUSAT University, Gujrat.	2022-09-26	2022-09-26
Sanjay Dhar Roy	PhD thesis examination	Anna University	2022-04-09	2022-08-23
Sanjay Dhar Roy	PhD thesis examination	KLE, Belgaum, Karnataka	2022-06-02	2022-07-15
Sanjay Dhar Roy	Paper Setter for the Semester End (Odd) B. Tech. Examination 2022-23	Integral University	2022-10-18	2022-10-29
Sanjay Dhar Roy	Paper Setter for the Semester End (Odd) B. Tech. Examination 2022-23	Integral University, Lucknow	2022-10-18	2022-10-31
Nilanjan Biswas	Viva-voce for final year M.Tech. Projects	IIEST Shibpur	2022-07-02	2022-07-02
Anup Kumar Bhattacharjee	Examiner for PhD Selection	Kazi Nazrul University	2022-04-01	2023-03-31



Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Anup Kumar Bhattacharjee	UG Electronics	Kazi Nazrul University	2022-04-01	2023-03-31
Anup Kumar Bhattacharjee	Paper Setter	Kazi Nazrul University	2022-04-01	2023-03-31
Rowdra Ghatak	Member of board of Studies at Electronics and Communication	University of Burdwan	2021-01-29	2023-08-15
Rajib Kar	M.E question paper setter	Vivekanandha College of Engineering for Women (Autonomous Institution, Affiliated to Anna University ,Chennai) Elayampalayam, Tiruchengode – 637 205	2022-05-19	2022-05-30
Rowdra Ghatak	Board of Studies in Electronics and Communication Engineering	North Easter Hill University	2019-07-30	2023-08-15
Rajat Mahapatra	Ph D thesis evaluation and viva- voce	Jadavpur University	2022-06-30	2022-06-30
Rajat Mahapatra	Ph D thesis evaluation and viva- voce	Homi Bhabha National Institute	2023-03-23	2023-03-23

## 4.6.29 Invited Expert in Selection Committees

Name of the Faculty	Discipline	University/Institute	From Date	To Date
Ashish Kumar Mal	ECE	MIET Bandel	2023-06-02	2023-06-02

### 4.6.30 Invited Lectures

Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Aniruddha Chandra	Millimeter wave vehicular communication: From channel sounding to standardization	IEEE Smart Cities	Online Webinar	2022-09- 06	2022-09- 06
Nilanjan Chattaraj	The assistive Robosapiens with human-like emotions: its fundamental and technological challenges	International Symposium on Robotics in Industry, Agriculture, and Healthcare	IIT Kanpur	2022-04- 09	2022-04- 10
Rajashree Das	Emergence of FinFET	IEI Technical Webinar on the theme VLSI	Kolkata	2023-05- 20	2023-05- 20
Hemanta Kumar Mondal	VLSI Chip Design: RTL- toGDSII	One month Short Term Training & Internship Program on "VLSI Embedded Systems and IOT (VLeSi 2022)" Organised by Department of Electronics and Communication, NIT Durgapur	NIT Durgapur	2022-07- 15	2022-08- 14



Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Hemanta Kumar Mondal	VLSI Chip Design: RTL- toGDSII Flow	One-week Hands-on Training on "Design and Characterization of Devices and Circuits for Electronic Systems (DC2ES)" My Topic: VLSI Chip Design: RTL-to-GDSII Flow on 20/09/2022	NIT Durgapur	2022-09- 19	2022-09- 25
Sanjay Dhar Roy	IoT Enabled Wireless Communication Systems	FDP on "IoT Enabled Wireless Communication" organized by Haldia Institute of Technology, W.B., India.	HIT, Haldia, West Bengal	2022-08- 09	2022-08- 09
Sapana Ranwa	Lecture on Advancement of 2-D materials Based Devices for IoT	One week Hands on training workshop on "Design and Characterization of Devices and Circuit for Electronic System (DC2ES)"  DSTSTUTI program of Indian  Institute of Technology  (ISM)	NIT Durgapur	2022-09-	2022-09- 25
Suman Samui	Conducted a session on "Speech Signal Processing" at K.G. Engineering Institute (a Govt. of West Bengal, Polytechnic), Bishnuspur, bankura, West Bengal	B.Tech and Diploma Course	Bankura, West Bengal	2023-03- 11	2023-03- 11
Rowdra Ghatak	Manipulative Electromagnetic Surfaces	Webinar at TCS Research	Online	2022-04- 21	2022-04- 21
Rowdra Ghatak	Circuit Design Challenges in 5G Advanced Systems	e-STC on Recent Innovation and Development in RF and Microwave Engineering for Wireless Communication	Department of electronics and communication engineering, National Institute of Technology, Hamirpur, India	2022-05- 12	2022-05- 16
Rowdra Ghatak	Circuit Design Challenges in Next Gen Communication Systems	Faculty Development Programme held at Dr. B C Roy College of Engineering on "Recent Trends and Advances in Electronics"	Durgapur	2022-09- 19	2022-05- 23

## 4.6.31 Session Chair/Convenor

Name of the Faculty	Programme	Place	Session	From Date	To Date
Aniruddha	IEEE AP-S/USNC-	Denver, CO,	Machine Learning & Advanced Statistical Methods for mm-Wave Measurements and Modeling	2022-07-	2022-07-
Chandra	URSI	USA		11	11
Sumit Kundu	IEEE Indicon	Kochin	Electronic Systems and Smart Technologies	2022-11- 27	2022-11- 27
Sanjay Dhar	Session Chair, IEEE	online	Track E, IEEE CONECCT 2022	2022-07-	2022-07-
Roy	CONECCT 2022	(Bangalore)		08	10



Name of the Faculty	Programme	Place	Session	From Date	To Date
Sujit Kumar Mandal	IEEE International Conference on Range Technology (ICORT 2023)	Integrated Test Range, Chandipur, Odisha	Antenna Design II	2023-02- 23	2023-02- 25

#### 4.6.32 Patents

NIL

#### 4.6.33 Workshops/Seminars Organized

NIL

### 4.7 Department Of Electrical Engineering

#### 4.7.1 Department at a Glance

The Electrical Engineering department was established in the year 1960. Presently the department offers B. Tech in Electrical Engineering, with intake capacity of 100 students, M. Tech in Power Systems, Power Electronics & Machine Drives and Instrumentation & Control having intake of 20, 20 and 15 students respectively. The Department also has a PhD program. The students from different states of India and also from different countries are presently studying in the department. The department has 25 Nos. of qualified and highly motivated faculty members with various specializations; is equipped with 19 different laboratories, and among these, 8 laboratories have modern state of the art facilities for research and consultancy work. The department also has strong regional and foreign collaboration.

#### 4.7.2 Mission & Vision

#### Mission:

- To impart quality education for producing qualified and motivated Engineers and Researchers who will contribute meaningfully to the growth and development of the country.
- To encourage the faculties and the students for research-oriented teaching-learning environment in the department with a focus on excellence and innovation.
- To pursue creative research and consultancy developing new technologies in Electrical Engineering in order to serve the needs of industry and country as a whole.
- To create congenial atmosphere for collaborative research, consultancy and other technical activities

#### Vision

To impart quality education and focus on research and innovation in Electrical Sciences to cater to the need of the country.

#### 4.7.3 Faculty

Name	Designation	Email-id
Dr. N. K. Roy	Professor-HAG	nroy.ee@nitdgp.ac.in
Dr. S. S. Thakur	Professor	ssthakur.ee@nitdgp.ac.in
Dr. S. Banerjee	Professor	sbanerjee.ee@nitdgp.ac.in
Dr. P. Acharjee	Professor	pacharjee.ee@nitdgp.ac.in
Dr. Chiranjib Koley	Professor	ckoley.ee@nitdgp.ac.in
Dr. S. N. Mahato	Professor	snmahato.ee@nitdgp.ac.in
Dr. T. K. Saha	Professor	tsaha.ee@nitdgp.ac.in
Dr. P. S. Bhowmik	Associate Professor	psbhowmik@ee.nitdgp.ac.in
Dr. (Smt.) Jayati Dey	Associate Professor	jdey.ee@nitdgp.ac.in
Sri Avinandan Das	Assistant Professor	adas.ee@nitdgp.ac.in
Dr. Supriya Sarkar	Assistant Professor	ssarkar.ee@nitdgp.ac.in
Sri J. C. Barman	Assistant Professor	jcbarman.ee@nitdgp.ac.in
Dr. Suman Halder	Assistant Professor	shalder.ee@nitdgp.ac.in
Dr. Tushar Kanti Bera	Assistant Professor	tkbera.ee@nitdgp.ac.in
Dr. Biman Kumar Saha Roy	Assistant Professor	bksroy.ee@nitdgp.ac.in

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Name	Designation	<b>Email-id</b>
Dr. A. Bhattacharya	Assistant Professor	abhattacharya.ee@nitdgp.ac.in
Dr. Aritro Dey	Assistant Professor	adey.ee@nitdgp.ac.in
Dr. Ashis Kumar Dhara	Assistant Professor	akdhara.ee@nitdgp.ac.in
Dr. Irfan Ahmed	Assistant Professor	airfan.ee@nitdgp.ac.in
Dr. Aashish Kumar Bohre	Assistant Professor	akbohre.ee@nitdgp.ac.in
Dr. Manika Saha	Assistant Professor	msaha.ee@nitdgp.ac.in
Dr. Soumya Chatterjee	Assistant Professor	schatterjee.ee@nitdgp.ac.in
Dr. Santanu Paul	Assistant Professor	spaul.ee@nitdgp.ac.in
Dr. Omkar Yadav	Assistant Professor	oyadav.ee@nitdgp.ac.in
Dr. Rajdip Dey	Assistant Professor	rdey.ee@nitdgp.ac.in

## 4.7.4 Equipments

Sl. No.	Name of the equipment	Date of Purchase	Amount
1	Single Phase Inductive load	13.04.22	23,925.00
2	Electrical Bridge Trainers	12.05.22	26,460.00
3	Sensor Trainer Kit	28.06.22	53,235.00
4	DSO	20.06.22, 07.03.23,	1,29,456.00
		15.03.23	
5	Motor Protection Relay	28.06.22	14,850.00
6	Frequency Drive	05.07.22	24,499.00
7	DC Position Control	28.07.22	62,475.00
8	Induction Motor	25.07.22	29,950.00
9	Partial Discharge Test Cell	21.07.22	7,493.00
10	Point Sphere Electrode	21.07.22	7,434.00
11	Voltmeter	11.08.22, 19.09.22, 21.09.22, 23.09.22,	70,673.00
		11.11.22, 23.11.22	
12	Watt hour Meter	26.08.22	2,199.00
13	Clamp Meter	26.08.22	2,300.00
14	Wattmeter	19.09.22, 21.09.22,	58,513.00
1.5	A 1 D 116	23.09.22	72 406 00
15	Analog Panel Meter	21.09.22, 23.09.22	72,496.00
16	Power Factor Meter	23.11.22	9,660.00
17	Variac	06.01.23	24,780.00
18	DC Power Supply	11.11.22, 09.03.23	83,970.00
19	Insulation Tester	21.02.23	21,000.00
20	Clamp Meter	29.11.22	7,770.00
21	LCR Meter	30.09.22, 25.01.23	35,876.95
22	PLC I/O Card	11.11.22	79,945.00
23	RLC Load	18.11.22	79,900.00
24	Relay & Contractor	10.01.23	58,175.00
25	Digital Panel wattmeter	23.11.22	3360.00
26	Optical Connectors	30.08.22	8968.00
27	MFD Printer	27.01.23	24113.00
28	DC Regulated Power Supply	07.02.23	42480.00
29	Measurement of Temp of RTD	15.03.2023	7800.00
30	LVDT Trainer Kit	15.03.2024	9200.00
31	Measurement of Temp by Thermocouple	15.03.2023	7800.00
32	Strain Gauge	15.03.2023	14500.00
33	Thermistor	15.03.2024	4800.00
34	LCD Monitor	07.02.23	35000.00
35	Laptop	13.02.23	79999.00
36	Desktop Computer	15.03.2023	264900.00
37	Desktop Computer	22.02.2023	971300.00
38	Angular displacement Trainer	15.03.2023	12500.00
39	UPS	27.03.2023	55869.41
40	Accessory 2 for single ph energy meter phantom	21.06.2023	24000.00
41	Accessory for single ph energy meter phantom	21.06.2023	24000.00
42	Measurement of speed by Magnetic Pickup	09.06.2023	21500.00
12	Measurement of speed by Magnette Flekup	07.00.2023	21300.00



Sl. No.	Name of the equipment	Date of Purchase	Amount
43	Measurement of speed by Photo Electric Pickup	09.06.2023	21500.00
44	Study of Pizeo Electric Transducer Trainer	09.06.2023	19500.00
45	Digital Storage Oscilloscope	9.032023	308200.00
46	Relay Control System	28.06.2023	23836.00
47	Compensating Network Setup	28.06.2023	24662.00
48	Magnetic Levitation System	28.06.2023	42598.00
49	Digital Control System	28.06.2023	42598.00
50	Graphics Card	31.03.2023	66,078.00
51	Measurement of Torque by Torque Transducer	15.03.2023	30,000.00
52	Function Generator	15.03.2023	32200.00
53	HIL Breakout Board with sensors	27.03.2023	249570.00

# 4.7.5 Labs

Sl.	No.	Name of Laboratory	Major equipment
	1	Electrical Technology Laboratory	Setup for Open Circuit and Short Circuit Test of Single Phase Transformer, Three Phase Wattmeter for power measurement in three phase circuit Setup, Test Energy Meter and Standard Energy Meter for Energy Meter Calibration Setup, Setup for RL, RC, RLC analysis, Set up for determining characteristics of Fluorescent Lamp, Set up for determining Characteristics of Incandescent Lamp, Setup ups for verification of Superposition Theorem, Thevenin's Theorem, Norton Theorem and Maximum Power Transfer Theorem
	2	Electrical Networks Laboratory	Setups of RL, RC and RLC transient set Low Pass, High Pass Filter, Frequency response each comprising of Function Generators and Digital Storage Oscilloscopes, Setup for understanding the basics of Magnetic Coupling, Set up for Two port Network
	3	Electrical Measurements Laboratory	Setup for Power measurement by three Voltmeter and three ammeter, Setup for DC Crompton Potentiometer, Setup for Power measurement by Instrument Transformer, Setup for Kelvin Double Bridge, Set up for Linear Variable Differential Transformer, Digital Earth Resistance Meter, Setups for Anderson Bridge, Schering Bridge and Wien Bridge, Set up for calibration of Digital Energy Meter
	4	Electrical Machines Laboratory	Single-phase transformer, Three-phase transformer, DC shunt machine, DC series machine, DC compound machine, Three-phase induction motor, Single-phase induction motor, Three-phase alternator, Three-phase synchronous motor, Single-phase variac, Three-phase auto-transformer, Resistive load box.
	5	Control Systems Laboratory	DC Servo Position Control System, DC Servo Speed Control System, AC Servomotor Speed Control System, Linear System Simulator, Temperature Control System, Lead-Lag Network, DC Machine Set-up for Identification of Transfer Function for DC Motor, Two Phase AC Servomotor Set-up for Determination of Transfer Function, P-I-D Controller Set-up for Control of LTI Systems
	6	Embedded System Laboratory	Microcontroller kit, Computer, Function Generator, Interfaces, PCB Prototyping Machine, Kieil C Compiler
	7	Power Electronics Laboratory	Single Phase Bridge Inverter (IGBT), Three Phase SCR module, 3-phase 5-level Cascaded H-bridge inverter power module, Speed Control of 3-phase induction motor with IPM and Micro-2407, Four-quadrant operation of DC-DC chopper with IGBT, Speed Control of DC motor with single phase triggering and device module, DC-DC SEPIC Converter, DC-DC FORWARD Converter, DC-DC Flyback Converter Trainer, Single phase step-down cycloconverter.
	8	Power Systems Laboratory	IDMT over-current relay experiment setup, Directional over-current relay (inverse) type CDD experiment setup, Numerical Distance Protection Relay MiCOM P442



Sl. No.	Name of Laboratory	Major equipment
		experiment setup, Parallel Feeder Protection experiment setup, Negative sequence protection of three-phase induction motor experiment setup, Study of over-voltage relay experiment setup, Biased Differential Relay experiment setup, Biased Differential Protection of a single phase Transformer experiment setup, Restricted E/F Protection of 3-phase Transformer experiment setup, Over-current and Earth fault protection scheme for three phase system experiment setup, Cable Fault Locator, Power Quality Analyzer
9	Power Systems Laboratory II	IDMT over-current relay experiment setup, Directional over-current relay (inverse) type CDD experiment setup, Numerical Distance Protection Relay MiCOM P442 experiment setup, Parallel Feeder Protection experiment setup, Negative sequence protection of three-phase induction motor experiment setup, Study of over-voltage relay experiment setup, Biased Differential Relay experiment setup, Biased Differential Protection of a single phase Transformer experiment setup, Restricted E/F Protection of 3-phase Transformer experiment setup, Over-current and Earth fault protection scheme for three phase system experiment setup, Cable Fault Locator, Power Quality Analyzer
10	Advanced Power System Laboratory	Relay Test Set, Directional Overcurrent relay, Cable fault locator, Oscilloscope, Function Generator, Power Quality Analyzer, Parallel Feeder Protection Test Kit, Directional overcurrent relay, Non-directional over current relay, Test Bench for ratio, polarity, magnetizing characteristic of CT and PT, Numerical Distance protection kit, Ferranti Effect and Parameter Measurement Kit, Transmission line simulation kit, Solar Photovoltaic Training and Research Kit
11	Power System Simulation Laboratory	Computers, MATLAB, MiPower software.
12	Computational Laboratory	Computers, MATLAB, MiPower software, PSIM software, OrCAD PSPICE software, PSCAD
13	High Voltage and Liquid Insulation Laboratory	AC High Voltage Test System, Impulse Voltage Test System, Partial Discharge Test System, 100 kV oil BDV Tester, C and Tan Delta test set up, 100 kV AC Test set up, Kinematic Viscometer bath, Digital C, tan Delta and resistivity test set, Pensky martens closed cup flash point tester
14	Machine Drives Laboratory	TMS 320F2812 DSP Processor, TMS 320F28335 DSP Processor, Multilevel Inverter, Intelligent Power Module, Three phase induction motor, Brushless DC Motor, Permanent Magnet Synchronous Machine with Spring Balance Loading Arrangement
15	Advanced Control System Laboratory	Digital Pendulum Control System with Personal Computer, Magnetic Levitation System with Personal Computer, Twin Rotor MIMO System with Personal Computer, Precision Modular Servo Workshop with Personal Computer
16	Advanced Power Electronics Laboratory	Single Phase Bridge Inverter (IGBT), Three Phase SCR module, 3-phase 5-level Cascaded H-bridge Inverter power module, Speed Control of 3-phase induction motor with IPM and Micro-2407, Four-quadrant operation of DC-DC chopper with IGBT, Speed Control of DC motor with single phase triggering and device module, DC-DC SEPIC Converter, DC-DC FORWARD Converter, DC-DC Flyback Converter Trainer, Single phase step-down cycloconverter
17	Instrumentation Laboratory	SOLAR PANEL SETUP comprising of crystalline solar cell; Liquid Level Measurement Setup comprising of Ultrasonic level sensor, Sump tank, Solenoid valve, Water pump, Overhead tank, DCS (HC900 hardware) DCS (SCADA Software); Flow Measurement Setup comprising of Electrical actuator, control valve, Differential pressure transmitter, Solenoid valve, DCS (HC900 hardware) DCS (SCADA Software); Temperature Measurement Setup comprising of RTD,



Sl. No.	Name of Laboratory	Major equipment
		Thermocouple & Thermistor; Speed Measurement Setup Comprising Of Tachometer & Stroboscope; 3 Phase Power Measurement Setup
18	Biomedical Instrumentation Laboratory	Two Channel MP45 BIOPAC Signal Acquisition System Comprising of ECG Electrodes, Respiration Sensor, GSR Sensor, SPO2 Sensor, Computers, MATLAB
19	Intelligent System Laboratory	Computers, MATLAB

#### 4.7.6 PhD degree awarded till 2022-23

41.

#### 4.7.7 Any other relevant information:

- IEEE 6th International Conference on Condition Assessment Techniques in Electrical Systems (IEEE CATCON 2022) was organized by the Department of Electrical Engg., NIT Durgapur and technically, co-sponsored by IEEE Dielectrics and the Electrical Insulation Society (DEIS), Kolkata Chapter during 17th -19th December, 2022 at National Institute of Technology Durgapur. Prof. Chiranjib Koley and Dr. Partha Sarathee Bhowmik of Department of Electrical Engg., NIT Durgapur, were the Conference Chair.
- Prof. Subrata Banerjee awarded prestigious IETE-BIMAL BOSE AWARD-2022 for some pioneer work in Power Electronics in 65th Annual IETE Convention on 26th September, 2022
- Prof. Subrata Banerjee, Prof. P. Acharjee and Dr. Aniruddha Bhattacharya have been placed within top 2% of scientists in the world by a survey conducted by a team of scientists at Stanford University in 2022.
- Prof. Subrata Banerjee organized a special session on 'Advancement in Power Electronics for E-mobility' in India Council International Conference 2022 (INDICON 2022) held at Cochin University of Science and Technology (CUSAT), Kochi, Kerala during 24 – 26 November 2022.
- Prof. Subrata Banerjee delivered lecture in NaMPET sponsored Online Short Term Course on "Applications of Power Electronics in Renewable Energy Systems (APERES-2022)", on 20.07.2022 at NIT Jamshedpur.
- Prof. S. N. Mahato delivered a talk on 15th July, 2022 in the one-week Virtual mode FDP on "Recent Advancement and Research Opportunities in Electrical Engineering" organized by Department of Electrical Engineering, Gargi Memorial Institute of Technology, Kolkata during July 11-15, 2022.
- Dr. Tushar Kanti Bera delivered an invited talk on "Recent Trends in The Battery Charging Technology for Electric Vehicles (EVs) and Plugged-In-Hybrid Electric" in the DST-SERB Sponsored High End Workshop "KARYASHALA" on "Present and Future Trends of Electric Vehicle Technologies" organized by the CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI), Durgapur, During September 07-13, 2022.
- Dr. Irfan Ahmed delivered an expert lecture on "Power Electronic Converters in AC and DC Microgrids" at DST-SERB sponsored two-days National Seminar on "AC-DC Microgrid: Configuration, Controls and Applications" organized by the Department of Electrical Engineering, Yeshwantrao Chavan College of Engineering, Nagpur, on November 11, 2022.
- The paper entitled "Static and Dynamic Analysis of IGBT Power Modules for Low and High-Power Range Electric Drives" by Ananthammagari Bharathsimha Reddy, Sankar Narayan Mahato and Nilanjan Tewari has been awarded as a Best Paper in session "PE-3" in 3-rd Electric Power and Renewable Energy Conference (EPREC 2022), May 27-29, 2022 organized by Department of Electrical Engineering, NIT Jamshedpur.
- Prof. Subrata Banerjee chaired a technical session in international conference IEEE-iSSSC 2022 in GIET University(online) Odisha on 16th Dec, 2022.

#### 4.7.8 Specialization

- · Power Electronics
- Electrical Engineering (Power System)
- Power System
- Power Systems
- · Control Systems
- · Electrical Engineering
- Power & Energy Systems (Renewable Energy)
- Electrical Engineering
- Image Processing and Machine Learning
- Electrical Engineering (Power System Operation and Control)



- Electrical Engineering / Power System
- · Contro
- High Voltage Engineering, Power System, ICT and IoT enabled High Voltage Laboratory test facilities, Conditioned and Health monitoring of High Voltage power apparatus, e Governance, rural e Governance
- · Power Systems
- · Electrical Machines and Drives
- · Control System
- · High voltage engineering
- · Power System
- · Electrical Engineering
- · Electrical Engineering
- · Power electronics application in power system
- · Machines Drives
- · Power Electronics, Machines, Drives
- · Power Systems
- Electrical Measurement & Instrumentation

#### 4.7.9 Proposed Plan for Research

- Space vector modulation techniques for cascaded H-bridge multilevel inverters
- Pulse-width modulation techniques for modular multilevel converters
- · Circulating current suppression in modular multilevel converters with embedded energy sources
- Supervision of Research Scholars, B.Tech and M.Tech students, Learning new research area on Renewable Energy, Electric Vehicle, Sponsored Project Works, Paper Publications, Review of papers,
- PMU placement considering communication and uncertainty issues in Distribution network
- · To carry out research in the Area of Power System Planning, stability using Machine Learning Algorithm
- To develop necessary hardware set up to detect Electrical Corona in Insulators
- · Bayesian Filtering, Nonlinear Control for Aerospace Applications
- Development of a non-contact method for condition assessment of high voltage assets.
- Offshore Wind Plant Design, Operation & Control
- Multi-carrier Energy Storage Application to Power System
- Modern Power System Operation & Control with Very High Share of Renewable Energy
- Instrumentation and Measurement
- · Affordable AI for Computer-aided Diagnosis of Retinopathy of Prematurity (ROP) using Retinal Fundus Images
- The proposed plan for research includes the analysis of the dynamic interactions of offshore wind farms with on-shore AC grids connected via MTDC grid, which would be further equipped with adaptive droop control. The impact of different control modes (e.g. droop control mode, constant power control mode) within the MTDC grid towards power sharing will be analysed. The performance of control modes at VSC terminal against set of low voltage ride through (LVRT) mode in some of the DFIGs in the entire windfarm will be investigated.
- Apply for sponsored project in my research area in SERB, DST CSIR etc. Try to get patent in my area. Also submit the
  paper for publication in journals and conferences.
- More Collaboration with industries related to the innovation and creativity for development of new equipment and materials
- Signal Processing, Soft Computing, Power Systems stability, FACTS Devices, Smart Grid / Micro Grid, Renewable Energy, Measurement & Instrumentation
- (i) Energy managment and Control of Unmanned Ground Vehicle for Combat Use, (ii) Control of Converters, (iii)
   Control, Guidance, Navigation of Unmanned Aerial Vehicle, (iv) Periodic Control, (v) Fractional Order Control, (vi)
   Control of Multi Input Multi Output Systems
- development of Condition monitoring system for high voltage power apparatus
- Operation, Control and Protection of Distribution Systems
- Completing R&D Project and Guding PhD, M.Tech, B. Tech students
- Converter modeling and control, Multilevel Inverter
- Converter design of Multifrequency microgrid, hardware realization of multifrequency microgrid
- Application of Multi phase Machines
- Biomedical Instrumentation

#### 4.7.10 Area of Research Interest

- Pulse-width modulation techniques for multilevel converters
- Circulating current model and its suppression in modular multilevel converters
- Soft-Computing Techniques such as GA, PSO, DE, Fuzzy, ANN and its application in Power System Power system
  dynamics & stability. FACTS Devices Smart Grid and Micro Grid Economic Load Dispatch and Optimal Power
  Flow Renewable Energy Electric Vehicle
- Power system monitoring, PMU applications



- · Power System Planning
- · Power System Stability and Security
- State Estimation, Nonlinear Control
- Condition monitoring of high voltage equipment, Insulation diagnosis, Graph theory and complex networks, signal processing applications in condition monitoring.
- Offshore Wind Plants
- Collection System Design of Offshore Hybrid Power Plants
- · Multi-carrier Energy Storage
- Grid Level Battery Storage Application
- Distribution System Operation with high share of PHEV
- Instrumentation and Measurement
- Electrical Impedance Tomography (EIT)
- Electrical Impedance Spectroscopy (EIS)
- Structural Health Monitoring (SHM)
- · Medical Imaging
- Computed Tomography (CT)
- Image Reconstruction
- · Inverse Problems
- · Biomedical Imagae Analysis and Machine Learning
- Electric Vehicles (EVs)
- Sensor Development
- · Operation and Control of Multi-terminal HVDC System with Offshore Wind Farm
- Power System Stability, Renewable Energy, Power System Optimization, Distribution System Planning, Microgrid
  Planning, Electric Vehicle, Planning of FACTS Devices, Power System Deregulation & Restructuring, Distributed
  Generation, Optimization Techniques, Application of Soft Computing Techniques in power system dynamics and
  control.
- Target Tracking, Nonlinear Control & Estimation
- High Voltage Engineering, Power System, ICT and IoT enabled High Voltage Laboratory test facilities, Conditioned and Health monitoring of High Voltage power apparatus, e Governance, rural e Governance
- Signal Processing, Soft Computing, Power Systems stability, FACTS Devices, Smart Grid / Micro Grid, Renewable Energy, Measurement & Instrumentation
- Analysis and Control of Induction Generators
- Condition monitoring and high voltage engineering
- Distributed Generations, Microgrid
- Power Electronics and Machine Drives, Non Conventional Energy Resources
- Modeling & Control of Switch-mode converters and Inverters, Multilevel Inverters & Different Modulation techniques, Electromagnetic Levitation, Active Magnetic Bearing, controller design, Intelligent control, Power Electronics & Machine Drives.
- Power electronics applications in Microgrid system, Microgrid architecture and control, Power balancing techniques of microgrids, Multifrequency microgrid, DC and induction Machine Drives
- · Multi phase machines
- · Power Electronics, Machines, Drives
- Power systems estimations, line outage detection, load forecasting etc.
- Feature Extraction from Biopotential

#### 4.7.11 Institute Industry Collaboration

Collaborating Institute Organization	Areas of collaboration	Collaboration Activities
National Thermal Power	Training and consulation of engineers	Training and Consultation of engineers
Institute, DURGAPUR	from different utilities like State Electricity	from different utilities like State Electricity
	Board Engineers and professionals	Board Engineers and professionals
RED(E) Pune, DRDO	Energy Managment and Control of	Cntrol topolog Development, Prototype
	Unmanned Ground Vehicle for Combat	Development of Electric Vehicle with
	Use	Hybrid energy sources
National Hydroelectric Power	Condition Monitoring	Device development
Corporation		
National Hydro Power	Development of PD SENORS and its	Development of PD SENORS and its
Coorporation (NHPC), Haryana	analyser	analyser



## 4.7.12 Collaboration with Academic and Research Institutions

Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
KIIT Bhubaneswar	Electrical Engineering	Dr. Sriparna Roy Chowdhury	Joint PhD Supervision
School of Energy Studies, Jadavpur University	Power quality and monitoring in grid-connected renewable energy systems.	Prof. Ratan Mandal	Research and Ph.D. supervision
IIT Bombay	Renewable Energy	Prof. Zakir Hussain Rather	Research
CSIR - Institute of Minerals and Materials Technology (CSIRIMMT), Bhubaneswar, Odisha	Electrical Impedance Tomography (EIT)	Dr. Tushar Kanti Bera	Electrical Impedance Tomography (EIT) Based Slurry Pipe Line Monitoring
Uppsala University, Sweden	Diagnostic Neuroradiology	Dr. Robin Strand	Diagnostic neuroradiology screening tool
Sankara Nethralaya, Channai, India	Diabetic retinopathy	Dr. Rajiv Raman	Diabetic retinopathy screening tool
Madras Diabetic Research Foundation, Channai, India	Diabetic retinopathy	Dr. R. Rajalakshmi	Diabetic retinopathy screening tool
PGIMER Chandigarh, Chandigarh, India	Diagnostic Neuroradiology	Dr. Chirag K Ahuja	Diagnostic neuroradiology screening tool
Uppsala University Hospital, Sweden	Diagnostic Neuroradiology	Dr. Johan Wikstrom	Diagnostic neuroradiology screening tool
Calcutta National Medical College, Kolkata, India	Diabetic retinopathy	Dr. Sambudda Ghosh	Diabetic retinopathy screening tool
University of Iowa, USA	BMD estimation	Dr. Punam K Saha	BMD estimation from X- Ray
University Colege of London, London, UK	Micrroscopy image analysis	Dr. Hirak Patra	Microscopy image analysis
NIT Silchar	State and Health Estimation of Supercapacitor	Dr. Munmun Khanra	ph.D guidance
1. National Thermal Power Institute, DURGAPUR, 2. National Hydro Power Corporation, Faridabad, Haryana	Training and consulation of engineers from different utilities like State Electricity Board Engineers and professionals, Innovative Projejts like Development of a PD detection system for High Voltage Power Apparatus	Prof N K Roy, Prof C Koley, Dr A Bhattarchaya, Dr P S Bhowmik	Training and consulation of engineers from different utilities like State Electricity Board Engineers and professionals, Innovative Projejts like Development of a PD detection system for High Voltage Power Apparatus
IIT Kanpur, IIT Bombay, IIT Madras, IISc Bangalore, CDAC Patna, IIIT Kurnool	Human Resource Development for UAV and Related Technology	Dr. Jayati Dey, Dr. Nilanjan Chattaraj (EC), Dr. Aritro Dey (EE), Dr. Deepak Kumar (ME)	(i) Workshop organization, (ii) Training on UAV related technology, , (iii) Project Development and Execution, (iv) Laboratory Development, (v) IPR generation
Jadavpur University	High Voltage	Prof. Sivaji Chakravorti	Research
IIT Kharagpur	Authored book from IET as co author	Prof. D. Kastha	Published two books from IET
National Institute of Technology Silchar	Condition monitoring of High voltage Equipment	Dr. Asish Paramane	Joint research work



Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
National Institute of Technology Calicut	Condition monitoring of High voltage Equipment	Dr. Nasirul Haque	Joint research work
National Institute of Technology Warangal	Condition monitoring of high voltage equipment	Dr. Palash Mishra	Joint research work
Birla Institute of Technology Mesra	Power quality monitoring	Dr. Pankaj Mishra	Joint research work
Jadavpur University	Condition monitoring of High voltage equipment	Prof. Sivaji Chakravorti, Prof. Biswendu Chatterjee and Prof. Sovan Dalai	Joint research work
IIT Kharagpur	Power system monitoring and protection	Prof. A.K.Pradhan	Submitted joint project to DST, Govt. of India and WBDST
CSIR-CMERI	Power Electronics	Prof. Subrata Banerjee	Joint Research & Guidance
IIT Kharagpur	Power Electronics	Prof. Subrata Banerjee	Joint Research & Guidance
Ontario-Institute of Technology	Power Electronics	Prof. Subrata Banerjee	Joint Research
MNNIT Allahabad	Applications of Control Systems in Power Systems	Prof. Subrata Banerjee	Joint Research, Book writing
National Thermal Power Institute, DURGAPUR	Training and consulation of engineers from different utilities like State Electricity Board Engineers and professionals	Prof N K Roy, Prof C Koley	Training and Consultation of engineers from different utilities like State Electricity Board Engineers and professionals

# 4.7.13 Workshops/Seminars Organized

Name of Key Speaker(s)	Name of the Programme	Date of the Programme
Prof. N. Chakraborty	Gian Programme on Computational Modelling of Turbulent Flow and Scalar Transport	2023-03-31

## 4.7.14 Journal: Published in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal	Others Info
		Name	
Dibyendu Sen, Sunil Kumar, Tapas Kumar Saha,	Active Power Control of	Electric	Volume:https://doi.
Jayati Dey	DPC Based Operation of	Power	org/10.1080/153250
	Three Phase Inverter	Components	08.2022.2148776
	Under Stand-alone Mode	and	Issue No: Page No:
		Systems	Year:December
			Month:2022
S. Sonar, S. Mondal, J. Ghommam, & S. Banerjee	An Optimized Space	IEEE Access	Volume:10 Issue
	Vector Based Switching		No: Page No:28965-
	Algorithm With Reduced		28974 Year:2022
	Switching Transitions for		Month:
	Impedance Source Inverter		
S. Sonar, N. Rana, & S. Banerjee	Improved Space vector	IEEE Journal	Volume:4 Issue
	based	of Emerging	No:1 Page No:266-
	PWM technique for three	and	275 Year:2023
	Phase Z-Source Inverter	Selected	Month:
		Topics in	



Author(s) Name	Paper Name	Journal Name	Others Info
		Industrial Electronics	
D. Guha, P.K. Roy, and S. Banerjee	Improved Fractional-order Sliding Mode Controller for Frequency Regulation of a	IEEE Transactions on Industry Applications	Volume:59 Issue No:4 Page No: Year:2023 Month:
	Hybrid Power System with Nonlinear Disturbance Observer		
S. Kundu, S. Panda & S. Banerjee	Fulfillment of Some Important Voltage Harmonic Standards in a FPGA Controlled CHB Multilevel Inverter	IEEE Transactions on Industry Applications	Volume:Early Access Issue No: Page No: Year:2023 Month:
	Utilizing Improved SHM-PAM Technique		
. D. Guha, P.K. Roy, and S. Banerjee	Adaptive fractional-order slidingmode disturbance observer-based robust theoretical frequency controller applied to hybrid winddiesel power system	ISA Transactions	Volume: Issue No: Page No: Year:2023 Month:Jul
S. Dey, S. Banerjee, J. Dey	Design of an improved robust fractional order PID controller for magnetic levitation system based on atom search optimization	Sadhana	Volume: Issue No: Page No: Year:2022 Month:Sep
S. K. Pandey, J. Dey, S. Banerjee	Modified Kharitonov Theorem Based Optimal PID Controller Design for MIMO Systems	Journal of Electrical Engineering & Technology	Volume: Issue No: Page No: Year:2022 Month:Dec
D. Guha, P. K. Roy, S. Banerjee	Frequency Control of a Winddiesel-generator Hybrid System with Squirrel Search Algorithm Tuned Robust Cascade Fractional Order Controller Having Disturbance Observer	Electric Power Components and Systems	Volume: Issue No: Page No: Year:2022 Month:Dec
D. Sen, S. Kumar, T. K. Saha, and J. Dey	Integrated  Active Power Control of DPC  Based Operation of Three Phase Inverter Under Stand-Alone Mode	Electrical Power Components Syst.	Volume:51 Issue No:3 Page No:307– 318 Year:2022 Month:Dec
S. Mitra and C. Koley	Early and Intelligent Bearing Fault Detection using Adaptive Superlets	IEEE Sensor	Volume:23 Issue No:7 Page No:7992 - 8000 Year:2023 Month:Feb



Author(s) Name	Paper Name	Journal	Others Info
		Name	
S. Dhara, C. Koley and S. Chakravorti	UHF Sensors Based	IEEE	Volume:72 Issue
	Localization of Partial	Transactions	No: Page No:1-9
	Discharge Sources in Air-	on	Year:2023
	insulated Electrical	Instrumentati	Month:Mar
	Substation using TDOA	on and	
	and	Measurement	
4 DI 1 10 K 1	Relative RSS Information	IDDE	77.1 27.1
A. Bhukya and C. Koley	Bi-Long Short-Term	IEEE	Volume:37 Issue
	Memory	Transactions	No:3 Page No:2024-
	Networks for Radio	on Power	2031 Year:2022
	Frequency	Delivery	Month:Jun
	Based Arrival Time		
	Detection of Partial		
Dill D. of L. M.	Discharge Signals	TEEE A	T. 1 10 T
Rajdip Dey, Shabari Nath	Cooperative Active Power	IEEE Access	Volume:10 Issue
	Management in		No: Page
	Multifrequency		No:120398 -
	Microgrid With an Energy		120411
	Storage System Based on		Year:2022
	Distance of Source to Load		Month:May
Kumar P, Das A, Halder S	Statistical heart rate	Journal of	Volume:79 Issue
	variability analysis for	Electrocardio	No: Page No:81-88
	healthy person: Influence of	logy	Year:2023
	gender and body posture		Month:Jun
Karmakar, Subashis, Kamilya, Supreeti,	Real time detection of	Biomedical	Volume:80 Issue
Guhathakurta, Parag	cognitive load using	Signal	No: Page No:
K.,Bera, Tushar Kanti,Halder,	fNIRS: A deep learning	Processing	Year:2023
Suman, Koley, Chiranjib, Pal,	approach	and	Month:Feb
Tandra,Basu,Anupam		Control	
Sannistha Banerjee &	A machine learning	Journal of	Volume:105 Issue
Partha Sarathee	approach based on decision	Electrical	No:02 Page
Bhowmik	tree algorithm for	Engineering,	No:2083-2093
	classification of transient	Springer	Year:2023
	events in microgrid		Month:Mar
D. Sen, P. Acharjee	Optimal allocation of	Engineering	Volume:40 Issue
	UPFC based on healthy	Science and	No:1 Page No:1-8
	and stressed zones for	Technology,	Year:2023
	critical power systems	an	Month:Mar
		International	
		Journal	
Mukherjee, M., Roy, B.K.S.	Cost-Effective Operation	Arabian	Volume:48 Issue
	RiskDriven μPMU	Journal for	No: Page No:6541-
	Placement in Active	Science and	6575 Year:2022
	Distribution Network	Engineering	Month:Nov
	Considering	_	
	Channel Cost and Node		
	Reliability		
Shubhrajyoti Kundu,	Power Systems State	Arabian	Volume:48 Issue
Mehebub Alam,	Estimation Using Complex	Journal for	No: Page No:5935–
Biman Kumar Saha	Synchronized	Science and	5951 Year:2022
Roy, Siddhartha	PMU Measurements: Two	Engineering	Month:Aug
Sankar Thakur	Novel Non-Iterative		
	Approaches		



Author(s) Name	Paper Name	Journal Name	Others Info
Samima Akter, Sandeep Biswal, Ahmed R. Adly, Abanishwar Chakraborti, Biman K.S. Roy, Priyanath Das, A. Y. Abdelaziz	Impedance based directional relaying for smart power networks integrating with converter interfaced photovoltaic plants	Electric Power Systems Research	Volume:213 Issue No: Page No: Year:2022 Month:Dec
A. Pal, A. Bhattacharya and A. K. Chakraborty	Planning of EV Charging Station with Distribution Network Expansion Considering Traffic Congestion and Uncertainties	IEEE Transactions on Industry Applications	Volume:59 Issue No:3 Page No:3810 3825 Year:2023 Month:Jan
Poluri Sri Mannarayana, Aritro Dey	Adaptive Gaussian filters for nonlinear state estimation with one-step randomly delayed measurements	Asian Journal of Control	Volume:25 Issue No:2 Page No:867- 885 Year:2023 Month:
Bishwajit Dey, Fausto Pedro García Márquez and Aniruddha Bhattacharya	Demand side management as a mandatory inclusion for economic operation of rural and residential microgrid systems	Sustainable Energy Technologies and Assessments	Volume:54 Issue No:1 Page No:1-7 Year:2022 Month:Dec
Poluri Sri Mannarayana, Aritro Dey	Adaptive Kalman Filter based on Variational Bayesian Approach for One-step Randomly Delayed Measurements	Scientia Iranica	Volume: Issue No: Page No: Year:2022 Month:Aug
Kuntal Bhattacharjee, Aniruddha Bhattacharya, Kathan Shah and Nitish Patel	A Novel Oppositional Approach for Solving Different Economic Emission Dispatch Problems	Electric Power Components and Systems	Volume:50 Issue No:9-10 Page No:480-497 Year:2022 Month:Nov
S. S. Roy, A. Paramane, J. Singh, X. Chen, F. Meng, C. Dai, A. K. Das, S. Chatterjee and Y. Tanaka	Remote Condition  Monitoring of  HVDC Cable Insulation  Using  Deep Learning-Aided  Space Charge Classification	IEEE Transactions on Dielectrics and Electrical Insulation	Volume:30 Issue No:1 Page No:377- 384 Year:2023 Month:Feb
S. Das, A. Paramane, S. Chatterjee and U. M. Rao	Accurate Identification of Transformer Faults from Dissolved Gas Data Using Recursive Feature Elimination Method	IEEE Transactions on Dielectrics and Electrical Insulation	Volume:30 Issue No:1 Page No:466- 473 Year:2023 Month:Feb
S. S. Roy, A. Paramane, J, Singh, S. Chatterjee and A. K. Das	Accurate Sensing of Insulator Surface Contamination Using Customized Convolutional Neural Network	IEEE Sensors Letters	Volume:7 Issue No:1 Page No:1-4 Year:2023 Month:Jan
S. Das, A. Paramane, S. Chatterjee and U. M. Rao	Sensing Incipient Faults in Power Transformers Using Bidirectional Long Short- term Memory Network	IEEE Sensors Letters	Volume:7 Issue No:1 Page No:1-4 Year:2023 Month:Jan



Author(s) Name	Paper Name	Journal Name	Others Info
S. Paul & Z. H. Rather	A novel approach for optimal cabling and determination of suitable topology of MTDC connected offshore wind farm cluster	Electric Power Systems Research	Volume:208 Issue No: Page No:1- 12 Year:2022 Month:Jul
Subashis Karmakar, Supreeti Kamilya, Prasenjit Dey, Parag K Guhathakurta, Mamata Dalui, Tushar Kanti Bera, Suman Halder, Chiranjib Koley,	Real time detection of cognitive load using fNIRS: A deep learning approach	Biomedical Signal Processing and Control	Volume:80 Issue No:1 Page No:104227 Year:2023 Month:Feb
Tandra Pal, Anupam Basu Geyunjian H Zhu, Mohammad Azharuddin, Bapan Pramanik, Karin Roberg, Sujoy Kumar Biswas, Padraig D'arcy, Meng Lu, Apanpreet Kaur, Alexander Chen, Ashis Kumar Dhara, Alexandru Chivu, Yunhui Zhuang, Andrew Baker, Xiewen Liu, David Fairen-Jimenez, Bismoy Mazumder, Rongjun Chen, Clemens F Kaminski, Gabriele S Kaminski Schierle, Jorma Hinkula, Nigel KH Slater, Hirak K Patra	Feasibility of Coacervate- Like Nanostructure for Instant Drug Nanoformulation	ACS applied materials & interfaces	Volume:15 Issue No:14 Page No:17485–17494 Year:2023 Month:Mar
Swagata Kundu, Vikrant Karale, Goutam Ghorai, Gautam Sarkar, Sambuddha Ghosh, Ashis Kumar Dhara	Nested U-Net for segmentation of red lesions in retinal fundus images and sub-image classification for removal of false positives	Journal of Digital Imaging, Springer	Volume:35 Issue No:5 Page No:1111 1119 Year:2022 Month:Oct
Debasis Maji, Souvik Maiti, Ashis Kumar Dhara, Gautam Sarkar	Automatic grading of retinal blood vessel tortuosity using Modified CNN in deep retinal image diagnosis	Biomedical Signal Processing and Control, Elsevier	Volume:74 Issue No: Page No:103514 Year:2022 Month:Apr
Souvik Maiti, Debasis Maji, Ashis Kumar Dhara, Gautam Sarkar	Automatic detection and segmentation of optic disc using a modified convolution network	Biomedical Signal Processing and Control	Volume:76 Issue No: Page No:103633 Year:2022 Month:Jul
Prince Kumar, Kunal Kumar, Aashish Kumar Bohre & Nabanita Adhikary	Intelligent priority based generation control for multi area system	Springer Smart Science	Volume:2023 Issue No:2023 Page No:1 10 Year:2023 Month:Mar
Bikash Kumar Saw, Aashish Kumar Bohre, Jalpa H. Jobanputra, and Mohan Lal Kolhe	Solar-DG and DSTATCOM Concurrent Planning in Reconfigured Distribution System Using APSO and GWO- PSO Based on Novel Objective Function	Energies	Volume:16 Issue No:1 Page No:1-34 Year:2022 Month:Dec



Author(s) Name	Paper Name	Journal Name	Others Info
Sumit Kumar Pandey, Jayati Dey & Subrata Banerjee	Modified Kharitonov Theorem Based Optimal PID Controller Design for MIMO Systems	Journal of Electrical Engineering & Technology	Volume:https://doi. org/10.1007/s42835 -022-01329-3 Issue No: Page No: Year:2022 Month:December
Soham Dey, Subrata Banerjee & Jayati Dey	Design of an improved robust fractional order PID controller for magnetic levitation system based on atom search optimization	Sådhanå, Indian Academy of Sciences	Volume:https://doi. org/10.1007/s12046 -022-01962-8 Issue No:47:188 Page No: Year:2022 Month:September
Nayan Kumar, Tapas Kumar Saha, Jayati Dey	Multilevel hysteresis modulation (AMHM) for sliding mode controlled dual inverter PV systems	ISA TRANSACT IONS	Volume:https://doi. org/10.1016/j.isatra. 2022.07.001 Issue No:133 (2023) Page No:435–449 Year:2022 Month:July
Reetam Mondal, Jayati Dey	A novel design methodology on cascaded fractional order (FO) PI- PD control and its real time implementation to Cart- Inverted Pendulum System	ISA TRANSACT IONS	Volume:https://doi. org/10.1016/j.isatra. 2022.04.015. Issue No: Page No: Year:2022 Month:
N.Rana, S. Sonar & S.Banerjee	Performance Investigation of Closed-Loop Dual Phase Interleaved Buck-Boost Converter with Dragonfly Optimized Type-III Controller	IEEE Transactions on Circuits and Systems II: Express Briefs	Volume:69 Issue No:3 Page No:1472- 1476 Year:2022 Month:May
Reetam Mondal and Jayati Dey	An Extended Experimental Study on Control of Unstable and NonMinimum Phase Plants with the Cascaded Form of a Fractional Order Compensator	IEEE Transactions On Industrial Applications	Volume:DOI 10.1109/TIA.2023.3 250607 Issue No: Page No: Year:2023 Month:March
Sandeep Kumar Das, Supriya Sarkar, Debapriya Das	Performance Enhancement of Grid-Connected Distribution Networks with Maximum Penetration of Optimally Allocated Distributed Generation Under Annual Load Variation	Arabian Journal for Science and Engineering	Volume:47 Issue No:11 Page No:14809–14839 Year:2022 Month:Jul
K Majumdar, P.K. Roy, and S. Banerjee	Framework of Hybrid Renewable Energy with Conventional Power Generation Scheduling: using Novel Meta Heuristic Optimization Algorithm	The International Journal of Power and Energy Systems, ACTA Press	Volume:42 Issue No:10 Page No: Year:2022 Month:



Author(s) Name	Paper Name	Journal Name	Others Info
K Majumdar, P.K. Roy, and S. Banerjee	Multi-Objective Chaotic Mayfly Optimization for Solar- Wind- Hydro-Thermal Scheduling Based on ATC Problem	The International Journal of Power and Energy Systems, ACTA Press	Volume:42 Issue No:10 Page No: Year:2022 Month:
A. Ghosh, J. Meher, S. Sonar, S. Banerjee	Modelling, Analysis & Control of Bidirectional SEPIC Converter for Energy Storage Applications	International Journal of Power Electronics	Volume: Issue No:2 Page No:299-332 Year:2023 Month:Feb
Biswajit Mandal & Partha Sarathee Bhowmik	Application of Soft Computing Techniques for Porosity Optimization of Dye Sensitized Solar Cell	Smart Science (Taylor & Francis),	Volume:11 Issue No:02 Page No:241- 250 Year:2022 Month:Apr
Dibyendu Sen, Ruman Kalyan Mahapatra, Tapas Kumar Saha, Jayati Dey	Bifurcation of Double Input DC- DC Buck Buck-boost Fused Converter	Journal of Control, Automation and Electrical Systems	Volume:https://doi. org/10.1007/s40313 -023-00987-6 Issue No: Page No: Year:February Month:2023
S. Ray, H. S. Chatterjee, D. Samajpati, S. N. Mahato, and N. K. Roy	BSA Based Analysis of Three- Phase Standalone Asynchronous Generator Using Two-Port Network	International Journal of Power Electronics	Volume:16 Issue No:3 Page No:385- 398 Year:2022 Month:Aug
Kundu Shubhrajyoti, Alam Mehebub, Saha Roy Biman Kumar and Thakur Sankar Siddhartha	M-estimation based robust approach for hybrid dynamic state estimation in power systems	Micro and Nanosystems	Volume:14 Issue No:4 Page No:358- 368 Year:2022 Month:Dec
Bikash Kumar Saw, Aashish Kumar Bohre, Jalpa H. Jobanputra, and Mohan Lal Kolhe	Techno-Economic and Environmental based Approach for Planning of SDG and DSTATCOM with Impact of Network Reconfiguration using APSO and TLBO	Distributed Generation & Alternative Energy Journal	Volume: Issue No:05 Page No:pp. 1585–1608 Year:2023 Month:Feb

# 4.7.15 Journal: Accepted for Publication in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Sumit Kumar	Control of Generalized decoupled MIMO	IETE Journal of	Volume:DOI:
Pandey,	Systems based on Linear Programming	Research	10.1080/03772063.2023.2215211
Jayati Dey &	Method		Issue No: Page No:
Subrata Banerjee			Year:February Month:2023
S. Panda, S. Kundu,	An Improved SHM-PAM Method to Meet	International	Volume: Issue No: Page No:
S. Banerjee	EN 50160 and CIGRE WG 36-05 Voltage	Journal of Power	Year:2023 Month:
	Harmonic Standards Using Asymmetrical	Electronics	
	Cascaded H-bridge Natural Sequence Multi-		
	level Inverter Structure		



Author(s) Name	Paper Name	Journal Name	Others Info
Mukherjee, M., Roy, B.K.S.	Optimal µPMU Placement in Radial Distribution Networks Using Novel Zero Injection Bus Modelling	SN Computer Science	Volume: Issue No: Page No: Year:2023 Month:Feb

4.7.16 Journal: Published in Others in 2022-2023

NIL

4.7.17 Journal: Accepted in Others in 2022-2023

NIL

## 4.7.18 Conference: Published in 2021-2022 DOI/ISBN

Author(s) Name	Paper Name	Conference Name	Others Info
Rana Das, Irfan	Comparison of Different	2022 Second International	DOI/ISBN:
Ahmed	Types of	Conference on Power,	https://doi.org/10.1109/ICPC2T5388
	Sinusoidal PWM	Control and Computing	5.2022.9776998
	Techniques for	Technologies	Volume: Issue No: Page No:
	Double-Star Chopper Cell		Year:2022 Month:Mar
	with		Presenter:CO-AUTHOR
	Embedded Energy Sources		
Tushar Kanti Bera,	Smart Charging for Electric	2022 IEEE Global	DOI/ISBN:
Aashish Kumar	Vehicles (EVs): A Short	Conference on Computing,	https://doi.org/10.1109/GlobConPT5
Bohre, Irfan Ahmed,	Review	Power and	7482.2022.9938183
Aniruddha		Communication	Volume: Issue No: Page No:
Bhattacharya, Ankur		Technologies	Year:2022 Month:Sep
Yadav			Presenter:CO-AUTHOR
S. Nandi, S. R. Ghatak,	Placement of EV Fast	International Conference	DOI/ISBN:
and P.	Charging	on	10.1109/CATCON56237.2022.1007
Acharjee	Station in Distribution	Condition Assessment	7648 Volume: Issue No: Page
	System	Techniques in Electrical	No:46-51 Year:2022 Month:Dec
	Based on Voltage Stability	Systems	Presenter:
	Index Strategy	(CATCON)	
Sourav Das, A. Pal, A.	Cost Benefit Analysis of	IEEE International	DOI/ISBN:
Chakraborty, P.	EV	conference on	10.1109/STPEC52385.2021.971867
Acharjee, and A.	Charging Scheduling under	"Power Electronics, Smart	4 Volume: Issue No: Page No:1-6
Bhattacharya	Stochastic Framework	Grid and Renewable	Year:2022 Month: Apr Presenter:
	Considering PV and Battery	Energy (PESGRE	
	Energy Storage	2022)	
V. Bharadwaj, S.	Seven Level CHB	IEEE, 2023 International	DOI/ISBN:
Panda, S. Kundu, S.	Multilevel	Conference on Computer,	10.1109/ICCECE51049.2023.10085
Banerjee	Inverter based STATCOM	Electrical &	627
	using	Communication	Volume: Issue No: Page No:
	Decoupled Control & DC	Engineering (ICCECE)	Year:2023 Month:Jan
	Voltage Balancing		Presenter:CO-AUTHOR
Mukherjee, M., Roy,	Optimal PDC &	6th International	DOI/ISBN:
B.K.S.	Comunication	Conference on	10.1109/CATCON56237.2022.1007
	Link Placement in	Condition Assessment	7624
	Distribution	Techniques in Electrical	Volume: Issue No: Page No:
	Network for An Optimal	System	Year:2022 Month:Dec
	μPMUSet	(CATCON)	Presenter:CO-AUTHOR
Poluri Sri Mannarayana,	Transformed Cubature	CATCON 2022	DOI/ISBN:
Aritro Dey	Quadrature Kalman Filter		10.1109/CATCON56237.2022.1007
	for Harmonic Estimation		7679



Author(s) Name	Paper Name	Conference Name	Others Info
	with onestep Randomly Delayed Measurements		Volume: Issue No: Page No:359– 363 Year:2022 Month:Dec Presenter:CO-AUTHOR
A. Chakraborty, S. Chatterjee and R. Mandal	Autocorrelation Aided Islanding Detection Using Bidirectional Long-short Type Memory Network	2nd International Conference on Power Electronics and Energy (ICPEE)	DOI/ISBN: 978-1-6654-7058-2 Volume: Issue No: Page No:1-6 Year:2023 Month:Jan Presenter:CO-AUTHOR
P. Soni, D. Mondal, S. Chatterjee and P. Mishra	Deep Learning Technique for Recurrence Plot-Based Classification of Power Quality Disturbances	3rd IEEE International Power and Renewable Energy Conference (IPRECON)	DOI/ISBN: 978-1-6654-9175-4 Volume: Issue No: Page No:1-5 Year:2022 Month:Dec Presenter:CO-AUTHOR
S. Modak, S. Chatterjee and S. Roy	Deep Learning-Based Discrimination of Focal Electroencephalogram Signals Employing Cross Stockwell Transform	6th IEEE International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)	DOI/ISBN: 978-1-6654-7380-4 Volume: Issue No: Page No:1-5 Year:2022 Month:Dec Presenter:CO-AUTHOR
R. Das, A. K. Das, S. Chatterjee, S. Biswas, S.Dalai, B.Chatterjee and K. Bhattacharyya	Time-frequency Representation aided Deep Transfer Learning Approach for Localization and Identification of Single and Multiple Partial Discharge Events	6th IEEE International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)	DOI/ISBN: 978-1-6654-7380-4 Volume: Issue No: Page No:1-5 Year:2022 Month:Dec Presenter:CO-AUTHOR
S. S. Roy, A. Paramane, J. Singh, S. Chatterjee and A. K. Das	Hydrophobicity Grade Detection of Polymeric Insulator Using Image Visibility Graph	6th IEEE International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)	DOI/ISBN: 978-1-6654-7380-4 Volume: Issue No: Page No:1-5 Year:2022 Month:Dec Presenter:CO-AUTHOR
S. Das, A. Paramane, S. Chatterjee and U.M. Rao	Recursive Feature Elimination Aided Accurate Fault Classification in Power Transformers Using Dissolved Gas Data	6th IEEE International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)	DOI/ISBN: 978-1-6654-7380-4 Volume: Issue No: Page No:1-4 Year:2022 Month:Dec Presenter:CO-AUTHOR
N. Modal, S. Chatterjee, N. Haque, S. Dalai, B.Chatterjee and S. Chakravorti	Estimation of Epoxy-Mica Insulation Ageing Through Havriliak-Negami Relaxation Model on Dielectric Modulus Spectrum	6th IEEE International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)	DOI/ISBN: 978-1-6654-7380-4 Volume: Issue No: Page No:1-5 Year:2022 Month:Dec Presenter:SELF
S. Maur, B. Chakraborty, A. K. Pradhan, S. Chatterjee, S. Dalai and B. Chatterjee	Estimation of Thermal Aging of Epoxy-Alumina Nano- Composites for Dry-Type High Voltage Insulation Using Dielectric Modulus	6th IEEE International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)	DOI/ISBN: 978-1-6654-7380-4 Volume: Issue No: Page No:1-5 Year:2022 Month:Dec Presenter:CO-AUTHOR
B. Chakraborty, S. Maur, A. K. Pradhan, S. Chatterjee, S. Dalai and B. Chatterjee,	Estimation of Paper Moisture within Vegetable Oil based Hybrid Nanofluid Impregnated Paper Using Capacitance Ratio	6th IEEE International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)	DOI/ISBN: 978-1-6654-7380-4 Volume: Issue No: Page No:1-5 Year:2022 Month:Dec Presenter:CO-AUTHOR



Author(s) Name	Paper Name	Conference Name	Others Info
N. Ahire; S. Paul & Z. H. Rather	Enhancement of Transmission	2022 10th International Conference on Smart Grid	DOI/ISBN: 10.1109/icSmartGrid55722.2022.98
	Systems Operational Condition in a Large Scale	(icSmartGrid)	48779 Volume: Issue No: Page No:78- 83
	Wind Integrated Power Systems Against Extreme Weather Events		Year:2022 Month:Jun Presenter:CO-AUTHOR
Sourav Chakraborty, Aashish Kumar	Allocation of Renewable	In 2022 IEEE International Conference for Women in	DOI/ISBN:
Bohre, Shilpa Kalambe, Bikash	Considering Impact of ZIP  Load	Innovation, Technology & Entrepreneurship	10.1109/ICWITE57052.2022.10176 250 Volume: Issue No: Page No:1-6
Kumar Saw, Mohan Lal Kolhe, Jalpa Thakkar, and Prince	Models in Distribution Network	(ICWITE), pp. 1-6. ÎEEE, 2022	Year:2022 Month:Dec Presenter:SELF
Kumar.			
Karmakar, Shukla, Tushar Kanti Bera,	Review on Cell Balancing Technologies of Battery	In 2023 IEEE IAS Global Conference on Renewable Energy	DOI/ISBN: 10.1109/GlobConHT56829.2023.10 087455
			Volume: Issue No: Page No:1-5 Year:2023 Month:Mar
Aashish Kumar Bohre	Management Systems in	and Hydrogen	Presenter:CO-AUTHOR
	Electric Vehicles	Technologies (GlobConHT), pp. 1-5. IEEE, 2023.	
Chakraborty, Ishan,	Effect of thermal load on	In 2022 IEEE 6th	DOI/ISBN:
Aashish Kumar Bohre	HRES for a rural area using different types of loads and	International Conference on Condition	10.1109/CATCON56237.2022.1007 7701
	sources	Assessment Techniques in Electrical Systems (CATCON), pp. 313-317.	Volume: Issue No: Page No:1-6 Year:2022 Month:Dec Presenter:SELF
Banerjee, Sannistha,	Detection and Location of	IEEE, 2022 In 2022 IEEE 6th	DOI/ISBN:
Partha Sarathee	Fault in Microgrid using	International	10.1109/CATCON56237.2022.1007
Bhowmik, Aashish Kumar Bohre	Discrete Wavelet Transform based	Conference on Condition Assessment Techniques in	7697 Volume: Issue No: Page No:1-6
	Technique	Electrical Systems	Year:2022 Month:Dec
		(CATCON), pp. 417-421. IEEE, 2022	Presenter:CO-AUTHOR
Nayak, Suchismita, Aashish Kumar Bohre, Prince Kumar, and	Modeling and Performance Analysis of an Electric Vehicle	In 2022 International Conference on Smart Generation Computing,	DOI/ISBN: 10.1109/SMARTGENCON56628.2 022.10084234
Mohan Lal Kolhe	Vemere	Communication and Networking (SMART GENCON), pp. 1-5. IEEE,	Volume: Issue No: Page No:1-6 Year:2022 Month:Dec Presenter:CO-AUTHOR
R. Sarkar, Aashish	Effect of Shading on	2022. 2022 IEEE 10th Power	DOI/ISBN:
Kumar Bohre, T. K. Bera, P. S. Bhowmik,	System Parameters and CO2	India International Conference	10.1109/PIICON56320.2022.10045 311
M. L. Kolhe and A. H.Hassanabad	Emission of grid-connected PV System	(PIICON), New Delhi, India, 2022, pp. 1-5,	Volume: Issue No: Page No:1-5 Year:2022 Month:Dec Presenter:SELF
Karmakar, Shukla,	A Novel Proportional	In 2022 IEEE Global	DOI/ISBN:
Tushar Kanti Bera, and Aashish Kumar	Integral Controller Based Passive	Conference on Computing, Power and	10.1109/GlobConPT57482.2022.99 38330
Bohre	Cell	Communication Technologies	Volume: Issue No: Page No:1-5
	Balancing for Battery Management System	(GlobConPT), pp. 1-5. IEEE, 2022.	Year:2022 Month:Sep Presenter:CO-AUTHOR



Author(s) Name	Paper Name	Conference Name	Others Info
Bera, Tushar Kanti, Aashish Kumar Bohre, Irfan Ahmed, Aniruddha Bhattacharya, and Ankur Yadav	Smart Charging for Electric Vehicles (EVs): A Short Review	In 2022 IEEE Global Conference on Computing, Power and Communication Technologies (GlobConPT), pp. 1-6. IEEE, 2022.	DOI/ISBN: 10.1109/GlobConPT57482.2022.99 38183 Volume: Issue No: Page No:1-5 Year:2022 Month:Sep Presenter:CO-AUTHOR
Mandal, Souvik, and Aashish Kumar Bohre	Fault Classification in Electrical Systems Using Machine Learning Algorithm	In 2022 Third International Conference on Intelligent Computing Instrumentation and Control Technologies (ICICICT), pp. 1412-1416. IEEE, 2022.	DOI/ISBN: 10.1109/ICICICT54557.2022.99179 76 Volume: Issue No: Page No:pp. 1412-1416. Year:2022 Month:Aug Presenter:CO- AUTHOR
Ari, Arnab, and Aashish Kumar Bohre	Harmonic and TIF Analysis in Distribution System with Integration of PV and Wind Systems	In 2022 International Conference on Intelligent Controller and Computing for Smart Power (ICICCSP), pp. 01- 06. IEEE, 2022.	DOI/ISBN: 10.1109/ICICCSP53532.2022.9862 320 Volume: Issue No: Page No:1-6 Year:2022 Month:Jul Presenter:CO-AUTHOR
K. Majumdar, N. Kumar, P. K. Roy, S. Banerjee	PI Controlled Synchronization Converter using SHO in Grid-Interactive Three- Phase Solar PV System	IEEE International Conference on Power Electronics, Smart Grid, and Renewable Energy (PESGRE)	DOI/ISBN: 10.1109/PESGRE52268.2022.97159 32 Volume: Issue No: Page No: Year:2022 Month: Presenter:CO- AUTHOR
S. Sen, P. Das and C. Koley	Design of a Notch Filter to Improve the Specificity in Detection of Partial Discharge Sources	IEEE 6th International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)	DOI/ISBN: 10.1109/CATCON56237.2022.1007 7620 Volume: Issue No: Page No:293- 297 Year:2022 Month:Dec Presenter:CO-AUTHOR
S. Dhara, C. Koley and S. Chakravorti	An Ultra-Wide Band MultiLayered Hatch- Mounted UHF Partial Discharge Sensor for High-Voltage Power Transformers	IEEE 6th International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)	DOI/ISBN: 10.1109/CATCON56237.2022.1007 7688 Volume: Issue No: Page No:258- 262 Year:2022 Month:Dec Presenter:CO-AUTHOR
K. Adhikari, C. Koley and N. K. Roy	A Proposed Intensity Modulated Optical Fiber Based Sensor for Partial Discharge Detection in High Voltage Power Transformer	IEEE 6th International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)	DOI/ISBN: 10.1109/CATCON56237.2022.1007 7698 Volume: Issue No: Page No:379- 383 Year:2022 Month:Dec Presenter:CO-AUTHOR
S. Saha, A. Bhattacharya, C. Koley, B. Bhattachriya and A. Gouraha	Design of an Optimized Printed Log Periodic Dipole Antenna for Partial Discharge Monitoring	IEEE 6th International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)	DOI/ISBN: 10.1109/CATCON56237.2022.1007 7683 Volume: Issue No: Page No:412- 416 Year:2022 Month:Dec Presenter:CO-AUTHOR
A. Bhukya and C. Koley	Wavelet Aided Deep Neural Network for Classification of Partial Discharge Sources in Air Insulated Substations	IEEE 6th International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)	DOI/ISBN: 10.1109/CATCON56237.2022.1007 7643 Volume: Issue No: Page No:151- 155 Year:2022 Month:Dec Presenter:SELF



Author(s) Name	Paper Name	Conference Name	Others Info
K. Adhikari, N. K. Roy	Proposed Intensity	2022 IEEE 6th	DOI/ISBN:
and C. Koley	Modulated	International Conference	10.1109/CATCON56237.2022.1007
	Optical Fiber Based Sensor	on Condition	7698. Volume: Issue No: Page
	for	Assessment Techniques in	No:379-383 Year:2022 Month:Dec
	Partial Discharge Detection	Electrical Systems	Presenter:
	in	(CATCON), Durgapur,	
	High Voltage Power Transformer		
S. Khandai, S.	Experimental Study of	2022 IEEE 6th	DOI/ISBN:
Biswas, R. T. Arun	Dielectric and Physical	International Conference	10.1109/CATCON56237.2022.1007
Ram Prasath, P.	Properties of	on Condition	7629. Volume: Issue No: Page
Kumbhakar and N. K.	Blended Coconut Oil and	Assessment Techniques in	No:408-411 Year:2022 Month:Dec
Roy	Mineral Oil with Graphene	Electrical Systems	Presenter:
	Oxide Nanomaterial	(CATCON), Durgapur,	
Sujit Khandai, D	Investigation of dielectric	AIP Conference	DOI/ISBN:
Jasper, Krishanlal	properties of blended ester	Proceedings	https://doi.org/10.1063/5.0117874
Adhikari, Partha	oils and dielectric fluids		Volume: Issue No: Page No:22-26
Kumbhakar, Pathik	used in transformer at		Year:2022 Month:Sep Presenter:
Kumbhakar, Nirmal	different temperatures		
Kumar Roy			
Lal, A. Kumar, P.,	Heartbeat Classification	Proceedings of the 1st	DOI/ISBN: 979-835033600-9
Halder, S.	Based on Deep	IEEE	Volume: Issue No: Page
	Convolutional Neural	International Conference	No: Year:2023 Month:Apr
	Network	on Networking and	Presenter:CO-AUTHOR
		Communications	
Das, A.K., Kumar, P.,	Complexity Analysis of	Procedia Computer	DOI/ISBN:
Halder, S.	Ocular	Science	10.1016/j.procs.2023.01.066
	Signal for Detection of		Volume: Issue
	Human		No: Page No:858-866 Year:2022
	Fatigue Using Small		Month:Sep
	Datasets		Presenter: CO-AUTHOR
Biswajit Mandal,	Dye-sensitized solar cell	2022 IEEE Calcutta	DOI/ISBN:
Partha Sarathee	testing by an improved	Conference	10.1109/CALCON56258.2022.1006
Bhowmik	resistive load	(CALCON)	0648
	method topology with		Volume: Issue No: Page No:
	Raspberry		Year:2022 Month:Dec
	Pi: A cost-effective novel		Presenter:CO-AUTHOR
	approach		
Sannistha Banerjee,	Detection and Location of	2022 IEEE 6TH	DOI/ISBN:
Partha Sarathee	Fault in	International Conference	10.1109/CATCON56237.2022.1007
Bhowmik	Microgrid using Discrete	on Conditional	7697
	Wavelet	Assessment Techniques in	Volume: Issue No: Page No:
	Transform based	Electrical Systems (IEEE	Year:2022 Month:Dec
	Technique	CATCON)	Presenter:CO-AUTHOR
Rishiraj Sarkar,	Effect of Shading on	2022 IEEE 10th Power	DOI/ISBN: 978-1-6654-5930-3
Aashish Kumar	System	India	Volume: Issue No: Page
Bohre, Tushar Kanti	Parameters and CO2	International Conference	No: Year:2022 Month:Nov
Bera, Partha Sarathee	Emission of grid-connected	(PIICON)	Presenter:CO-AUTHOR
Bhowmik, Mohan Lal	PV System		
Kolhe, Armin			
Hassanzadeh			
Hassanabad			





## 4.7.19 Conference: Published in Others

Author(s)	Paper Name	Conference Name	Others Info
Name			
S. Sonar, S.	Maximum boost control	IEEE 5th International	DOI/ISBN:
Mandal and	technique to	Conference on	
S. Banerjee	remove 6th frequency	Computing, Power and	10.1109/GlobConPT57482.2022.9938250
	component from	Communication	Volume: Issue No: Page No: Year:2022
	three phase Impedance	Technologies	Month:Sep Presenter:CO-AUTHOR
	Source Inverter		
S. Panda, V.	Power Quality	5th Regional Science and	DOI/ISBN: 0 Volume: Issue No: Page
Bharadwaj, S.	Improvement Using	Technology	No: Year:2023 Month:Jan Presenter:CO-
Kundu, S.	Pulse Amplitude	Congress	AUTHOR
Banerjee	Modulation (PAM)		
	Strategy Applied to		
	Cascaded H-Bridge		
	Multilevel Inverter		
S. Panda, S.	Different Applications of	5th Regional Science and	DOI/ISBN: 0 Volume: Issue No: Page
Kundu, V.	Multilevel Inverter in	Technology	No: Year:23 Month:Jan Presenter:CO-
Bharadwaj, S.	Modern Electrical Systems	Congress	AUTHOR
Banerjee			
V. Bharadwaj, S.	Power Factor Correction of	5th Regional Science and	DOI/ISBN: 0 Volume: Issue No: Page
Panda, S. Kundu,	the Grid Using CHB MLI	Technology	No: Year:2023 Month:Jan Presenter:CO-
S. Banerjee	Based STATCOM'	Congress	AUTHOR
V. Bharadwaj, S.	Application of MAGLEV	5th Regional Science and	DOI/ISBN: 0 Volume: Issue No: Page
Panda, S. Kundu,	Train in Transportation	Technology	No: Year:2023 Month:Jan Presenter:CO-
S. Banerjee	System	Congress	AUTHOR

## 4.7.20 Books Authored

Author	Co-Author	Title of the Book	Title of the Chapter	Publication
Name				Details
Tushar Kanti	Aashish Kumar	Planning of Hybrid	Magnetohydrodynamic	Publisher:
Bera	Bohre, Irfan	Renewable Energy Systems,	(MHD) Power Generation	Springer Nature,
	Ahmed, Aniruddha	Electric Vehicles and	Systems	Singapore
	Bhattacharya, Partha	Microgrid: Modeling,		Publication
	Sarathee Bhowmik	Control and Optimization		Date: 2022-05- 22
Irfan Ahmed	Aashish Kumar	Planning of Hybrid	Energy Sources for Electric	Publisher:
man minea	Bohre,	Renewable Energy Systems,	Vehicles	Springer Nature,
	Tushar Kanti Bera.	Electric Vehicles and		Singapore
	Aniruddha	Microgrid: Modeling,		Publication
	Bhattacharya	Control and Optimization		Date: 2022-05-
	·	1		22
Aashish	Partha Sarathee	Power Electronics and High	Planning and Analysis of	Publisher:
Kumar Bohre	Bhowmik,	Voltage in Smart Grid:	EV Charging Station with	Springer Nature,
	Baseem Khan, Tushar	Select Proceedings of	Solar-PV in Grid-Connected	Singapore
	Kanti	SGESC 2021	System of Durgapur	Publication
	Bera, Irfan Ahmad,			Date: 2022-02-
	Aniruddha			16
	Bhattacharya			
Parimal	Sourav Das, Arnab	Planning of Hybrid	Multilevel Planning for	Publisher:
Acharjee	Pal,	Renewable Energy Systems,	Smart Charging Scheduling	Springer
	Ajoy Kumar	Electric Vehicles and	for On Road Electric	Publication
	Chakraborty,	Microgrid	Vehicles Considering	Date: 2022-0822
	Aniruddha		Seasonal Uncertainties	
	Bhattacharya			



Author Name	Co-Author	Title of the Book	Title of the Chapter	Publication Details
Aniruddha	Sourav Das, Arnab	Planning of Hybrid	Multilevel Planning for	Publisher:
Bhattacharya	Pal,	Renewable Energy Systems,	Smart Charging Scheduling for On Road Electric	Springer
	Parimal Acharjee,	Electric Vehicles and	Vehicles Considering	Publication
	Ajoy Kumar Chakraborty	Microgrid	Seasonal Uncertainties	Date: 2022-0522
Aniruddha	Arnab Pal, Ajoy	Planning of Hybrid	Planning of Electric Vehicle	Publisher:
Bhattacharya	Kumar Chakraborty	Renewable Energy Systems, Electric Vehicles and Microgrid	Charging Station with Integration of Renewables in Distribution Network	Springer Singapore Publication Date: 2022-05-
				22
S. Paul	S. R. Ara & Z. H.	Planning of Hybrid	Layout Optimization Planning	Publisher:
	Rather	Renewable Energy Systems,	of Hybrid Offshore Wind-	Springer
		Electric Vehicles and	Solar PV Power Plants	Publication
		Microgrid		Date: 2022-05- 22
Partha	R. Reddy, S Ahmad	Circuit Analysis		Publisher:
Sarathee				Scientific
Bhowmik				International
				House
				Publication
D 4	D': 11 X	) / ·		Date: 2022-0727
Partha Sarathee	Ritambhara, Y. Sharma. P. Malarkodi	Microprocessor and Microcontroller		Publisher: Alpha International
Bhowmik	Snarma. P. Maiarkodi	Microcontroller		Publishing
Dilowillik				Publication
				Date: 2022-0906
S. Banerjee	S Maiti, S. Sonar	Renewable Resources and	Design and Analysis of Z-	Publisher:
3	,	Energy Management	Source Inverter Using	Springer
			Simple Boost Control Method	Publication
				Date: 2023-0125
Tapas Kumar	Nayan Kumar, Josep	Power Electronics for		Publisher: IET
Saha	M. Guerrero,	NextGeneration Drives and Energy Systems, Volume 1		Publication
	Debaprasad Kastha	Energy Systems, volume 1		Date: 2023-04- 21
Partha	T. K. Bera, A. K.	Planning of Hybrid	Magnetohydrodynamic	Publisher:
Sarathee Bhowmik	Bohre, I. Ahmed, A. Bhattacharya,	Renewable Energy Systems, Electric Vehicles and Microgrid	(MHD) Power Generation Systems (Book Name: Planning of Hybrid	Springer Nature, Singapore Publication
		Microgrid	Renewable Energy Systems,	Date: 2022-05-
			Electric Vehicles and	31
			Microgrid: Modeling,	31
			Control and Optimization	
Partha	T. Rana	Planning of Hybrid	Modeling and Control of PV	Publisher:
Sarathee		Renewable Energy Systems,	Systems for Maximum	Springer Nature,
Bhowmik		Electric Vehicles and	Power Point Tracking and	Singapore
		Microgrid	Its Performance Analysis	Publication
			using Advanced Techniques	Date: 2022-05-
			(Book Name: Planning of	31
			Hybrid Renewable Energy	
			Systems, Electric Vehicles	
			and Microgrid: Modeling, Control and Optimization	
			Control and Optimization	



Author Name	Co-Author	Title of the Book	Title of the Chapter	Publication Details
Partha	Biswajit Mandal,	Handbook of Research on	Recent Advancement on	Publisher:
Sarathee		Evolving Designs and	Dye Sensitized Solar Cell	Springer Nature,
Bhowmik		Innovation in ICT and	(DSSC): A Review	Singapore
		Intelligent Systems for		Publication
		RealWorld Applications		Date: 2022-06-
		**		30
Partha	Arati,M. Buradkar, R	Digital Electronics		Publisher:
Sarathee	Das			Scientific
Bhowmik				International
				House
				Publication
				Date: 2022-0405

# 4.7.21 Seminars, Summer/Winter Schools, Short Term Courses Attended

Name of the Programme	Organized By	From Date	To Date	Organizing Country
International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)	NIT Durgapur	2022-12-17	2022-12-19	India
Outcome based Accreditation: Challenges and Opportunities	NIT Durgapur	2022-06-23	2022-06-24	India
Faculty Updation Program on "Introduction to Navigation, Guidance and Control of Unmanned Systems"	IIT Bombay	2023-07-17	2023-07-22	India
6th IEEE International Conference on Condition Assessment Techniques in Insulation Systems	NIT Durgapur	2022-12-17	2022-12-19	India
ISNR 2023	Indian Society of Neuroradiology	2023-02-24	2023-02-26	India
A two days' workshop on outcome based accreditation: Challenges and Opportunities,	NIT Durgapur	2022-06-23	2022-06-24	India
IEEE Global Conference on Computing, Power and Communication Technologies (GlobConPT 2022)	IEEE Industry Applications Society, USA	2022-09-23	2022-09-25	India
IEEE 6th Int. Conf. on Condition Assessment Techniques in Electrical Systems 2022 (IEEE CATCON 2022)	National Institute of Technology Durgapur and IEEE Dielectrics and Electrical Insulation Society and IEEE	2022-12-17	2022-12-19	India
IEEE 6th International Conference on Condition Assessment Techniques in Electrical Systems	Department of Electrical Engineering & IEEE DEIS Society, Kolkata Chapter	2022-12-17	2022-12-19	India
Innovative Teaching Strategies and Tools in the Digital Age	MoE's Institution Innovation Council Gulzar Group Of Institutes, Ludhiana, Punjab	2023-03-24	2023-03-30	India
2022 IEEE 6th International Conference on Condition Assessment Techniques in Electrical Systems (CATCON)	IEEE DEIS Chapter Kolkata	2022-12-17	2023-08-20	India
IEEE CATCON	NIT Durgapur	2022-12-17	2022-12-19	India
Organized a special session on 'Advancement in Power Electronics for	Cochin University of Science and Technology (CUSAT),	2022-11-24	2022-11-26	India



Name of the Programme	Organized By	From Date	To Date	Organizing Country
FDP Programme titled "Recent	IEEE-SPS & IEEE-PES,	2022-07-11	2022-07-15	India
Advancement and Research Opportunities in Electrical Engineering".	Kolkata Section			

# 4.7.22 Ph.D. Supervisor

Topic Name	Scholar	Supervisor	Status	Status Date
Some studies on battery management system for electric vehicle applications using embedded source modular multilevel converter	Rana Das	Dr. Irfan Ahmed	ONGOING	-
Simplification of Space Vector Modulation Techniques for Multilevel Inverters	Anuj Kumar Pandey	Dr. Irfan Ahmed	ONGOING	-
Grid connected PV systems	Sumit Kumar	Prof. S. Banerjee & Dr. S.K. Giri (CSIR- CMERI)	ONGOING	-
Charging Scheduling and Allocation of Suitable Charging Station for On-Road Electric Vehicles In Probabilistic Scenario Considering Renewable Power Source	Sourav Das	Dr. Parimal Acharjee, Dr. Aniruddha Bhattacharya	ONGOING	-
Application of soft computing techniques in constrained compensated power systems	Deepro Sen	Dr. Parimal Acharjee	ONGOING	-
Enhancement of available transfer capability	Kingshuk	Prof. S. Banerjee	DEGREE	2023-
incorporating FACTS devices for large scale power systems by using meta-heuristic algorithms.	Mazumder	(NIT) & Prof. P.K. Roy (KGEC)	AWARDED	03-31
Application of Advanced Controllers in Maglev System	Soham Dey	Prof. S. Banerjee & Dr. J. Dey	ONGOING	-
Low frequency based modulation schemes for CHB Multilevel Inverters	Samudra Panda	Prof. S. Banerjee	ONGOING	-
Multiport DC-DC converters for EV applications	Siddheswar Sen	Dr. S.K. Giri (CSIR- CMERI) & Prof. S. Banerjee	ONGOING	-
Multiport Converter for Hybridization of PEM Fuel Cell with Battery/Ultracapacitor in Electric Vehicle Applications	Hanumath Prasad Ikkurti	Dr. S.K. Giri (CSIR- CMERI) & Prof. S. Banerjee	ONGOING	-
State Estimation of Dynamics Systems using Adaptive Nonlinear Filters	Poluri Sri Mannarayana	Dr. Aritro Dey	ONGOING	-
Few Aspects of Discrete Sliding Mode Control	Biswapratim Roy	Dr. Aritro Dey, Dr. Jayati Dey	ONGOING	-
Detection and Classification of Transient Disturbances in Power System using Advanced Signal processing and Machine Learning Techniques	Mrs. Ananya Chakraborty	Dr. Ratan Mandal and Dr. Soumya Chatterjee	ONGOING	-
Detection of Cyber-Attack in Power System	Sayak Mondal	Parimal Acharjee, Bhattacharya Aniruddha	ONGOING	-
PMU application in Distribution network	Manas Mukherjee	Biman Kumar Saha Roy	ONGOING	-
Optimal Placement of Phasor Measurement Unit for State Estimation of Power Systems	Shubhrajyoti Kundu	Siddhartha Sankar Thakur and Biman Kumar Saha Roy	ONGOING	-
PMU assisted Smart Grid Operation and Protection against cyber insecurity	Koushik Mandal	Biman Kumar Saha Roy	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status
				Date
Application Of Synchro-Phasor Measurement In	Soumesh	Dr. Sumita Deb (NIT	DEGREE	2023-
Power System	Chatterjee	Agartala) and Biman Kumar Saha Roy	AWARDED	03-31
Deep Neural Networks and Interactive deep	Swagata Kundu	Dr. Ashis Kumar	ONGOING	
learning	Swagata Kundu	Dhara and Dr. Robin	ONGOING	_
Maria Cara Diagram	. 1	Strand	ONGODIC	
Machine Learning for BMD Estimation from X-Ray Images	Amandeep Minhas	Dr. Ashis Kumar Dhara and Dr.	ONGOING	-
		Arunava Naha		
Deep Learning Methods for Aneurysm  Quantification from MRA Images	Subhash Chandra Pal	Dr. Ashis Kumar Dhara and Dr. Robin	ONGOING	-
		Strand		
Handling Severe Class Imbalance in Diabetic Retinopathy Screening	Raka Goswami	Dr. Ashis Kumar Dhara	ONGOING	-
Implementation of Federated Learning	Sudupta Mal	Dr. Ashis Kumar	ONGOING	
Framework	Sudapui Mar	Dhara and Dr. Tushar Kanti Bera	ortgontg	
Optimal Planning of Distributed Generation and	Mr. Bikash	Dr. Aashish Kumar	ONGOING	
Distributed Network	Kumar Shaw	Bohre		
VO2 based Multi-Functional ultra-wideband Terahertz Meta-absorber for EMI Shielding application	Niti Rani	Dr. Aashish Kumar Bohre	ONGOING	-
Fractional Order Modelling and Estimation of Supercapacitor	Ms. Suparna Maity	Dr. Munmun Khanra, Dr. Manika Saha	ONGOING	-
Designing and Development of An Efficient Wireless Power Transfer (WPT) System for	Ankur Yadav	Dr. Tushar Kanti Bera	ONGOING	-
Electric Vehicles (EVs)		D M 1 17 2	ONGODIG	
Design and Development of An EEG Acquisition and Analyzing System for Epileptic	Sunil Chowdhary	Dr. Tushar Kanti Bera	ONGOING	-
Seizure Detection				
Development of A Machine Learning Based AI	Pranab Hazra	Dr. Tushar Kanti Bera	ONGOING	-
Tool for Early Detection of Alzheimer's Disease (Biomedical Engineering)		and Dr. Ashis Kumar Dhara		
Drone Based Expert System for Smart Pesticide	Sudipta Mal	Dr. Ashis Kumar	ONGOING	
Spraying Systems for Agricultural Applications	Sudipia Mai	Dhara and Dr. Tushar  Kanti Bera	ONGOING	
Performance Analysis and Assessment of	Sambaran Ray	Prof. S. N. Mahato	SUBMITTED	2022-
Capacitance Requirement of Self-Excited Induction Generator	Samoaran Kay	and Prof. N. K. Roy	SOBMITIED	06-20
Some Studies on Analysis and Control of Self-	Himadri Sekhar	Prof. S. N. Mahato	ONGOING	
Excited Induction Generator	Chatterjee			-
Some Studies on Analysis and Control of Six- Phase Self-Excited Induction Generator	Saikat Ghosh	Prof. S. N. Mahato	ONGOING	-
Investigation and Development of Power Converters for DC Microgrid Applications	A. Bharathsimha Reddy	Prof. S. N. Mahato	ONGOING	-
Design Optimization and Analysis of AC Electrical Machines	Pratyush Prasanna Das	Prof. S. N. Mahato	ONGOING	-
Smart Electrical Energy Audit and Management	Subir Bhattacharyya	Dr. Partha Sarathee Bhowmik	ONGOING	-
Advanced Signal and Data Processing Techniques for Detection and Classification of	Sannistha Banerjee	Dr. Partha Sarathee Bhowmik	ONGOING	-
Transient Events in Microgrid	3			
Porosity optimization of Dye-Sensitized Solar Cell using Soft Computing Technique	Biswajit Mondal	Dr. Partha Sarathee Bhowmik	ONGOING	-
Cyber attack Detection for electric vehicles	Anshu	Dr. Partha Sarathee	ONGOING	



Topic Name	Scholar	Supervisor	Status	Status Date
Study of SIW components for Microwave and mm wave applications	Jhuma Kundu Paul	Dr. Partha Sarathee Bhowmik	ONGOING	-
Control of multi Input Converter for Hybrid wind Solar battery based system	Dibyendu sen	Tapas Kumar Saha, Jayati Dey	SUBMITTED	2023- 06-01
Design and Real Time Implementation of Controllers for Magnetic Levitation System using Optimal Control Theory	Soham Dey	Subrata Banerjee, Jayati Dey	ONGOING	-
Performance Study, Stability Analysis and Control of Multi-Machine System with Fractional Order Compensation	Poulomi Chatterjee	Jayati Dey	ONGOING	-
Control and Analysis of Multi-Input Converter for Hybrid Renewable Energy Generation Scheme	Dibyendu Sen	Prof. Tapas Kumar Saha & Dr. Jayati Dey	SUBMITTED	2023- 06-02
Integrated intelligent system for recognition and location of power quality problems in an interconnected power systems	Pullabhatla Srikanth	Chiranjib Koley	DEGREE AWARDED	2023- 01-17
Time Delay Estimation Technique for Localization of Partial Discharge Sources Using Radiated UHF Signal	Anitha Bhukya	Chiranjib Koley	SUBMITTED	2023- 02-14
Study the Characteristics of Diffrent Nanofluids for Transformer.	Sujit Khandai	PROF. N.K.ROY	ONGOING	-
Development of Partial Discharge Sensors for Conditioned monitoring of High Voltage Power Apparatus	Sri Krishanlal Adhikari	Prof N K Roy and Prof C Koley	ONGOING	-
Development of IoT enabled High Voltage  Laboratory Facilities	Sri D Jasper	Prof N K Roy	ONGOING	-
Assessment of fatigue derived from biosignal utilizing advanced measurement techniques	Ashis Kumar Das	Dr. Suman Halder	SUBMITTED	2023- 03-23
Study of SOC and SOH of Li-ion Battery in Battery management System	Abhishek Kumar	Prof N K Roy	ONGOING	-

# 4.7.23 Ongoing Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Amount(in Rs.)	Starting Year
Cost Minimization-Based Multi-Stage PMU Installation Strategy Considering Energy Industries' Perspective	Parimal Acharjee	CSIR EMR-II	1821000.0	2021
Development of Online Partial Discharge Monitoring Solutions for High Voltage Electrical Apparatus	Chiranjib Koley, N.K.Roy, P.S. Bhowmik, Aniruddha Bhattacharya	NHPC Ltd.	21998000	2022
Computer-aided Glioblastoma and Intracranial Aneurysms Treatment Response Quantification in Neuroradiology	Dr. Ashis Kumar Dhara and Dr. Chirag Kamal Ahuja, Dr. Robin Strand and Dr. Johan Wikstrom	DBT, Govt of India	3969480.0	2021
Artificial Intelligence for Affordable Screening and Prediction of Diabetic Retinopathy in the Framework of Big Data	PI and coordinator: Dr. Ashis Kumar Dhara, Dr. Rajiv Raman, Dr. S. Mathavan, Dr. R. Rajalakshmi, Dr. Sambuddha Ghosh, Dr. Anita Chatterjee, Dr. Sushmita Mitra, Co-PI: Dr. V. Mohan, Dr. R.M. Anjana, Ms. S. Jebarani, Dr. B. Uma Shankar, Dr. Tushar Kanti Bera	DBT, Govt of India	27223224	2021



Title of the Project	Investigator	Sponsor Authority	Amount(in Rs.)	Starting Year
Design and Development of An AI- Based Portable Electrical Impedance Tomography (EIT) System for Respiratory Function Studies Using Machine Learning Technique	Dr. Tushar Kanti Bera (PI), Prof. Sushmita Mitra, Dr. Ashis Kumar Dhara, Dr. Samir Kumar Biswas, Prof. Chiranjib Koley	DST, Govt. of India	9714862.0	2021
Artificial Intelligence for affordable Screening and prediction of Diabetic Retinopathy in the framework of in Big Data Consortium Project with Work Phase I + Work Phase II (Work Phase I: Screening of Diabetic Retinopathy with Affordable AI in Big Data; Work Phase II: Artificial Intelligence integrating Big Data in developing an affordable diagnostic prediction model for Diabetic Retinopathy in India)	Dr. Ashsi Kumar Dhara, Dr. S. Mathavan, Dr. Rajiv Raman, Dr. R Rajalakshmi, Dr. Sambuddha Ghosh, Dr. Sushmita Mitra, Dr. M Suchetha, Dr. V Mohan, Dr. Tushar Kanti Bera (Co-PI), Dr. B Uma Shankar, Dr. Anita Chatterjee	DBT, Govt. of India	27223224	2021
Artificial intelligence for affordable screening and prediction of diabetic retinopathy in the framework of big data	Dr. Charudutta Jadav (TCS), Dr. Bibhash Sen (NIT Durgapur), Dr. Tushar K Bera (Co-PI, NIT Durgapur), Professor Tandra Pal (NIT Durgapur)	Tata Consultancy Services (TCS)	2900000.0	2021
Development of nanocomposite jutegeotextile for high-speed railway embankment system to enhance the durability and its remotely health monitoring using Internet of Things (IoT)	Dr. Supriya Pal, Dr. Mrinal Kanti Mandal, Dr. Tushar Kanti Bera (Co-PI), Dr. Rajib Ghosh Choudhuri	National Technical Textiles Mission(NTTM), Ministry of Textiles, Government of India	9970000.0	2023
Development of electrical impedance tomographybased system for monitoring of solids inside pipeline used in ocean mining application.	Dr. Debi Prasad Das, Dr. Tushar Kanti Bera (PI), Dr. Santosh Kumar Behera	National Institute of Ocean Technology (NIOT), Ministry of Earth Sciences, Govt. of India.	2500000.0	2023
Development of PD Detection System for High Voltage power Apparatus	Prof N K Roy, Prof C Koley, Dr A Bhattarchaya, Dr P S Bhowmik	National Hydro Power Coorporation Faridabad, Haryana	21900000	2022
Improved Energy Management and Control of a Hybrid UGV for Combat Use	Jayati Dey and Tapas Kumar Saha	DRDO, Govt. of India	7250000.0	2020
Capacity building for human resource development in Unmanned Aircraft System (Drone and related Technology)	Nilanjan Chattaraj, Jayati Dey, Aritro Dey, Deepak Kumar	Ministry of Electronics and Information Technology (MeitY), Government of India	15091000	2022



Title of the Project	Investigator	Sponsor Authority	Amount(in Rs.)	Starting Year
Development of Partial Discharge Monitoring Solutions for High Voltage Electrical Apparatus	PI Chiranjib Koley, Co-PI : Dr. Partha Sarathee Bhowmik, Dr. Airuddha Bhattacharya, Co-Ordinator: Prof. Nirnal Kumar Roy	NHPC Ltd.	21998000	2022
Multilayer Fractal Ultra High- Frequency Sensor for Partial Discharge Monitoring of High Voltage Power Transformers	PI Chiranjib Koley, C0-PI Sivaji Chakravorti	SERB CRG DST	4566000.0	2022
Ultra-High Frequency Multisensor based Partial Discharge Detection System for Electrical Substations	PI Chiranjib Koley, C0-PI N K Roy	DST TDP	3985000.0	2023
Testing and calibration of UHF flange mounted Partial Discharge sensor.	Chiranjib Koley, N K Roy, A Bhattachriya, P S Bhowmik	Sensorzoid Pvt. Ltd Consultancy	35400.0	2023

# 4.7.24 Completed Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Complete Year
Electrical Impedance Spectroscopy (EIS) Assisted Electrical Impedance Tomography (EIT) System: Biological Tissue Imaging with Optimum Frequency Scanning	Dr. Tushar Kanti Bera	NIT Durgapur (Research Initiation Grant)	2022
Artificial Intelligence in Education Focus Children with learning Disability	Prof. Tandra Pal, Dr. Parag K Guhathakurta, Dr. Mamata Dalui, Dr. Tushar Kanti Bera, Dr. Suman Halder, Dr. Chiranjib Koley, Prof. Anupam Basu	Ministry of Electronics and Information Technology (MeitY), Govt. of India	2023
Modelling and Control of Electromagnetic Levitation Devices	S. Janardhanan (PI) & S. Banerjee (CO-PI)	DST, SERB	2022
"Development of Personalised and Performance based E- Learning tool for existing E-resources	Prof N K Roy, Dr A Dutta	Department of Electronics and Information Technology (DieTY), Govt of India	2012
Developed one course and coordinated seven courses under National ICT Mission, MHRD Govt. of India, titled "Developing Suitable Pedagogical Methods for Various Classes, Intellectual Calibres and Research in e-Learning"	Prof N K Roy, Prof P Kumbhakar et al	MHRD, GOVERNMENT OF INDIA	2010
Setting up of a new Centrally funded Institute, Gani Khan Choudhuri Institute of Technology (GKCIET), Malda	Prof N K Roy	MHRD , Govt of India	2012
Artificial Intelligence (AI) In Educationfocus: Children With Learning Disability	Pal, Tandra, Dolui Mamata, Guhathakurta, Parag K.,Bera, Tushar Kanti,Halder, Suman,Koley, Chiranjib, ,Basu, Anupam	MeitY	2023





Sponsoring Industry / Institute Name	Title of the Project	Total Amount (in Rs.)	Remarks
Karmakar Electric Enterprises	BDV test of Transformer Oil	4500.0	Successfuly completed
National Thermal Power Instiute Durgapur	Training and consultancy to the Engineers from West Bengal State Electricity Transmission Coorporation Limited (WBSETCL), West Bengal	940000.0	Approximately, four hundred Engineers from WBSETCL are taken hands on training at High Voltage Laboratory, NIT Durgapur, all are posted to different subsation in West Bengal for operation and maintenance.

# 4.7.26 Reviews of Manuscripts for Publication in Journal

Reviewer	Name of the Journal	Publisher	Date of Final Review
Parimal Acharjee	ISA Transactions	Elsevier	2023-02-03
Parimal Acharjee	Applied Soft Computing Journal	Elsevier	2023-01-09
Parimal Acharjee	Applied Mathematics and Computation	Elsevier	2023-12-12
Parimal Acharjee	Electrical Engineering Journal	Springer	2023-09-18
Parimal Acharjee	Applied Energy	Elsevier	2023-07-27
Parimal Acharjee	IEEE systems Journal	IEEE	2023-05-11
Aniruddha Bhattacharya	Journal of Energy Storage	Elsevier	2023-02-22
Santanu Paul	IEEE Transactions on Sustainable Energy	IEEE	2023-03-22
Santanu Paul	IEEE Transactions on Power Systems	IEEE	2022-08-22
Santanu Paul	IEEE Transactions on Industrial Informatics	IEEE	2022-07-12
Santanu Paul	IEEE Systems Journal	IEEE	2022-08-15
Santanu Paul	Renewable & sustainable energy reviews	Elsevier	2023-08-05
Santanu Paul	Electric Power Systems Research	Elsevier	2023-03-20
Ashis Kumar Dhara	SN Computer Science	Springer	2022-08-17
Omkar Yadav	Engineering Applications of Artificial Intelligence	Science Direct	2023-05-19
Aashish Kumar Bohre	Technology and economics of smart grids and sustainable energy	Springer Nature	2022-05-15
Aashish Kumar Bohre	International Journal of Green Energy	Clarivate	2022-07-27
Soumya Chatterjee	IEEE Sensors Journal	IEEE	2023-01-14
Soumya Chatterjee	IEEE Sensors Journal	IEEE	2023-01-17
Soumya Chatterjee	IEEE Transactions on Dielectrics and Electrical Insulation	IEEE	2023-02-14
Soumya Chatterjee	IEEE Transactions on Dielectrics and Electrical Insulation	IEEE	2022-09-02
Soumya Chatterjee	IEEE Transactions on Industry Applications	IEEE	2022-09-09
Soumya Chatterjee	IEEE Transactions on Industry Applications	IEEE	2023-03-20
Subrata Banerjee	IEEE Transaction on Industry Applications	IEEE	2022-10-29

## 4.7.27 Review of Books

NIL

# 4.7.28 Invited Examiners/Paper-Setters/Board of Studies

Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Irfan Ahmed Mohd. Fazlul	M. Tech. Final Project Exam (June, 2022)	Visvesvaraya National Institute of Technology Nagpur	2022-06-22	2022-06-22
Irfan Ahmed Mohd. Fazlul	Semester End (Odd) Examination 2022- 23	Integral University, Lucknow	2022-12-01	2022-06-01
Parimal Acharjee	Electrical Engineering (Diploma Level)	Assam Science and Technology University	2023-02-27	2023-03-01
Subrata Banerjee	PhD Thesis Examination	Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar	2022-05-21	2022-05-21
Subrata Banerjee	PhD Thesis Examination	NIT Jamshedpur	2022-08-14	2022-08-14
Subrata Banerjee	PhD Thesis Examination	Utkal University	2022-12-19	2022-12-19
Sankar Narayan Mahato	M.Tech. 4-th semester viva-voce examination and thesis evaluation in the Department of Electrical Engineering	NIT Jamshedpur	2022-06-13	2022-06-13
Partha Sarathee Bhowmik	Semester End Examination ODD Semester, 2022-23.	JIS College of Engineering (An Autonomous Institute)	2022-11-16	2022-11-16
Partha Sarathee Bhowmik	Semester End Examination Even Semester, 2022-23.	JIS College of Engineering (An Autonomous Institute)	2022-06-09	2022-06-09
Nirmal Kumar Roy	Thesis evaluation titled " Effects Of Non Standard Lightning Transients In Power Cable" Name: Sri Mudang Taro	NERIST, Arunachal	2023-04-05	2023-04-05

## 4.7.29 Invited Expert in Selection Committees

Name of the Faculty	Discipline	University/Institute	From Date	To Date
Parimal Acharjee	Electrical Engineering	Bihar Public Service Commission	2022-11-02	2022-11-05
Parimal Acharjee	Project-JRF/ Project Associate	in CSIR-Central Mechanical Engineering Research Institute, Durgapur	2022-06-16	2022-06-16
Sankar Narayan Mahato	Electrical Engineering	Institute of Engineering & Industrial Technology, Sanaka Educational Trust's Group of Institutions, Malandighi.	2022-05-29	2022-05-29

## 4.7.30 Invited Lectures

Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Irfan Ahmed	Power Electronic	AC-DC Microgrid:	YCCE Nagpur	2022-	2022-
Mohd. Fazlul	Converters in AC and DC Microgrids	Configuration, Controls and Applications		11-10	11-11



Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Parimal Acharjee	Application of PMU in Power Systems	Recent Advancement and Research Opportunities in Electrical Engineering	Bardhaman	2022- 07-11	2022- 07-15
Parimal Acharjee	Recent Advancement in Smart Grid	Recent Advancement in Smart Grid and Renewable Energy Post Graduate Diploma	Dr. B. C. Roy Engineering College, Durgapur	2022- 12-19	2022- 12-23
Aniruddha Bhattacharya	Power System Modelling	Course in Transmission and Distribution Systems with Automation SCADA/DMS organized by Centre Board of Irrigation & Power (CBIP)	Online	2022- 08-29	2023- 09-02
Santanu Paul	Frequency Stability of Power Systems Integrated with Large Scale Renewable Energy Resources	Faculty Development Program on "Recent Advancements in Smart Grid & Renewable Energy"	Durgapur	2022- 12-19	2022- 12-23
Tushar Kanti Bera	Biomedical Applications of Electrical Impedance Tomography (EIT): Looking into the Human Anatomy with Electrical Currents	Technical Webinar for The Departmental Students (B.Tech.)	Gargi Memorial Institute of Technology, Kolkata – 700144	2022- 04-23	2022- 04-23
Tushar Kanti Bera	Recent Trends in The Battery Charging Technology for Electric Vehicles (EVs) and Plugged-In-Hybrid Electric Vehicles (PHEVs)	DST-SERB Sponsored High End Workshop "KARYASHALA" on "Present and Future Trends of Electric Vehicle Technologies, September 07- 13, 2022	CSIR-Central Mechanical Engineering Research Institute (CSIR-CMERI), Durgapur M G Avenue, City Center, Durgapur, West Bengal 713209, INDIA	2022- 09-07	2022- 09-07
Tushar Kanti Bera	Multi-Disciplinary Research for Health, Environment and Energy	Re-Union and Symposium 2023, Asansol Polytechnic, Dakshin, South Dhadka, Dhadka, Asansol, West Bengal 713302	Asansol Polytechnic, Asansol	2023- 01-08	2023- 01-08
Tushar Kanti Bera	Approaches and Methods for Successful Scientific Research	Online Seminar 2023, Babu Banarasi Das Northern India Institute of Technology (BBDNIIT), BBD University, Y Block, Faizabad Rd, Lucknow, Uttar Pradesh 226028	BBD University, Y Block, Faizabad Rd, Lucknow, Uttar Pradesh 226028	2023- 02-24	2023- 02-24
Tushar Kanti Bera	Battery Electric Vehicles (BEVs) and Hybrid Electric Vehicles (HEVs): The Needs, Applications and Impacts on The Environment and Electrical Power System	IEI Student Chapter Seminar 2023, Department of Electrical Engineering, Academy of Technology (AOT)	Department of Electrical Engineering, Academy of Technology (AOT)	2023- 02-28	2023- 02-28



Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Tushar Kanti Bera	The Opportunities and Responsibilities in Research and Development in Academia and Industry: A Road-	IEI Student Chapter Seminar 2023, Department of Electrical and Electronics Engineering, Academy of Technology (AOT)	Department of Electrical and Electronics Engineering, Academy of Technology (AOT)	2023- 02-28	2023- 02-28
Tushar Kanti Bera	Map for Students, Scholars and Young Faculties  Electrical Impedance Based Noninvasive Medical Diagnosis of Human Diseases: Technology, Instrumentation and Applications	Departmental eminar 2023, Department of Electronics and Communication Engineering, Narula Institute of Technology (An Autonomous Institution Under JIS Group), Agarpara, Kolkata	Department of Electronics and Communication Engineering, Narula Institute of Technology (An Autonomous Institution Under JIS Group), Agarpara, Kolkata	2023- 03-01	2023- 03-01
Tushar Kanti Bera	Recent Trends in Charging Methodologies for Electric Vehicles (EVs): The Technology, Applications and Limitations	Online Short Term Training Program (STTP) on "Recent Advancements in Electrical grid, Renewable Energy, and its applications in EVs"	Department of Electrical Engineering, Budge Budge Institute of Technology (BBIT), Nishchintapur, Budge Budge, Kolkata, West Bengal 700137	2023- 03-15	2023- 03-15
Aashish Kumar Bohre	Distributed Systems Planning And Optimization with New Era",	Invited Expert lecture delivered in FDP on "Distributed Systems Planning And Optimization with New Era", in Faculty Development Programme on "Enhancement And Utilization Of Green Energy In Power Systems Using Power Electronics And Control" jointly organized by the Department of Electrical & Electronics Engineering, GMR Institute of Technology, Rajam and AU College of Engineering, Visakhapatnam, Andhra Pradesh, India held between 12th -17th December 2022	Visakhapatnam, Andhra Pradesh	2022- 12-12	2022- 12-17
Subrata Banerjee	Power Electronics Converters of of Power Electronics in Renewable Energy Systems	Applications of Power Electronics in Renewable Energy Systems (APERES2022)	NIT Jamshedpur (Virtual Mode)	2022- 07-20	2023- 07-20



Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Sankar	Analysis And	One Week Virtual mode FDP,	Kolkata	2022-	2022-
Narayan	Control Of	jointly collaborating with		07-15	07-15
Mahato	Induction	IEEE-SPS & IEEE-			
	Generator For	PES, Kolkata Section,			
	Micro Hydro	organized by Department of			
	Applications	Electrical Engineering,			
	• •	Gargi Memorial Institute of			
		Technology, Kolkata			
Jayati Dey	On Decoupling	Online Faculty Development	DR. B. C. Roy	2022-	2022-
	Control of MIMO	Programme (FDP) on	Engineering	06-13	06-17
	Systems	"Emerging Trends In Different	College, Durgapur, West		
		Fields Of	Bengal		
		Electrical Engineering"			
Jayati Dey	Fractional Order	Faculty Development	Dr. B. C. Roy Polytechnic	2023-	2023-
	Compensation of	Programme on "Modern		02-14	02-18
	Continuous-time	Technologies in Electrical			
	Plants	Engineering"			
Nirmal	ICT & IoT Enabled	FDP programme on "Recent	Baruipur	2022-	2022-
Kumar Roy	Monitoring of	Advancement and Research		07-11	07-15
	Electrical	Opportunities in Electrical			
	System & High	Engineering".			
	Voltage Test Facilities				
Nirmal	Problems In Indian	ESMOC 2021-3rd Energy	NIT Durgapur	2022-	2022-
Kumar Roy	Power Sector And	System Modeling and		12-05	12-07
	Its Remedies	Optimization Conference,			
	Through	December 5-7, 2022			
	Implementation Of				
	ICT & IoT				

# 4.7.31 Session Chair/Convenor

Name of the Faculty	Programme	Place	Session	From Date	To Date
Subrata Banerjee	2020 IEEE International Symposium on	GIET	Power	2022-12-	2022-12-
	Sustainable Energy, Signal Processing	University	Electronics	15	17
	and Cyber Security	Gunupur			
		Odisha, India (online)			
Santanu Paul	2022 6th IEEE International Conference	EE	Technical	2022-12-	2022-12-
	on Condition	Department,	Session-7	17	19
	Assessment Techniques in	NIT Durgapur			
	Electrical Systems (IEEE				
	CATCON 2022)				
Omkar Yadav	International Conference on	NIT	Technical	2022-12-	2022-12-
	Condition Assessment	Durgapur,	Session	17	19
	Techniques in Electrical	Durgapur			
	Systems (IEEE CATCON 2022)				
Tushar Kanti	Session Chair, IEEE 6th Int. Conf. on	NIT	Instrumentation	2022-12-	2022-12-
Bera	Condition Assessment Techniques in	Durgapur		17	19
	Electrical Sys. 2022				
	(CATCON2022), Dec. 17-19, 2022, NIT				
	Durgapur				



Name of the Faculty	Programme	Place	Session	From Date	To Date
Manika Saha	2022 6th International	NIT	Hybrid Session	2022-12-	2022-12-
	Conference on Condtion Assessment	Durgapur	6:Power system	17	19
	Techniques in Eletrical Systems		operation and Planning		
Partha Sarathee	2022 IEEE Global	New Delhi	Track: TD 08	2022-09-	2022-09-
Bhowmik	Conference on Computing, Power and			23	25
	Communication				
	Technologies (GlobConPT)				
Partha Sarathee	IEEE 6th International	NIT	Track: FD 08	2022-12-	2022-12-
Bhowmik	Conference on Condition	Durgaour,		17	19
	Assessment in Electrical	West Bengal			
	Systems (IEEE CATCON 2022)				
Soumya	6th IEEE International	Durgapur	Technical	2022-12-	2022-12-
Chatterjee	Conference on Condition		Session 9: Solid	17	19
•	Assessment Techniques in Electrical		Dielectrics		
	systems				
Nirmal Kumar	2022 IEEE 6th International	DURGAPUR	Technical	2022-12-	2022-12-
Roy	Conference on Condition		Session: 2:	17	17
	Assessment Techniques in		Condition		
	Electrical Systems		Monitoring of		
	(CATCON)		HV Power		
			Apparatus		

#### 4.7.32 Patents

Title	Inventors	Application Nos	Date of Filling
Automated Solar Panel Cleaning System with IOT For Small Scale and Large- Scale Solar Power Plant	Dr. Aashish Kumar Bohre, Dr. Biman Kumar Saha Roy, Dr. Aniruddha Bhattacharyya, Dr. Partha Sarathee Bhowmik	2022/10599	2022-09-26
Automated Solar Panel Cleaning System with IoT for Small Scale and Large Scale Solar Power Plant	Dr. A. K. Bohre, Dr. B. K Saha Roy, Dr. A Bhattacharyya, Dr. P. S. Bhowmik	21/01/2022/10599	2022-09-26

#### 4.8 Department of Earth and Environmental Studies

#### 4.8.1 Department at a Glance:

The Department was started in early 1960's as Department of Geology and later renamed as Department of Earth and Environmental Studies in 2012 because of spread of activities of the department on environment issues, mainly in research and teaching.

The Department is the coordinating department for multidisciplinary M.Tech. Programme in "Environmental Science and Technology" from the academic session 2009-2010, presently involving four departments of the Institute.

The Department is supporting the UG courses of the Institute offering a compulsory subject to all First year students on environment. It also caters specifically to Metallurgical and Materials Engineering and Civil Engineering students by offering compulsory theory and laboratory subjects. The Departmental laboratories are well equipped to serve the needs of the students. The Department is equipped with various equipments, required for Earth and Environmental Studies courses, including Research Model Polarizing Microscopes (for both transmitted light and incident light), Student Model Microscopes, Polarizing Micro projector and rich collection of models, charts, rocks and mineral specimens. A well-equipped environmental laboratory has also been set up in the department to serve the post graduate students of Environmental Science and Technology and to augment research and consultancy facilities in this emerging field.



The Department offers facilities for research activities to faculties and research scholars of the Institute. Present fields of research include various problems related to environment, application of RS & GIS in resource management, etc. Presently, ten research scholars are carrying out their research in the department. The Department also undertakes consultancy jobs on environmental and geological issues with particular expertise on groundwater study.

#### 4.8.2 Mission & Vision

#### Mission:

- To impart quality technical and scientific education and produce engineers, technologists, scientists and
- · citizens who will contribute meaningfully to the growth and development of the country and excel in
- various disciplines of knowledge
- To create a research-oriented teaching-learning environment in the Institute with a focus on excellence
- and innovation.
- To embark upon an inclusive growth path committed to the uplift of the community.

#### Vision:

 To impart quality technical education and focus on research and innovation to cater to the need of the country

#### 4.8.3 Faculty

Name	Designation	Email-id
Prof. Kalyan Adhikari	Professor	kalyan.adhikari@ees.nitdgp.ac.in
Dr. Sandip Mondal	Assistant Professor	sandip.mondal@ees.nitdgp.ac.in
Dr. Manoj Ozha	Assistant Professor	manoj.ozha@ees.nitdgp.ac.in
Dr. Shreya Karmakar	Assistant Professor	Shreya.karmakar@ees.nitdgp.ac.in

## 4.8.4 Equipments:

Sl. No.	Name of the equipment	Date of Purchase	Amount
01	Trinocular Petrological Microscope (Make: Dewinter)	11.04.2022	2,48,850/-
02	Desktop Computer	25.08.2022	63,988/-
	(Make: Acer)		
03	Peristaltic Pump	04.01.2023	2,18,772/-
	(Make:Virtual Instrumentation)		
04	Trinocular Student Grade Microscope(02 no.)	01.03.2023	10,38,000/-
	(Make:Euromex)		
05	Trinocular Research Grade Microscope	16.03.2023	13,67,397/-
	(Make: CarlZeiss, Germany)		

#### 4.8.5 Laboratories Available

Sl. No.	Name of Laboratory	Major equipment
1	Environmental Lab 1	COD Reactor, Fume Hood, Balance, Hot Plate, Water Distillation Unit, Magnetic
		Stirrer, etc.
2	Environmental Lab 2	Hot Air Oven, Muffle Furnace, Vacuum Oven, Vacuum Furnace, Incubator
		Shaker, Tube Furnace, Centrifuge, Laminar, kjeldahl nitrogen distillation
		apparatus, Autoclave, Stack Monitoring Kit, P.M 2.5 Sampler, High Volume
		Sampler, Ozone Analyser, Rock Cutting, Polishing and Grinding Machine etc.,
		Vacuum Oven etc.
3	Research Laboratory	Centrifuge, Peristaltic Pump, Ion Meter, pH meter, TDS meter
4	Instrument Laboratory	AAS, GC, Balance, pH meter, UV-Visible Spectrometer
5	Contaminant transport Lab	Permeability Meter, Mechanical Shaker etc.
6	Geology Lab	Petrological Microscope (Monocular, Binocular and Trinocular), Geological
		Samples and Models
7	Computer Lab	Computers and ERDAS, Nitro Pro, TNT MIPS, GEOMEDIA, HYDRUS,
		MODFLOW software facilities

#### 4.8.6 PhD degree awarded till 2022-23

17 (Seventeen).

## 4.8.7 Any other relevant information

Department has four Adjunct Faculty members

#### 4.8.8 Specialization

- Environmental Engineering
- Groundwater, Subsurface transport of contaminants
- Metamorphic Petrology, Geochronolology
- Ore Geology, Metamorphic petrology, and Geochemistry

#### 4.8.9 Proposed Plan for Research

- Lithium Recovery from aqueous medium, Groundwater contaminants transport and mitigation, Water and Wastewater Treatment Technology, Saline water treatment, Recovery of the critical elements from aqueous media, Development of nanotechnology for separation of emerging contaminants
- Mechanism of As contamination of groundwater and its removal, Subsurface transport of Pesticide and groundwater contamination, Optimising artificial recharge in hardrock terrain with a bearing to agriculture, Optimisation of priority indicators of sustainability in Coal mining sectors, MCDM study of MSWM regarding centralised / decentralised system, Removal of As through Electrokinetic technique
- My recent research has provided new insights about the mechanism of mineral reactions in open system. In extension to this, I now wish to further explore open system mineral reactions particularly with respect to the mobility of nominally soluble elements like Ti and Al, during conditions of crustal metamorphism, as I have encountered a few natural evidences of mobility of Ti and Al during regional metamorphism. This is important because, Ti and Al are essentially considered immobile in regional metamorphic systems due to low solubility of TiO2 and Al2O3 in common metamorphic fluids. As a consequence, the constant-Ti or Al frame of reference is widely used in most mass-flux calculations in fluid transport and to evaluate open-system behavior during metasomatism. This study will also include the effect of element mobility, i.e. "X" (composition) on the stability of minerals and assemblages, as opposed to only pressure and temperature. Such problems help to not only broaden our understanding of the subject, often finding applications in other related branches of geoscience, but in combination with petrological and geochronological studies from different mobile belts of India, they will also help to solve regional geological problems related to the tectonometamorphic evolution of the orogenic belts (CITZ, EGMB, GTSI) and the evolution and formation of the Indian subcontinent in its present configuration.
- Detailed petrological, mineralogical, microtexture, and geochemical studies integrated with geochronology to understand mineralization related to Uranium, Rare Earth Elements, Gold, and Sulphides. Additional emphasis will be given to understanding the genesis and their association with critical metals, as they encompass the heart of Modern Technology. Accordingly, in the coming years, more importance will be given to augment the domain related to critical minerals (or metals). Moreover, studies related to radiation damage will also given emphasis as it can play as a critical parameter in assessing the durability of ceramics that are used in nuclear disposal sites.

#### 4.8.10 Area of Research Interest

- Lithium Recovery from aqueous medium, Groundwater contaminants transport and mitigation, Water and Wastewater Treatment Technology, Saline water treatment, Recovery of the critical elements from aqueous media, Development of nanotechnology for separation of emerging contaminants
- Subsurface transport of contaminants, Augmentation of groundwater resource through different techniques, particularly in water stressed region, Use of RS and GIS in delineation of saline water intrusion and coastal aquifer management coastal
- Understanding the genesis related to Uranium, Rare Earth Elements, Gold, and Sulphide deposits and associated element mobilization using Mineral Geochemistry, associated Fluid-Rock Interaction and various in-situ Dating Techniques.
- Metamorphic petrology Geochronology: Decoding temporal and tectono-metamorphic history of metamorphic rocks associated with mineral deposits.
- Phase equilibria modeling to understand phase stability and element mobility in open and closed systems.
- · Geodynamics: Understanding Crustal evolution and origin of Plate tectonics from a petrological viewpoint.

#### 4.8.11 Institute Industry Collaboration

Collaborating Institute Organization	Areas of collaboration	Collaboration Activities
EOGEPL Durgapur	Land subsidence study	Field survey, data analysis and
		preparation of report

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## 4.8.12 Collaboration with Academic and Research Institutions

Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
IIRS Dehradun	Application of Remote sensing and GIS in Earth Science	Dr. R.S. Chatterjee	Joint guidance of 3 no. of PG dissertations
IIT-ISM Dhanbad	Metamorphic Petrology,	Dr. Upama Dutta	Joint research publications
Geological Studies Unit, ISI Kolkata	Structural Geology	Dr. Tridib Mondal	Joint field based research work
Wadia Institute of Himalayan Geology; Dehradun, India	Understanding Gold mineralization from Dharwar Craton, India	Dr. Kunda Badhe	Research paper Publications (one paper got accepted on 26/07/2023 in Geological journal)

# 4.8.13 Workshops/Seminars Organized

NIL

# 4.8.14 Journal: Published in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
D. Dutta, S. Misra * S. Karmakar	Deformation mechanisms and characteristics of the meta-BIFs from an early Proterozoic shear system of the Southern Granulite Terrane (SGT), India	Journal of Structural Geology	Volume:156 Issue No:N.A. Page No:104534: 1-15 Year:2022 Month:Jan
Manash Gope, Anibrata Das, Sandip Mondal, Apurba Ratan Ghosh, Rajnarayan Saha	Immobilization of Cr (III) and Cr (VI) from contaminated aqueous solution by using sewage produced biochar: Affecting factors and mechanisms	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	Volume:44 Issue No:3 Page No:5812-5828 Year:2022 Month:Sep
Tuhin Kamilya, Rajneesh Kumar Gautam, Shobha Muthukumaran, Dimuth Navaratna, Sandip Mondal	Technical advances on current research trends and explore the future scope on nutrient recovery from waste-streams: a review and bibliometric analysis from 2000 to 2020	Environmental Science and Pollution Research	Volume:29 Issue No:33 Page No:49632-49650 Year:2022 Month:Jul
Mohd Taqui, Sneha Das, Tuhin Kamilya, Sandip Mondal, Surabhi Chaudhuri	Green synthesis of iron-oxide nanoparticles using scrap iron as precursor for the removal of Pb (II) from aqueous medium	Journal of Environmental Engineering and Landscape Management	Volume:30 Issue No:2 Page No:308-320 Year:2022 Month:Jun
S. Karmakar, S. Mukherjee, S. R. Choudhury, P. Maiti, S. Sanyal, P. Sengupta	Neoproterozoic reworking of a Mesoproterozoic magmatic arc from the north-eastern part of the Central Indian Tectonic Zone: Implication for the growth and disintegration of the Indian shield in the Proterozoic supercontinental cycles	Precambrian Research	Volume:378 Issue No:N.A. Page No:106758: 1-22 Year:2022 Month:May
M Gope, P Paramanik, I Som, S Mondal, AR Ghosh, R Saha	A review on low-cost adsorbent (biochar) for the elimination of potentially toxic elements (PTEs) from contaminated water	Arabian Journal of Geosciences	Volume:15 Issue No:20 Page No:1609 Year:2022 Month:Oct



Author(s) Name	Paper Name	Journal Name	Others Info
Avishek Adhikary, Debasmita Datta, Supriya Pal, Kalyan Adhikari, Sudipta Ghosh	Assessment of subsurface migration and simultaneous removal of Carbendazim in simulated constructed wetland through physical and numerical modeling	Journal of water process Engineering, Elsevier	Volume:50 (2022) 103272 Issue No: Page No: Year:2022 Month:Oct
A. Chakrabarty*, S. Mukherjee, S. Karmakar, S. Sanyal, P. Sengupta	Petrogenesis and in situ U-Pb zircon dates of a suite of granitoid in the northern part of the Central Indian tectonic Zone: Implications for prolonged arc magmatism during the formation of the Columbia supercontinent.	Precambrian Research	Volume:387 Issue No:N.A. Page No:106990; 1-19 Year:2023 Month:Jan
S. Chatterjee*, S. Karmakar, S. Mukherjee, S. Sanyal, P. Sengupta	Origin of clinopyroxene-ilmenite symplectites in mafic granulites from eastern parts of the Chotanagpur granite gneissic complex, East Indian shield	American Mineralogist	Volume:In Press Issue No:N.A. Page No:N.A. Year:2022 Month:Mar
Nilanjana Bhattacharjee, Ipsita Som, Rajnarayan Saha & Sandip Mondal	A critical review on novel eco- friendly green approach to synthesize zinc oxide nanoparticles for photocatalytic degradation of water	International Journal of Environmental Analytical Chemistry	Volume: Issue No: Page No:1- 28 Year:2022 Month:Jan
Vineeta Prasad, · Gautam Bandyopadhyay, · Kalyan Adhikari, · Sayan Gupta	An Integrated Framework for Prioritizing Sustainability Indicators for the Mining Sector with a Multicriteria Decision Making Technique	Operations Research Forum	Volume: Issue No:(2023) 4:5 https://doi.org/10.1007/s43069022- 00188- Page No: Year:2023 Month:Apr

# 4.8.15 Conference: Published in 2022-2023 DOI/ISBN

Author(s) Name	Paper Name	Conference Name	Others Info
Debasree Roy, Kalyan Adhikari, Supriya Pal	In-situ remediation of Arsenic infested soil through Electrokinetic technique	3rd International Conference on Advanced Technologies for Industrial Pollution Control	DOI/ISBN: ISBN: 978-93-5768118-6 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR
Arghya Ghosh, Narayani Gogoi, Suresh A. Kartha, Sandip Mondal	Geochemical Evaluation and Spatiotemporal Distribution of Fluoride in Groundwater of the Sedimentary Alluvial Plain of Bankura District, West Bengal, India	EGU23-9327, Copernicus Meetings, EGU General Assembly 2023	DOI/ISBN: https://doi.org/10.5194/egusphereegu23-9327 Volume: Issue No: Page No: Year:2023 Month:Apr Presenter:CO-AUTHOR

# 4.8.16 Conference: Published in Others

Author(s) Name	Paper Name	Conference Name	Others Info
Nilesh Meshram, Sameer Shafi Ganaie, Kalyan Adhikari	Metalaxyl migration in the alluvial soil of the Nadia district using HYDRUS 3D: a comparison of experimental and simulated data	9th International Groundwater Conference: Effective Management of (sub) surface water resources in arid and semi arid regions Dept. of Hydrology, IIT Roorkee	DOI/ISBN: NA Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:CO- AUTHOR



Author(s) Name	Paper Name	Conference Name	Others Info
Sameer Shafi Ganaie,	Comparative study of migrative	9th International Groundwater	DOI/ISBN: NA
Nilesh Meshram,	behavior of pesticide Metalaxyl	Conference: Effective Management	Volume:
Kalyan Adhikari	through vadose zone via	of (sub) surface water resources in	Issue No: Page No:
	Physical (tank model) and	arid and semi arid regions	Year:2022 Month:Nov
	Numerical (HYDRUS 3D)	Dept. of Hydrology, IIT Roorkee	Presenter:CO-
	modeling		AUTHOR

# 4.8.17 Seminars, Summer/Winter Schools, Short Term Courses Attended

Name of the Programme	Organized By	From Date	To Date	Organizing Country
36th IGC (International Geological Congress)	International Geological Congress	2022-03-20	2022-03-22	India
International Workshop at Institute for Water Resources and Water Supply	Hamburg University of Technology	2022-07-20	2022-07-22	Germany
India-Australia joint workshop On critical minerals research for sustainable transition to green energy	IIT Bombay	2023-03-03	2023-03-04	India
Valuing Low-grade Ore and Waste: Challenges and Remedies (VLOW: CR - 2023)	The Institution of Engineers (India) Durgapur Local Centre	2023-01-21	2023-01-22	India
2nd GWCO / APA & MPA and AEA Assessor's Meet 2022	NABET, New Delhi	2022-08-24	2022-08-26	India

# 4.8.18 Ph.D. Supervisor

Topic Name	Scholar	Supervisor	Status	Date
Synthesis of functionalized magnetic biochar for the removal of emerging contaminants from aqueous medium	Sneha Das	Dr. Sandip Mondal	ONGOING	-
Emerging Contaminants and their Accumulation in Ecosystem of Lower Stretch of Hooghly River	Lokenath Chakraborty	Dr. Sandip Mondal, Dr. Subir Kumar Nag	SUBMITTED	2023- 02-17
Hydrgeochemical and mineralogical evaluation of shallow(<80m) arsenic affected aquifers of Murshidabad district of West Bengal, Eastern India	Rhitwik Chatterjee	Dr. Kalyan Adhikari	ONGOING	-
Optimization of sustainable integrated Municipal Solid Waste Management system through case studies	Arpan Chattopadhyay	Dr. Kalyan Adhikari, Dr. Supriya Pal	ONGOING	-
Development of quantitative tool for assessment of regional sustainability of coal mining area	Vineeta Prasad	Dr. Kalyan Adhikari	ONGOING	-
Assessment of Pestcide transport in soil and groundwater through field study, experiment and modelling	Nilesh Meshram	Dr. Kalyan Adhikari	ONGOING	-
Intensive hydrogeologic intervention to augment cultivable lands in a hardrock alluvium mixed terrain of northern part of Bankura district, India	Sagorika Chakraborty	Dr. Kalyan Adhikari	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Date
Geochemical and temporal	Reeya Ghosh	Manoj Kumar Ozha	ONGOING	-
Evolution of carbonatite in And around purulia area,				
Eastern india: using monaziteapatite geochemistry				
as proxy				

# 4.8.19 Ongoing Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Amount (in Rs.)	Starting Year
Emerging contaminants and their accumulation in  Ecosystem of lower stretch of hooghly river	DR. Sandip Mondal, Prof. Rajnarayan Saha	WBDST	997800.0	2018

# 4.8.20 Testing & Consultancy Services Rendered

Sponsoring Industry / Institute Name	Title of the Project	Total Amount (in Rs.)	Remarks
EOGEPL, Durgapur	Land Subsidence Study at CBM- Raniganj Block	566400.0	Completed (04/04/2022 to 30/06/2022)

## 4.8.21 Reviews of Manuscripts for Publication in Journal

Reviewer	Name of the Journal	Publisher	Date of Final Review
Kalyan Adhikari	Environmental Technology and Innovation	Elsevier	2023-02-28

## 4.8.22 Participation in National Committees/Visits

Name of the Faculty	Name of the Committee	Place of Visit	From Date	To Date
Kalyan Adhikari	Member of Accreditation committee of GWCO, NABET, Quality Council of India	Online / New Delhi	2020-11-01	2024-10-31
Kalyan Adhikari	Member of Expert Committee of Assessment (Earth Science) of UGC Faculty Recharge Programme, Ministry of Education, GOI	Online / New Delhi	2022-11-23	2022-11-24
Shreya Karmakar	2023 Summer Research Fellowship Program for students and teachers, IASc, INSA, NASc	IASc, Bangalore	2023-01-05	2023-01-06

# 4.8.23 Invited Examiners/Paper-Setters/Board of Studies

Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Kalyan Adhikari	UG BOS of Geology	KNU	2020-04-07	2024-04-06
Kalyan Adhikari	External Expert of framing of UG (Geology) syllabus	Bankura University	2022-06-30	2022-06-30

## 4.8.24 Invited Lectures



Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Manoj Kumar Ozha	Alteration halo surrounding radioactive minerals: a proxy to understand fluid assisted alteration	Indo-Australian Joint Workshop on "Critical Minerals Research for Sustainable Transition to Green Energy	IIT BOMBAY	2023-03-03	2023-03-04
Kalyan Adhikari	Invited lecture on Anthropogenic contamination of Groundwater - Case studies at Regional Centre of Central Groundwater Board, GOI, Kolkata	Workshop on Groundwater	CGWB, GOI, Kolkata	2022-06-29	2022-06-29
Kalyan Adhikari	Sustainable Waste Management through Synergistic Utilization	Seminar in Dr. B.C. Roy Engineering College	Durgapur	2022-04-19	2022-04-19

### 4.8.25 Patents

NIL

### 4.9 Department of Humanities and Social Sciences

### 4.9.1 Department at a Glance:

The Department has been in existence since the inception of the Institute in 1960. Stalwarts like Dr Sujit Mohan Chanda, Dr Hirendranath Roy, Mr Arun Kumar Dutta, Dr Debashish Roychowdhury, Dr Kamala Banerjee, Dr Baidyanath Chakrabarti, Dr Partha Pratim Sengupta graced this Department as illustrious Professors. The Department at present has seven faculty members. They are actively engaged in teaching, research, and administration, specializing in various genres of English, Economics, Sociology, and Social Work. It runs PhD program in different disciplines and one PG program in Social Work, besides functioning as a supporting Department in UG programs, offering two core courses and as many as nine open elective courses. The Department regularly organizes academic activities like conferences, seminars, academic talks by eminent persons, GIAN programs, faculty development programs, short-term courses, and workshops, thereby sustaining and whetting the intellectual appetite of the academic community. The Research Scholars of the Department are also dedicated to the wholesome development of the Department, contributing their best to the formation of the academic and cultural identity of the Department.

### 4.9.2 Mission & Vision

#### Mission:

- To achieve excellence in imparting communication skill and to emerge as a centre of excellence in language studies.
- To instil a sense of social awareness and social responsibility by giving exposure to social sciences.
- To enhance decision-making power of budding techno-managers by imparting knowledge of Economics, Management, Social Work, and Literature.

### Vision:

• To emerge as a catalyst of synergy between technical education and social sciences so as to produce value-based social technocrats.

### 4.9.3 Faculty :

Name	Designation	Email-id
Dr Arindam Modak	Associate Professor & Head	hod@hu.nitdgp.ac.in
		arindam.modak@hu.nitdgp.ac.in
Dr Joydeep Banerjee	Associate Professor	joydeep.banerjee@hu.nitdgp.ac.in
Dr Shri Krishan Rai	Associate Professor	shrikrishanrai@hu.nitdgp.ac.in
Dr Debasis Chakraborty	Assistant professor, Grade I	debasis.chakraborty@hu.nitdgp.ac.in
Dr Sutanuka Banerjee	Assistant Professor, Grade I	sutanuka.banerjee@hu.nitdgp.ac.in
Dr Angshu Jajodia	Assistant Professor, Grade II	angshu.jajodia@hu.nitdgp.ac.in
Dr Rinki Chokhani	Assistant professor, Grade II	rinki.chokhani@hu.nitdgp.ac.in

### 4.9.4 Equipments

Sl. No.	Name of the equipment	Date of Purchase	Amount
1	Webcam, Language Lab Software, Headset, Desktop	06-01-2023	Rs 16,88,670/-
	Computer, Network, Electrical Work (14 Nos.) for		
	upgradation of the Language Laboratory		
2	Line Interactive UPS APC 10 nos. for MSW Laboratory	11-10-2022	Rs 33,984/-

#### 4.9.5 Labs:

Sl. No.	Name of Laboratory	Major equipment
1	Language Laboratory	Desktops with Software for acquiring Language Skills
2	MSW Laboratory	Desktops and Projector

### 4.9.6 PhD degree awarded till 2022-23

63

### 4.9.7 Any other relevant information

The Faculty Members of the Department have distinguished themselves in activities like continuing education, conducting of workshops, seminars and conferences, coordinating GIAN programmes, Unnat Bharat, Yuva Sangam, etc. The Department has been offering the compulsory Research Methodology course for all the Research Scholars of the Institute. The Faculty Members have also been offering unique open elective subjects keeping in view the updated requirement in the present professional scenario.

# Besides the regular academic activities, the Department conducted the following activities also. Invited Talks:

- 1. Prof. Himadri Lahiri, Professor (Retd.) of English, University of Burdwan, delivered a lecture on "Research Methodology for English" on 22-07-2022.
- 2. Prof. Sanjay Banerji, Professor of Finance, University of Nottingham, delivered a lecture on "Information Economics and Its Implications" on 27-09-2022.
- 3. Prof. Sukanta Chaudhuri, Professor Emeritus, Jadavpur University, delivered a lecture on "What Is Digital Humanities?" on 10-11-2022.
- 4. Prof. Sukanta Chaudhuri, Professor Emeritus, Jadavpur University, delivered a lecture on "What Shakespeare Wrote?" on 11-11-2022.
- 5. Prof. Edward Hollis, Professor of Architecture, Edinburgh University, delivered a lecture on "Architectural Heritage of Asansol-Raniganj Industrial Belt" on 28-03-2023.
- 6. The Asansol Heritage Research Group conducted a Story-Telling Session on "Cultural Heritage of Asansol-Raniganj Industrial Belt" on 28-03-2023.

### **Memorial Lectures:**

- Prof. Arup Kumar Chattopadhyay, Emeritus Professor of Economics, Sister Nivedita University, Kolkata, delivered the first Dr Baidyanath Chakrabarti Memorial Lecture on the topic, "Economic Implications of COVID-19 Pandemic in India" held on 30-09-2022.
- Dr. Barnita Bagchi, Associate Professor, Utrecht University, delivered the first Prof. Arun Kumar Dutta Memorial Lecture on the topic, "Utopia and Dystopia Today from a Transcultural and Feminist Perspective" held on 05-01-2023.
- Dr. Sukriti Ghosal, Principal (Retd.) of M U C Women's College, Burdwan, delivered the first Prof. Sujit Mohan Chanda Memorial Lecture on the Birth Centenary of the Legendary Professor on the topic, "Mapping the Mutated Face of Culture" held on 15-02-2023.

### 4.9.8 Specialization

- Indian English Literature
- Economics
- English
- · Gender Studies, Cultural Studies, English Literature
- Social Work



- Indian English Literature, Cinema, and Religion
- · Sociology and Social Work
- Economics

### 4.9.9 Proposed Plan for Research

- Integrating the teaching of Language and Literature with Everyday Life Experiences
- · Collaboration with different Institutes

### 4.9.10 Area of Research Interest

- Literature
- Labour Economics, Development Economics, Migration Studies, Agricultural Economics, Urban Economics Literary Theory
- · Gender Studies, Cultural Studies
- Hearing impairment, language acquisition for pre-lingual hearing impaired children, mainstreaming of children with disabilities
- · Gerontology, Dalit Studies, Cinema, Religion, Personality Development
- · Disability, Gender, Caste
- International Economics, Entrepreneurial Practice

## 4.9.11 Institute Industry Collaboration

NIL

### 4.9.12 Collaboration with Academic and Research Institutions

Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
IIT (ISM) Dhanbad	Cultural Studies	Dr. Nirban Manna	Research Supervision
Sido Kanhu Murmu	Writing and	Dr Angshu Jajodia, Dr Animesh	Writing a Project Proposal on
University,	submission of	Dutta, Prof. Anupam Basu, Dr	"UPLIFTTRIBALLIFE: Socio-
Dumka and ESAF LIMS	a Project	Sudipta Mondal, Dr Kaushik	Economic Upliftment of Tribal
(Lahanti	Proposal to	Mandal, Dr Anupam De (all from	Communities through Establishment
Institute of Multiple Skills),	DST	NIT Durgapur), Dr Sutanu Lal	of STI Hubs and Targeted
Dumka		Bondya, Dr Punam Hembrom (from	Interventions" submitted on
		Sido Kanhu Murmu University	12/08/2022 to DST under SEED
		Dumka) and Dr Ajithsen Selvadhas	Division for the STI Hub for ST
		(ESAF LIMS Dumka)	Community

### 4.9.13 Workshops/Seminars Organized

Name of Key Speaker(s)	Name of the Programme	Date of the Programme
Dr Anderson Luis Nunes da Mata	GIAN course on "Decolonial Options in Brazilian Contemporary Literature"	2022-08-22
Prof Sanjukta Dasgupta, Prof Sanjoy Saksena, Dr. Dhananjai Chopra, Prof Dhananjay Singh	National Seminar on "Nationalism and Indian Cinema: Celebrating the Unsung Heroes of Cinema in Azadi Ka Amrit Mahotsav"	2022-06-04
Dr Claudio R. V. Braga	GIAN course on "Apprehending Contemporaneity: a globalized gaze upon Postcoloniality and Diaspora through Chimamanda Adichie's literature"	

# 4.9.14 Journal: Published in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Rai, Shri Krishan and Das Avijit	The Caged Bird Sings: Resilience and Resistance against the Afghan Patriarchal Culture in Nadia Hashimi's One Half from the East	Journal of International Women's Studies	Volume:24 Issue No:6 Page No: Year:2022 Month:Oct
Debasis Chakraborty	Comparative role of income and social inequality in migration decision making: a household level analysis of India	International Journal of Economics and Business Research	Volume:26 Issue No:1 Page No:24-42 Year:2023 Month:
Debasis Chakraborty	Exploring Causality between Domestic Savings and Economic Growth: Fresh Panel Evidence from BRICS Countries	Economic Alternatives, 2023, Issue 1, pp. 48-69	Volume:29 Issue No:1 Page No:48-69 Year:2023 Month:
Ujjal Protim Dutta and Debasis Chakraborty	An Exploration of the Impact of Electricity Consumption on Economic Growth in India using ARDL Cointegration Analysis	Vision: The Journal of Business Perspective	Volume:ONLINE Issue No: Page No:1-14 Year:2022 Month:
Sutanuka Banerjee, Lipika Kankaria	Networking Voices against Violence: Online Activism and Transnational Feminism in Local-Global Contexts	Journal of International Women's Studies	Volume:24 Issue No:2 Page No:1-17 Year:2022 Month:Jun
Lipika Kankaria, Sutanuka Banerjee	Exploring Uncharted Territories: A Study of Bengali Women's Travelogues in the Colonial Period	Asiatic: IIUM Journal of English Language and Literature	Volume:16 Issue No:2 Page No:103-120 Year:2022 Month:Dec
Lipika Kankaria, Sutanuka Banerjee	Negotiating Identity through Travel: Japan through a Bengali Woman's Lens	SIC: Journal of Literature, Culture and Literary Translation	Volume:12 Issue No:1/13 Page No:1-21 Year:2022 Month:Dec
Rai, Shri Krishan and Panda Santanu	Cartographical Representation of Neglected Forms: Traversing from Repression to Reconciliation with Sashi Deshpande's That Long Silence	Journal of Xidian University	Volume: 16 Issue No:4 Page No:297-309 Year:2022 Month:Apr
Oliva Roy, Dr. Joydeep Banerjee	Khaledi Hosseini's And The Mountain Echoed: An Expose of the Hegemonic Power Relation between the Genders in the Legitimise of Social Structure of Hierarchy	The IUP Journal of English Studies	Volume:17 Issue No:4 Page No:14-29 Year:2022 Month:Dec
Rai, Shri Krishan and Panda Santanu	Book Review : THE NUTMEG'S CURSE: PARABLES for A PLANET IN CRISIS	STRAD RESEARCH	Volume:9 Issue No:5 Page No:343-345 Year:2022 Month:May

## 4.9.15 Conference: Published in 2022-2023 DOI/ISBN

Author(s) Name	Paper Name	Conference Name	Others Info
Pallabi Maji & Arindam Modak	Rape: A H (Heinous) E (Execrable) R (Repulsive) O (Objectionable) I (Infamous) C (Contemptible) Act!	International Conference on Malay, Arabic and English Literature	DOI/ISBN: 978-967-256911-4 Volume: Issue No: Page No:840-849 Year:2022 Month:Sep Presenter:CO- AUTHOR

# 4.9.16 Conference: Accepted in Others in 2022-2023

Author(s) Name	Paper Name	Conference Name	Others Info
Pallabi Maji & Arindam Modak	From "Room" to "Independent Living": Survival Story of a Raped Victim in Emma Donoghue's "Room"	The Tenth International Tartu Conference on Canadian Studies	DOI/ISBN: N.A. Volume: Issue No: Page No:N.A. Year:2022 Month:Oct Presenter:CO-AUTHOR



Author(s) Name	Paper Name	Conference Name	Others Info
Pallabi Maji & Arindam Modak	Violence and Silence: Feminist Reading of T. S. Eliot's "The Waste Land"	International Conference on Mapping the Wastelands: Literature and Beyond	DOI/ISBN: N.A. Volume: Issue No: Page No:N.A. Year:2023 Month:Mar Presenter:CO-AUTHOR
Anindita Ghosal & Arindam Modak	Towards a Healing Gaia: The Human NonHuman Entanglement in Eco-Dystopian Japanese Manga "Nausicaa of the Valley of the Wind"	The 19th International Biennial Symposium on Literature and Culture in the Asia-Pacific Region, Literature and the Non- Human: Abrogating the Anthropocene	DOI/ISBN: N.A. Volume: Issue No: Page No:N.A. Year:2022 Month:Nov Presenter:CO-AUTHOR

## 4.9.17 Books Authored

NIL.

# 4.9.18 Seminars, Summer/Winter Schools, Short Term Courses Attended

Name of the Programme	Organized By	From Date	To Date	Organizing Country
The 16th Annual Conference on Asian Studies: Bodies, Gender, Identities	Palacký University Olomouc	2022-11-25	2023-08-26	Czech Republic
ERASMUS + ICM (International Credit Mobility)	European Union	2023-01-15	2023-01-22	Portugal

# 4.9.19 Ph.D. Supervisor

Topic Name	Scholar	Supervisor	Status	Date
Foregrounding Social, Moral and Psychodynamic Perspectives of Empathy: A Study of Indian Graphic Novels	Kabita Mondal	Joydeep Banerjee	DEGREE AWARDED	2022-05- 27
Theatre, Resistance and Activism in Postcolonial India: A critique of emerging Voices of Dissent with special reference to the plays of Utpal Dutt, Vijay Tendulkar and Safdar Hashmi	Oliva Roy	Joydeep Banerjee	ONGOING	-
Impact of Sustainability Issues on Consumer Purchase Decision Making: Special Emphasis on Indian Middle-Class Consumers	Amit Kumar Banerjee	Dr. Debasis Chakraborty & Prof. Partha Pratim Sengupta	ONGOING	-
Implementation And Performance Evaluation Of Enterprise Resource Planning (ERP) In Durgapur Steel Plant, An Integrated Steel Plant In West Bengal, India, Under Steel Authority Of India Ltd	Sumit Ranjan Dasgupta	Dr. Debasis Chakraborty, Prof. Partha Pratim Sengupta, Dr. Anupam De	ONGOING	-
The Spectrum of Global Concerns in the Light of Glocalization: A Study in the Select Plays of Mahesh Dattani	Asoke Howlader	Dr Arindam Modak	SUBMITTED	2022-09- 14
Healing the Trauma of Sexual Abuse: the Health Humanities Approach	Pallabi Maji	Dr Arindam Modak	ONGOING	-
The Yellow Book and the Alternative Literature at the Turn-of-the-Century by New Women Writers and Poets of the Periodical	Satorupa Ghosh Das	Dr Arindam Modak	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Date
From Sight to Insight: Psychopathological Interpretations of Abnormality of Shakespeare's Characters	Md. Abu Barkat Ali	Dr Arindam Modak	ONGOING	-
Visualizing the Entangled Gaia: A Study of Select Eco-Dystopian Graphic Narratives	Anindita Ghosal	Dr Arindam Modak	ONGOING	-
Understanding People's Perceptions through Visual Research Methods in Climate Change Affected Uncertain Landscapes: The Case of Indian Sundarbans and Kutch, Gujarat	Shibaji Bose	Dr Arindam Modak & Prof. (Retd.) Partha Pratim Sengupta	ONGOING	-
Towards Rooted Cosmopolitanism: Exploring Rabindranath Tagore as the Pioneer of Cosmopolitan Nationalism in India	Tanushree Mitra	Dr Arindam Modak & Dr Sutanuka Banerjee	ONGOING	-
Expanding Horizons: A Critical Exploration of Bengali Women's Travel Narratives in English (1915- 1947)	Lipika Kankaria	Dr. Sutanuka Banerjee	ONGOING	-
Performance, Identity and Colonial Modernity in Select Autobiographies of Indian Female Stars	Raju Rana	Dr. Sutanuka Banerjee	ONGOING	-
Negotiating Normative Spaces: Reading Transgressive Bodies in Select Contemporary Indian Narratives in English	Ankita Chatterjee	Dr. Sutanuka Banerjee	ONGOING	-
Towards Rooted Cosmopolitanism: Exploring Rabindranath Tagore as the Pioneer of Cosmopolitan Nationalism in India	Tanushree Mitra	Dr. Arindam Modak, Dr. Sutanuka Banerjee	ONGOING	-
Indian English Fiction and Cultural Studies	Subhasnata Mohanta	Dr. Sutanuka Banerjee, Dr. Rumpa Das	ONGOING	-
Pattachitra and Gender Studies	Somjit Halder	Dr. Sutanuka Banerjee, Dr. Nirban Manna	ONGOING	-
Post 9/11 Fictions	AVIJIT DAS	Dr Shri Krishan Rai	ONGOING	-
Abjection of Women in/and Contemporary Indian English Fiction: A Select Study	SANTANU PANDA	Dr Shri Krishan Rai	ONGOING	-
Cultural Representations and Metaphorical Tropes in Indian Disability Life Writings in English: A Select Study	SHIBU GORAI	Dr Shri Krishan Rai	ONGOING	-
Fiction in the Quantum Realm: The Changing Notions of Reality in Some Select Quantum Fictions	SUMANTA PRAMANIK	Dr Shri Krishan Rai	ONGOING	-
Gerontology and Bengali Cinema	ASHOKE KUMAR MONDAL	Dr Shri Krishan Rai	ONGOING	-
Secularism and Islam: Friction in the Post 9/11 Fictions by Muslim Writers	SOURAV PAUL	Dr Shri Krishan Rai	DEGREE AWARDED	2022-07- 27
Efficiency and Productivity Analysis of India's Iron & Steel Industry: A Comparative Study	Dhiraj Kumar	Dr. Debasis Chakraborty	ONGOING	-
Impact of Energy Consumption on Economic Growth, Human Development and Sustainable Development: A Cross- Country Analysis with Special Reference to India	Titiksha Das	Dr. Debasis Chakraborty	ONGOING	-





# 4.9.20 Reviews of Manuscripts for Publication in Journal

NIL

# 4.9.21 Participation in National Committees/Visits

Name of the Faculty	Name of the Committee	Place of Visit	From Date	To Date
Angshu	Coordinator, GATI Pilot Project Working	NIT Durgapur	2022-08-29	2023-03-31
Jajodia	Committee at NIT Durgapur vide Office Order No.			
	NITD/SRCC/AD/CSE/2021/06/GSAT dated			
	29/08/2022			

# 4.9.22 Invited Examiners/Paper-Setters/Board of Studies

Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Joydeep Banerjee	Gr.III Recruitment (Technical Officer) at CSIR	CSIR	2022-08-09	2022-09-01
Angshu Jajodia	Paper Setter for M.A. 3rd Semester Examination, 2023 in MSW course, Paper-DSEC I (B)	Kanyashree University	2023-02-21	2023-02-21

## 4.9.23 Invited Expert in Selection Committees

Name of the Faculty	Discipline	University/Institute	From Date	To Date
Joydeep Banerjee	English	Sanaka Educational Trust's Group of	2022-12-16	2022-12-16
		Institutions		

## 4.9.24 Invited Lectures

Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Sutanuka Banerjee	Feminist Criticism	Delivered lecture as the PG Academic Counsellor	Netaji Subhas Open University, Durgapur	2022-05-22	2022-05-22
Sutanuka Banerjee	"Complicating Gender: Reflections on Literature, Society, and Culture"	One-day National Webinar	Purbasthali College	2022-05-16	2022-05-16
Angshu Jajodia	Keynote Lecture	International Day of Persons with Disabilities	Banwarilal Bhalotia College, Asansol	2022-12-02	2022-12-02

## 4.9.25 Session Chair/Convenor

Name of the Faculty	Programme	Place	Session	From Date	To Date
Sutanuka Banerjee	Chaired a session in NATIONAL SEMINAR on Nationalism and Indian Cinema: Celebrating The Unsung Heroes of Cinema	NIT Durgapur	Parallel Session II-B	2022-06-04	2022-06-05

## 4.9.26 Patents

NIL

# 4.10 Department of Mathematics

### 4.10.1 Department at a Glance

The department is involved in teaching three mathematics courses to all the disciplines of undergraduate students and various elective courses are also offered to them. We offer two years M.Sc. in Mathematics and Ph.D. programs in mathematics. The department also participates as a coordinating department in the multidisciplinary M.Tech in Operations Research programme with the Department of Management Studies and the Department of Computer Science & Engineering. The broad range of mathematical disciplines we cover include algebra, analysis, differential equations, applied mathematics, theoretical physics and computational sciences.

### 4.10.2 Mission & Vision

#### Mission:

- To create an ambiance in which state-of-the-art undergraduate, postgraduate, and doctoral programmes will flourish.
- To identify different industrial problems through industry- academia interaction and to undertake collaborative projects for long term development.
- To generate human resources with finest capabilities who can emerge as leaders in a range of professions.

#### Vision:

 To be among the best Mathematics departments in the country and to contribute to the nation through quality and value-based education and research in order to meet the needs of the diverse student community and to improve their intrinsic standards.

### 4.10.3 Faculty

Name	Designation	Email-id
Kajla Basu	Professor	kajla.basu@maths.nitdgp.ac.in
Samarjit Kar	Professor	samarjit.kar@maths.nitdgp.ac.in
Seema Sarkar (Mondal)	Professor	seema.sarkar@maths.nitdgp.ac.in
Pinaki Pal	Associate Professor	pinaki.pal@maths.nitdgp.ac.in
Lakshmi Kanta Dey	Associate Professor & Head	lakshmikanta.dey@maths.nitdgp.ac.in
Anita Pal	Associate Professor	anita.pal@maths.nitdgp.ac.in
Sarit Maitra	Associate Professor	sarit.maitra@maths.nitdgp.ac.in
Satya Bagchi	Associate Professor	satya.bagchi@maths.nitdgp.ac.in
Goutam Panigrahi	Assistant Professor	goutam.panigrahi@maths.nitdgp.ac.in
Partha Pratim Gopmandal	Assistant Professor	partha.gopmandal@maths.nitdgp.ac.in
Md Firoz Ali	Assistant Professor	firoz.ali@maths.nitdgp.ac.in

### 4.10.4 Equipments (Newly Added):

Sl. No.	Name of the equipment	Date of Purchase	Amount (INR)
1	Benq Projector	05/04/2022	50197.50/-
2	White Board	15/09/2022	6500/-
3	Canon Printer	15/09/2022	41979.95/-
4	25 Desktop Computers	16/11/2022	1167000/-
5	02 Magnetic Ceramic Green Board	25/11/2022	36000/-
6	Ricoh Multifunction Machine	09/12/2022	139950/-
7	Erase Writing Board	09/01/2023	19970/-
8	Executive Computer Table	10/01/2023	11800/-
9	04 Steel Almirah	10/01/2023	88000/-
10	Executive Computer Table	10/01/2023	31000/-
11	Brother Multifunction Printer	23/01/2023	21923.86/-
12	Brother Printer	23/01/2023	25731/-
13	Acer Laptop	23/01/2023	54746/-
14	07 Computer Systems	23/01/2023	317509.98/-
15	27 Modular Work Stations	30/01/2023	369900/-
16	Throw Multimedia Projector	16/02/2023	42201.51/-
17	Toner Box (Brother)	16/02/2023	21058.79/-
18	Unbranded Writing Board	02/03/2023	4992.50/-
19	Printer Color Cartidge	03/03/2023	12733/-



Sl. No.	Name of the equipment	Date of Purchase	Amount (INR)
20	02 Metal Industrial Switch	03/03/2023	24570/-

### 4.10.5 Labs

Sl. No.	Name of Laboratory	Major equipment
1	Computational Laboratory	Desktop computers

### 4.10.6 PhD degree awarded till 2022-23

100 (one hundred).

### 4.10.7 Any other relevant information

NIL

### 4.10.8 Specialization

- · Fluid Dynamics
- · Functional Analysis
- · Major: Geophysics
- · Computational Fluid Dynamics
- · Algebraic Coding Theory
- Mathematics
- Algebra
- Complex Analysis
- · Operations Research
- · Optimization
- · Nonlinear Waves, Plasma Dynamics, Mathematical Ecology
- · Statistical Analysis and Operations Research

### 4.10.9 Proposed Plan for Research

- · Functional Analysis, Fixed Point Theory, Proximity Theory, Non-linear Analysis, Real Analysis, and Topology
- To develop and study the mathematical models to get insight of the ground deformation due to different types of
  Interacting faults/ To develop real life models on various problems of OR particularly transportation and inventory
  system/ study the problems on prey-predator system
- To investigate the convective instabilities in presence of rotation in electrically conducting fluids. 2. To explore the role of symmetries of complex networks in collective dynamics.
- (a) Electrophoresis/ Diffusiophoresis/ Sedimentation of various type of biocolloids and nanoparticulates, (b) Modulation of electroosmotic flow through microfluidic devices, (c) Streaming potential mediated energy conversion through engineered nanochannel.
- Investigation on Locally Repairable Codes
- · Algebraic Geometry
- · Chemical Graph Theory, Fuzzy Graph Theory, Fuzzy Inventory Model
- To study Geometric Function Theory
- In real world, the disaster may occur at a specified zone in a state. Now different modelling for the supply of essential commodities different topology in travelling salesman problem is considered. We are working on Ring Star, Ring Tree topologies
- · To study nonlinear differential equations using analytic and numerical methods

#### 4.10.10 Area of Research Interest

- Functional Analysis, Fixed Point Theory, Proximity Theory, Non-linear Analysis, Integration Theory, and Geometry of Banach Spaces etc.
- Geophysics (also Operations research & Mathematical Biology)
- Convective instabilities and collective dynamics in complex networks.
- Electrokinetic Transport Phenomena
- · Computational Graph Theory, Fuzzy Mathematics
- · Algebraic Coding Theory



- Group Ring
- Algebraic Geometry
- Complex Analysis
- Combinatorial Optimization
- Nonlinear dynamics

# 4.10.11Institute Industry Collaboration

NIL

## 4.10.12 Collaboration with Academic and Research Institutions

Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
Mahadevananda Mahavidyalaya Barrackpore, Kolkata	Mathematical Biology	Dr. Krishna Pada Das	Joint Research
Hiralal Bhakat College, Naihati, West Bengal	Mathematical Biology	Dr. Banshidhar Sahoo	Joint Research
Vidyasagar University, Midnapur, West Bengal	Operations Research	Prof. Manoranjan Maiti (Retd.)	Joint Research
International Institute of Information Technology, Hyderabad	Collective dynamics in complex networks	Dr. Chittaranjan Hens	Joint Research
Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar	Complex Networks	Dr. Prosenjit Kundu	Joint Research
IIT Kharagpur	Transport of colloidal particle under applied potential gradient	Prof. S. Bhattacharyya	Publication of Research Articles
ISI Kolkata	Transport of colloidal particle under applied potential gradient	Prof. S. Sarkar	Publication of Research Articles
CNRS Nancy, France	Electrophoresis of various type of biocolloids	Prof. JFL Duval	Publication of Research Articles
Tsukuba University, Japan	Electrophoresis of various type of biocolloids	Prof. Y. Adachi	Publication of Research Articles
Tokyo University of Science	Electrophoresis/ Diffusiophoresis of various type of biocolloids	Prof. H. Ohshima	Publication of Research Articles
IIT Madras	Modulation of electroosmotic flow through microfluidic devices	Y Sanyasiraju	Publication of Research Articles
Babeș-Bolyai University, Romania	Functional Analysis	Adrian Petrusel	Research work
Jadavpur University, Kolkata	Functional Analysis	Pratulananda Das	Joint Research & Project
Thammasat University, Thailand	Functional Analysis	Wutiphol Sintunavarat	Research work
University of Lahore, Pakistan	Chemical Graph Theory	Muhammad Imran	Joint Research Paper
Sungkyunkwan University, South Korea	Spectral Graph Theory	Kinkar Chandra Das	Joint Research Paper
School of Basic Sciences, IIT Bhubanehwar	Spectral Graph Theory	Sasmita Barik	Joint Research Paper
Yamaguchi University	Geometric Function Theory	M. F. Ali, H. Yanagihara	Joint Research



Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	s Collaboration Activities
Mugberia Gangadhar Mahavidyalaya	Research	Dr. Kalipada Maity	Taken one student jointly with this faculty member in Operations Research field
Vilnius Gediminas Technical University, Lithuania	Decision-making and Optimization	Romualdas Bausys	Chief Research Fellow

# 4.10.13 Workshops/Seminars Organized

Name of Key Speaker(s)	Name of the Programme	Date of the	
-		Programme	
Prof. P. Das, Jadavpur University; Prof. A.	Annual Foundation School-I	2022-12-12	
Habib, SNU, Delhi; Prof. B. Bhowmik, IIT			
Kharagpur; Prof. D. Ghosh, IIT Kharagpur;			
Prof. V.R Allu, IIT Bhubaneswar.			
Sister B. K. Supriya	Positivity in Negative Situation	2022-11-09	
Swami Chidrupananda Saraswati	Value the Value	2022-08-22	
Dr. K. P. Das	An introduction to basics of nonlinear dynamics and its	2023-03-06	
	application in plankton dynamics		
Prof. Anupam Basu, Prof. Prem Kumar Agarwal,	International Women's Day	2023-03-03	
Dr. Rajni Singh			
Sensei Gopal Kumar Nath	Acts of Resistance: Self Defence Training Workshop	2023-01-07	
Sensei Gopal Kumar Nath	Acts of Resistance: Self Defence Training Workshop	2023-01-08	
Director NITD	B.Tech First Year Induction Programme	2022-11-17	
Sister B.K Supriya	Seminar on Positivity in Negative Situations	2022-11-09	
Prof. K.A Germina	Seminar on on Research Problem in Graph Theory	2022-11-02	
DR. Vasudev Das	Seminar on One-day seminar on Sonic Therapeutic	2022-09-15	
	Intervention for Global Peace and Harmony		
Mr. Avelo Roy	Tips to step your life in 20's	2023-03-23	
Prof. Damodar Gurrappu	Conference on Science Technology and Management-	2022-07-08	
	2022		
	(NCSTM-2022)		
Prof. D Chanda	Webinar on Stochastic Optimization & Machine	2022-07-16	
	Learning		
	(SOME-2022)		

# 4.10.14Journal: Published in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Kar S, Basu K, Sarkar B	Advertisement policy for dual-channel within emissions-controlled flexible production system	Journal of Retailing and Consumer Services	Volume: Issue No: Page No: Year:2023 Month:
Dasgupta C, Maitra S	The electrostatic wave modes and formation of dust voids in an externally magnetized cylindrical dusty plasma	Zeitschrift für Naturforschung	Volume: 77 Issue No:12 Page No:143-151 Year:2022 Month:Dec



Author(s) Name	Paper Name	Journal Name	Others Info
Piu Kundu and Seema Sarkar (Mondal)	Comparison of ground deformation due to movement across three different types of interacting fault models in Burger's rheology	Geomechanics and Geophysics for GeoEnergy and Geo-Resources	Volume:8 Issue No:48 Page No: Year:2022 Month:Apr
Pabita Mahato, Debabrata Mondal and Seema Sarkar (Mondal)	Determination of effect of the movement of an infinite fault in viscoelastic half space of standard linear solid using fractional calculus	Physica Scripta	Volume:97 Issue No:12 Page No: Year:2022 Month:Nov
S Mandal, M Ghosh, P Maity, A Banerjee, and P Pal	Supercritical and subcritical rotating convection in a horizontally periodic box with no-slip walls at the top and bottom	Physics of Fluids	Volume:34 Issue No: Page No:104117 Year:2022 Month:Oct
Susmita Samanta, Paramita Mahapatra, H Ohshima, Partha P Gopmandal	Diffusiophoresis of hydrophobic spherical particles in a solution of general electrolyte	Physics of Fluids	Volume:35 Issue No: Page No:032006 Year:2023 Month:Mar
SK Pal, YVSS Sanyasiraju, H Ohshima, Partha P Gopmandal	A meshless scheme on the electrokinetically driven flow of power-law fluid through nanochannel considering dual effects of heterogeneity in wall charge and surface wettability	Journal of Non- Newtonian Fluid Mechanics	Volume:310 Issue No: Page No:104943 Year:2022 Month:Dec
Paramita Mahapatra, H Ohshima, Partha P Gopmandal	Effect of hydrodynamic slip on the electrophoresis of hydrophobic spherical particles in a solution of general electrolytes	Colloid and Polymer Science	Volume:300 Issue No:12 Page No:1311–1325 Year:2022 Month:Sep
Sourav Chowdhury, Paramita Mahapatra, H Ohshima, Partha P Gopmandal	Electrophoresis of a soft particle with a hydrophobic rigid core decorated with a soft-step and partially ion-penetrable polymer layer	Physics of Fluids	Volume:34 Issue No:11 Page No:112019 Year:2022 Month:Nov
Paramita Mahapatra, H Ohshima, Partha P Gopmandal	Electrophoresis of Dielectric and Hydrophobic Spherical Fluid Droplets Possessing Uniform Surface Charge Density	Langmuir	Volume:38 Issue No:37 Page No:11421-11431 Year:2022 Month:Sep
Dipankar Kundu, S Bhattacharyya, Partha P Gopmandal	Ion partitioning and ion size effects on streaming field and energy conversion efficiency in a soft nanochannel	Colloid and Polymer Science	Volume:300 Issue No:9 Page No:1049- 1062 Year:2022 Month:Sep
Bharti, Sankar Sarkar, H Ohshima, Partha P Gopmandal	Gel electrophoresis of a hydrophobic liquid droplet with an equipotential slip surface	Langmuir	Volume:38 Issue No:29 Page No:8943-8953 Year:2022 Month:Jul
Partha P Gopmandal, Jérôme FL Duval	Electrostatics and electrophoresis of engineered nanoparticles and particulate environmental contaminants: beyond zeta potential-based formulation	Current Opinion in Colloid & Interface Science	Volume:60 Issue No: Page No:101605 Year:2022 Month:Aug
Pragna Labani Sikdar, Samarjit Kar, Parag Kumar Guha Thakurta	Multiobjective energy efficient street lighting framework: A data analysis approach	Applied Intelligence	Volume:52 Issue No:15 Page No:17237-17263 Year:2022 Month:Dec
Raghunathan Krishankumar, Fatih Ecer, Arunodaya Raj Mishra, KS Ravichandran, Amir H Gandomi, Samarjit Kar	A SWOT-Based framework for personalized ranking of IoT service providers with generalized fuzzy data for sustainable transport in urban regions	IEEE Transactions on Engineering Management	Volume: Issue No: Page No: Year:2022 Month:Sep



Author(s) Name	Paper Name	Journal Name	Others Info
Raghunathan Krishankumar, Dragan Pamucar, Alok Pandey, Samarjit Kar, Kattur Soundarapandian Rayichandran	Double hierarchy hesitant fuzzy linguistic information based framework for personalized ranking of sustainable suppliers	Environmental Science and Pollution Research	Volume:29 Issue No:43 Page No:65371-65390 Year:2022 Month:Sep
Raghunathan Krishankumar, Arunodaya Raj Mishra, Pratibha Rani, Edmundas Kazimieras Zavadskas, Kattur Soundarapandian Ravichandran, Samarjit Kar	A new decision model with integrated approach for healthcare waste treatment technology selection with generalized orthopair fuzzy information	Information Sciences	Volume:610 Issue No: Page No:1010-1028 Year:2022 Month:Sep
Haresh Kumar Sharma, Saibal Majumder, Arindam Biswas, Olegas Prentkovskis, Samarjit Kar, Paulius Skačkauskas	A Study on Decision-Making of the Indian Railways Reservation System during COVID-19	Journal of Advanced Transportation	Volume: Issue No: Page No:1-10 Year:2022 Month:Jul
Shanoli Samui Pal, Samarjit Kar	Fuzzy transfer learning in time series forecasting for stock market prices	Soft Computing	Volume:26 Issue No:14 Page No:6941-6952 Year:2022 Month:Jul
Joydeep Dutta, Partha Sarathi Barma, Anupam Mukherjee, Samarjit Kar, Tanmay De, Dragan Pamu čar, Šarūnas Šukevičius, Giedrius Garbinčius	Multi-objective green mixed vehicle routing problem under rough environment	Transport	Volume:37 Issue No:1 Page No:51–63 Year:2022 Month:May
Mohuya Byabartta Kar, Raghunathan Krishankumar, Dragan Pamucar, Samarjit Kar	A decision framework with nonlinear preferences and unknown weight information for cloud vendor selection	Expert Systems with Applications	Volume:213 Issue No: Page No:118982 Year:2023 Month:Mar
Anupam Mukherjee, Patha Barma, Joydeep Dutta ,Goutam Panigrahi	A multi-objective antlion optimizer for the ring tree problem with secondary sub-depots	Operational Research	Volume:22 Issue No:1 Page No:1813-1851 Year:2022 Month:Jul
B Sarkar, S Kar, K Basu, R Guchhait	A sustainable managerial decision- making problem for a substitutable product in a dual-channel under carbon tax policy	Computers & Industrial Engineering	Volume: Issue No: Page No: Year:2022 Month:
Ghosh A, Maitra S	Conservation Laws and New Exact Solutions to The Maccari's Modulation Equations	Physics Scripta	Volume:98 Issue No:3 Page No:035219 Year:2023 Month:Mar
Saikat Roy, Satya Bagchi	Orthogonality of sesquilinear forms and spaces of operators	Linear and Multilinear Algebra	Volume:70 Issue No:19 Page No:4416-4424 Year:2022 Month:May
Pramod Kumar Maurya, Satya Bagchi	Quadratic residue-based unilateral authentication protocol for RFID system	Multimedia Tools and Applications	Volume:82 Issue No: Page No:16533-16554 Year:2023 Month:Mar
Pramod Kumar Maurya, Haradhan Ghosh, Satya Bagchi	MDS code based ultralightweight authentication protocol for RFID system	IEEE Access	Volume:11 Issue No: Page No:10563-10577 Year:2023 Month:Jan

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Author(s) Name	Paper Name	Journal Name	Others Info
Sourav Mondal, Nilanjan De and Anita Pal	Topological Indices of Some Chemical Structures Applied for the Treatment of COVID-19 Patients	Polycyclic Aromatic Compounds	Volume:42 Issue No:4 Page No:1220-1234 Year:2022 Month:Apr
Mukhopadhyay, J., Singh, V. K., Mukhopadhyay, S., Pal, A., & Kumar, A	A truthful budget feasible mechanism for IoT-based participatory sensing with incremental arrival of budget	Journal of Ambient Intelligence and Humanized Computing	Volume:13 Issue No:2 Page No:1107-1124 Year:2022 Month:Aug
Prosanta Sarkar, Nilanjan De and Anita Pal	On some topological indices and their importance in chemical sciences	European Physical Journal Plus	Volume:137 Issue No:2 Page No:195 Year:2022 Month:May
Sourav Mondal, Sasmita Barik, Nilanjan De and Anita Pal	A note on neighborhood first Zagreb energy and its significance as a molecular descriptor	Chemometrics and Intelligent Laboratory Systems	Volume:2022 Issue No:222 Page No:104494 Year:2022 Month:Oct
Sourav Mondal, Biswajit Some, Anita Pal and Kinkar Chandra Das	On Neighborhood Inverse Sum Indeg Energy of Molecular Graphs	Symmetry	Volume:2022 Issue No:14 Page No:2147 Year:2022 Month:Oct
Kartick Mohanta, Anupam Kumar Jha, Arindam Dey, Anita Pal	An application of neutrosophic logic on an inventory model with two – level partial trade credit policy for time –dependent perishable products	Soft Computing	Volume:2023 Issue No:27 Page No:47954822 Year:2023 Month:Oct
M. F. Ali and S. Pal	Pre-Schwarzian norm estimates for the class of Janowski starlike functions	Monatsh. Math.	Volume:201 Issue No: Page No:311-323 Year:2023 Month:
M. F. Ali and M. Nurezzaman	On certain close-to-convex functions	Bull. Aust. Math. Soc.	Volume: Issue No: Page No: Year:2023 Month:
Debnarayan Khatua, Arif Ahmed Sekh, Rintu Kutum, Mitali Mukherji, Bhavana Prasher, Samarjit Kar	Classification of Ayurveda constitution types: a deep learning approach	Soft Computing	Volume:27 Issue No: Page No:5309–5317 Year:2023 Month:Mar
Raghunathan Krishankumar, Arunodaya Raj Mishra, KS Ravichandran, Samarjit Kar, Amir H Gandomi, Romualdas Bausys	An integrated personalized decision approach with probabilistic linguistic context for grading restaurants in India	Applied Soft Computing	Volume:136 Issue No: Page No:110089 Year:2023 Month:Mar
Madhushree Das, Arindam Roy, Samir Maity, Samarjit Kar	A Quantum-inspired Ant Colony Optimization for solving a sustainable fourdimensional traveling salesman problem under type-2 fuzzy variable	Advanced Engineering Informatics	Volume:55 Issue No: Page No:101816 Year:2023 Month:Jan
Komal Soni, Debi Prosad Dogra, Arif Ahmed Sekh, Samarjit Kar, Heeseung Choi, Ig-Jae Kim	Person re-identification in indoor videos by information fusion using Graph Convolutional Networks	Expert Systems with Applications	Volume:210 Issue No: Page No:118363 Year:2022 Month:Dec
Sanjit Bhowmick, Ramakrishna Bandi, Satya Bagchi	LCD Matrix product codes with an application	Discrete Mathematics, Algorithms and Applications	Volume:15 Issue No:4 Page No:2250104 Year:2022



Author(s) Name	Paper Name	Journal Name	Others Info
			Month:Apr
Prasanta Kumar Ghosh, Amalesh Kumar Manna, Jayanta Kumar Dey, Samarjit Kar	An EOQ model with backordering for perishable items under multiple advanced and delayed payments policies	Journal of Management Analytics	Volume:9 Issue No:3 Page No:403-434 Year:2022 Month:Jul
Madhushree Das, Arindam Roy, Samir Maity, Samarjit Kar, Shatadru Sengupta	Solving fuzzy dynamic ship routing and scheduling problem through new genetic algorithm	Decision Making: Applications in Management and Engineering	Volume:5 Issue No:2 Page No:329-361 Year:2022 Month:Oct
Ibrahim M Hezam, Arunodaya Raj Mishra, R Krishankumar, KS Ravichandran, Samarjit Kar, Dragan Stevan Pamucar	A single-valued neutrosophic decision framework for the assessment of sustainable transport investment projects based on discrimination measure	Management Decision	Volume:61 Issue No:2 Page No:443-471 Year:2023 Month:Mar
Prasanta Kumar Ghosh, Amalesh Kumar Manna, Jayanta Kumar Dey, Samarjit Kar	Optimal production run in an imperfect production process with maintenance under warranty and product insurance	OPSEARCH	Volume: Issue No: Page No:1-33 Year:2023 Month:Mar
Amrita Bhattacharya, Avijan Dutta, Samarjit Kar	Does demographics influence the risk behaviour of urban investors? A machine learning model based approach	Operational Research in Engineering Sciences: Theory and Applications	Volume:5 Issue No:2 Page No:190-205 Year:2022 Month:Apr
Joydeep Dutta, Partha Sarathi Barma, Anupam Mukherjee, Samarjit Kar, Tanmay De	A hybrid multi-objective evolutionary algorithm for open vehicle routing problem through cluster primary-route secondary approach	International Journal of Management Science and Engineering Management	Volume:17 Issue No:2 Page No:132-146 Year:2022 Month:Apr
Manas Kumar Mohanty, Parag Kumar Guha Thakurta, Samarjit Kar	Efficient sensor node localization in precision agriculture: an ANN based framework	OPSEARCH	Volume: Issue No: Page No:1-24 Year:2023 Month:Feb
Harinandan Tunga, Samarjit Kar, Debasis Giri	Intrinsic Profit Maximization of the Offloading Tasks for Mobile Edge Computing with Fixed Memory Capacities and Low Latency Constraints Using Ant Colony Optimization	Mathematical Modelling of Engineering Problems	Volume:9 Issue No:3 Page No: Year:2022 Month:Jun
Sibnath Deb, Samarjit Kar, Shayana Deb, Sanjib Biswas, Aehsan Ahmad Dar, Tusharika Mukherjee	A cross-sectional study on mental health of school students during the COVID-19 pandemic in India	Data	Volume:7 Issue No:7 Page No:99 Year:2022 Month:Jul
Arindam Dey and Anita Pal	Types of fuzzy graph coloring and polynomial ideal theory	International Journal of Advance Intelligence Paradigms	Volume:23 Issue No:1 Page No:146-154 Year:2022 Month:Sep

# 4.10.15 Journal: Accepted for Publication in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Sourav Mondal, Muhammad Imran,	Topological Indices of Total Graph and	Complexity	Volume: Issue No: Page No: Year:2023 Month:Jun
Nilanjan De and	Zero Divisor Graph of Commutative Ring:  A Polynomial Approach		Year:2023 Month:Jun
Anita Pal			

### 4.10.16Journal: Published in Others in 2022-2023

Author(s) Name	Paper Name	Journal Name	Others Info
Yanfei Lan, Pingping Lu, Chen Pan, Sarmajit Kar, Weifeng Li	The effects of medical insurance and patients' preference on manufacturer encroachment in a pharmaceutical supply chain	Journal of Management Science and Engineering	Volume:7 Issue No:2 Page No:243-265 Year:2022 Month:Jun

## 4.10.17Conference: Published in 2022-2023 DOI/ISBN

Author(s) Name	Paper Name	Conference Name	Others Info
Deep Mukhopadhyay, Kalyan Hansda, Satya Bagchi  Haradhan Ghosh, Pramod Kumar Maurya, Satya Bagchi	Some Properties and Constructions of Weakly Self Dual LRCs  Secret Sharing Scheme: Based on LCD Code	IEEE International Conference on Signal Processing and Communications (SPCOM)  International Interdisciplinary Conference on Mathematics, Engineering and Science (MESIICON)	DOI/ISBN: 10.1109/SPCOM55316.2022 Volume: Issue No: Page No: Year:2022 Month:Jul Presenter:SELF DOI/ISBN: 10.1109/MESIICON55227.2022 Volume: Issue No: Page No: Year:2022 Month:Nov
Ratnabali Pal, Samarjit Kar, Arif Ahmed Sekh	What and Why? Interpretability in Colon Cancer Detection	Proceedings of International Conference on Data Science and Applications: ICDSA 2022	Presenter:CO-AUTHOR  DOI/ISBN: https://doi.org/10.1007/978- 98119-6631-6 Volume: Issue No: Page No:771-780 Year:2023 Month:Feb Presenter:SELF
JN Roul, K Maity, S Kar, M Maiti	Optimal control of complementary and substitute items in a production system for infinite time horizon	3rd International Conference on Engineering Mathematics and Computing (ICEMC 2020)	DOI/ISBN: https://doi.org/10.1007/978- 98119-2300-5 Volume: Issue No: Page No:117-141 Year:2022 Month:Oct Presenter:SELF
Avijit De, Samarjit Kar, Sujit Das	Development of Fuzzy-Based Methodologies for Decision- Making Problem	Intelligent Technologies: Concepts, Applications, and Future Directions	DOI/ISBN: https://doi.org/10.1007/978- 98119-1021-0 Volume: Issue No: Page No:281-312 Year:2022 Month:May Presenter:SELF

4.10.18Conference: Published in Others in 2022-2023

NIL.

4.10.19Conference: Accepted in Others in 2022-2023

NIL.

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## 4.10.20Books Authored

NIL.

# 4.10.21Seminars, Summer/Winter Schools, Short Term Courses Attended

Name of the Programme	Organized By	From Date	To Date	Organizing Country
International Conference on Nonlinear Applied Analysis and Optimization	IIT BHU	2022-12-19	2022-12-22	India
BIOMETERICS- Theory and Applications	Department of Mathematics, NITD	2022-09-12	2022-09-12	India
Science, Philosophy and Education	NITD in collaboration with Tagore Centre for Natural Science and Philosophy, Kolkata.	2022-11-04	2022-11-04	India
One day Lecture on Graph Theory	Department of Mathematics, NITD	2022-11-22	2022-11-22	India
International conference on Modelling, Analysis and simulation of multiscale transport phenomena	IIT Kharagpur	2022-08-25	2022-08-27	India
"Series of Lecture on Electrokinetic transport of colloidal suspension and separation of ionic species: from fundamentals to applications"	Graduate school of Life and Environmental Sciences, University of Tsukuba, Japan	2023-03-28	2022-08-31	Japan
Invited Lecture on Hydrodynamic Interaction of Motors in Fluid Membranes	Department of Mathematics, NITD.	2023-01-12	2023-01-12	India
IEEE International Conference on Signal Processing and Communications (SPCOM)	IISc Bangulore	2022-07-11	2022-07-15	India
National Webinar on "Solving Real Life Problems with Non-Linear Optimization Models" (NOMO-2022)	ORSI Durgapur	2022-04-24	2022-04-24	India
National Conference on Science Technology and Management-2022 (NCSTM-2022)	NSHM Knowledge Campus in collaboration with ORSI Durgapur Chapter	2022-07-08	2022-07-09	India
One week Faculty Development Programme on "National Education Policy -2020	Teaching Learning Centre, Ramanujan College, University of Delhi	2023-06-25	2022-07-01	India
37th Annual Conference of Ramanujan Mathematical Society	Sri Sivasubramaniya Nadar College of Engineering	2022-12-06	2022-12-08	India
Optimization, Learning and Analytics in Business (OLAB 2022)	Department of Mathematics, Heritage Institute of Technology Kolkata and Operational Research Society of India, Calcutta Chapter	2023-12-15	2023-12-17	India
Workshop On Design Thinking Critical Thinking	Mugberia Gangadhar Mahavidyalaya	2023-03-31	2023-08-31	India

# 4.10.22Ph.D. Supervisor

Topic Name	Scholar	Supervisor	Status	Status Date
Topological Fixed-Point Theory	Ashis Bera	Lakshmi Kanta Dey	DEGREE	2022-
			AWARDED	07-18

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Topic Name	Scholar	Supervisor	Status	Status Date
Topology and Nonlinear Analysis	Supriti Laha	Lakshmi Kanta Dey	ONGOING	-
Topological Fixed-Point Theory	Subhadip Pal	Lakshmi Kanta Dey	ONGOING	-
Non-linear analysis	Anish Banerjee	Lakshmi Kanta Dey	ONGOING	-
Integration theory	Raja Dutta	Lakshmi Kanta Dey	ONGOING	-
Some Two-stage Four-dimensional Transportation Problems in Uncertain Environment	Sudeshna Devnath	Prof. Seema Sarkar (Mondal), Prof. Manoranjan Maiti (Retd.	ONGOING	-
Mathematical Modelling for the Control of Infectious Diseases	Argha Roy	Dr. Seema Sarkar (Mondal), Dr. Banshidhar Sahoo	ONGOING	-
Study of Deformation due to Planar and Non-planar Fault Movement in Viscoelastic Half Space	Pabita Mahato	Dr. Seema Sarkar (Mondal)	ONGOING	-
Broad Topic: Nonlinear Dynamics	Anirban Sen	Dr. Seema Sarkar (Mondal)	ONGOING	-
Broad Topic: Seismology	Soubik Chanda	Dr. Seema Sarkar (Mondal)	ONGOING	-
Broad topic: Mathematical Biology	Sanjukta Pramanik	Dr. Seema Sarkar (Mondal), Dr. Krishna Pada Das, Dr. Partha Karmakar	ONGOING	-
Broad topic: Seismology	Tanushree Biswas	Dr. Seema Sarkar (Mondal)	ONGOING	-
Transitions near the onset of magnetoconvection	Lekha Sharma	Pinaki Pal	ONGOING	-
Effect of rotation and magnetic field on some convective instabilities	Sutapa Mandal	Pinaki Pal	ONGOING	-
Synchronization in Complex networks: Role of structural properties	Sangita Dutta	Pinaki Pal	ONGOING	-
Convective instabilities in presence of rotation and oblique magnetic field	Snehashish Sarkar	Pinaki Pal	ONGOING	-
Spreading of information in complex networks	Abhijit Mondal	Pinaki Pal	ONGOING	-
Ecological Modelling	Anath Bandhu Das	Pinaki Pal	ONGOING	-
Electrokinetics of bio-inspired nanoparticles.	Paramita Mahapatra	Partha Pratim Gopmandal	ONGOING	-
Electrophoresis of bio-colloids and electroosmotic flow through microdevices	Sourav Chowdhury	Partha Pratim Gopmandal	ONGOING	-
Electroviscous effects of colloidal suspension	Susmita Samanta	Partha Pratim Gopmandal	ONGOING	-
Controlled transport of colloidal particles under applied potential gradient	Jhulan Acharya	Partha Pratim Gopmandal	ONGOING	-
Linear complementary dual codes over finite commutative Frobenius rings	Sanjit Bhowmick	Satya Bagchi, R Bandi	DEGREE AWARDED	2022- 09-22
Algebraic Characterization of Some Linear Codes via Group Codes	Ankan Shaw	Satya Bagchi	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status Date
Locally Repairable Codes: Constructions and Properties	Deep Mukhopadhyay	Satya Bagchi	ONGOING	-
Radio Frequency Identification Protocols Using Linear Codes	Haradhan Ghosh	Satya Bagchi	ONGOING	-
Study on some graph invariants and their applications	Sourav Mondal	A. Pal and N. De	DEGREE AWARDED	2022- 11-02
A Study on Graph Optimization Problems in Uncertain Environment.	Kartick Mohanta	A. Pal	ONGOING	-
Study of topological indices in drug manufacturing.	Biswajit Some	A. Pal	ONGOING	-
A Study on Invariants and Energy of graphs.	Parikshit Das	A. Pal	ONGOING	-
Studies on sustinable supply chain management	Sumi Kar	A. Pal and B. Sarkar	ONGOING	-
Study On Spectral Graph Theory	Saroj Ghosh	A. Pal	ONGOING	-
Pre-Schwarzian and Schwarzian derivatives for analytic functions	Sanjit Pal	Md Firoz Ali	ONGOING	-
Pre-Schwarzian and Schwarzian derivatives for harmonic functions	Sushil Pandit	Md Firoz Ali	ONGOING	-
Coefficient Inequalities for certain univalent functions	Md Nurezamman	Md Firoz Ali	ONGOING	-
On bounded functions	Lokenath Thakur	Md Firoz Ali	ONGOING	-
Univalent functions	Shaesta Azim	Md Firoz Ali	ONGOING	-
Newsboy problem under some Uncertain Paradigms	Krishnendu Adhikary	Prof. Samarjit Kar	DEGREE AWARDED	2022- 08-10
Rough Set Theory	Sandeep Majumder	Prof. Samarjit Kar	SUBMITTED	2022- 07-14
Intelligent video analysis for visually impaired people	Ratnaboli Pal	Prof. Samarjit Kar	ONGOING	-
Optimal Control Theory	Debopriya Dey	Prof. Samarjit Kar and Prof. Dilip Kumar Bhattacharya	ONGOING	-
Portfolio Optimization	Bikash Koli Roy	Prof. Samarjit Kar	ONGOING	-
Supply Chain Management	Aparna Adhikary	Prof. Samarjit Kar and Dr. Jayanta Kumar Dey	ONGOING	-
Some real life decision making problems in different imprecise environment	Palash Sahoo	Goutam Panigrahi, Dipak Kumar Jana	DEGREE AWARDED	2022- 04-29
Nonlinear differential equations	Arindam Ghosh	Sarit Maitra	ONGOING	-
Stability, bifurcation and control of predator-prey models	Rajesh Ranjan Patra	Sarit Maitra	ONGOING	-

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Topic Name	Scholar	Supervisor	Status	Status Date
Linear and nonlinear wave propagation in dusty and astrophysical plasmas	Chitrita Dasgupta	Sarit Maitra	ONGOING	2023- 03-31
Birkhoff-James Orthogonality in the Geometry of Banach Spaces and Some Related Topics	Saikat Roy	Satya Bagchi	DEGREE AWARDED	2022- 06-22

# 4.10.23Ongoing Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Amount (in Rs.)	Starting Year
Rotating and magnetized double-diffusive convection	Pinaki Pal	Science and Engineering Research Board, Government of India	2431264.0	2022
"Development of hybrid numerical tools to study the electrokinetic transport of biocolloids"	Partha Pratim Gopmandal	SERB, DST	6.6	2019
Investigation on Locally Repairable Codes	Satya Bagchi	Science and Engineering Research Board, DST, India	660000.0	2022

# 4.10.24Completed Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Complete Year
Dual Hamming Distance of two Weighted Codes from	Satya Bagchi & Lakshmi Kanta Dey	NBHM under DAE	2022
Trace Codes over a Chain Ring			
"Modulation of electroosmotic flow through	Partha Pratim	SERB, DST	2018
nanochannel"	Gopmandal		

# 4.10.25 Reviews of Manuscripts for Publication in Journal

Reviewer	Name of the Journal	Publisher	Date of Final Review
Lakshmi Kanta Dey	Fixed Point Theory	House Book Sci., ClujNapoca, Romania	2023-03-30
Lakshmi Kanta Dey	HELIYON	Elsevier	2023-03-25
Lakshmi Kanta Dey	MR Review	AMS	2022-10-31
Lakshmi Kanta Dey	Journal of Applied Mathematics and Computing	Springer	2022-09-27
Seema Sarkar (mondal)	GEM-International journal on Geomathematics	Springer Nature publication.	2022-04-03
Partha Pratim Gopmandal	Journal of Colloid and Interface Science	Elsevier	2022-11-06
Partha Pratim Gopmandal	Langmuir	ACS	2023-01-01
Partha Pratim Gopmandal	Physics of Fluids	AIP	2022-09-14
Pinaki Pal	Chaos, Soliton & Fractals	Elsevier	2022-11-20
Pinaki Pal	Pramana - Journal of Physics	Indian Academy of Sciences	2022-10-09
Satya Bagchi	Journal of Ambient Intelligence and Humanized Computing	Springer	2022-05-05



Reviewer	Name of the Journal	Publisher	Date of Final Review
Satya Bagchi	Transactions on Information Forensics & Security	IEEE	2022-11-15
Md Firoz Ali	Turkish Journal of Mathematics	Scientific and Technological Research Council of Turkey	2023-02-07
Md Firoz Ali	Abstract and Applied Analysis	Hindawi	2023-01-06
Md Firoz Ali	Hacettepe Journal of Mathematics and Statistics	Hacettepe University	2022-06-14
Md Firoz Ali	Bulletin of the Malaysian Mathematical Sciences Society	Springer	2022-09-06

# 4.10.26 Participation in National Committees/Visits

Name of the Faculty	Name of the Committee	Place of Visit	From Date	To Date
Seema Sarkar	Committee formed by the Commission for	Sister Nivedita	2023-01-16	2023-01-20
(mondal)	Scientific and	University,		
	Technical Terminology, Ministry of Education,	New Town,		
	Government of India	Kolkata		
Satya Bagchi	Member of Constitution of Doctoral Committee	Online	2021-09-14	2023-08-08
	- VIT-AP University of Mr. Umesh Uttamrao			
	Shinde			
Satya Bagchi	External expert of Doctoral Committee member	Online	2021-02-14	2023-08-08
	of Mr. N.			
	Abhilash, Dept of Maths, SRMIST,			
	Kattankulathur, Tamilndu, India			
Satya Bagchi	External examiner of Doctoral Committee	Online	2022-06-21	2023-08-08
	member of Mr.			
	Melvin Varghese, Dept of Maths, SRMIST,			
	Kattankulathur, Tamilndu, India			
Satya Bagchi	External expert of Doctoral Committee member	Online	2022-02-14	2023-08-08
	of Mr. Abin Sam Tharakan, Dept of Maths,			
	SRMIST, Kattankulathur, Tamilndu, India			

# 4.10.27Invited Examiners/Paper-Setters/Board of Studies

Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Lakshmi Kanta Dey	Examiner of End term Examination	Netaji Subhas Open University	2023-06-01	2023-06-30
Partha Pratim Gopmandal	PG (Mathematics)	Kaji Nazrul University	2022-07-13	2022-12-31
Anita Pal	Ph.D. Thesis Evaluation	Manonmaniam Sundaranar University	2022-04-11	2022-04-11
Anita Pal	Ph.D. Thesis Evaluation	Manonmaniam Sundaranar University	2022-07-04	2022-07-04
Anita Pal	Ph.D. Thesis Evaluation	University of Madras	2022-08-22	2022-08-22
Anita Pal	Ph.D. Thesis Evaluation	Bharathidasan University, Tiruchirappalli, Tamilnadu	2022-11-03	2022-11-03
Anita Pal	Ph.D. Thesis Evaluation	Bharathidasan University, Tiruchirappalli, Tamilnadu	2022-12-22	2022-12-22
Anita Pal	P.hD. Thesis Evaulation	University of Madras	2023-02-01	2023-02-01

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Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Anita Pal	Ph.D. Thesis Evaluation	Anna University, Chennai	2023-02-03	2023-02-03
Anita Pal	Ph.D. Thesis Evaluation	Anna University, Chennai	2023-02-03	2023-02-03
Anita Pal	Ph.D. Thesis Evaluation	Anna University, Chennai	2023-02-01	2023-02-01
Anita Pal	Ph.D. Thesis Evaluation	University of Madras	2023-02-06	2023-02-06
Anita Pal	Ph.D. Thesis Evaluation	Presidency University, Bengaluru	2023-02-21	2023-02-21
Anita Pal	Ph.D. Thesis Evaluation	Thiruvalluvar University, Vellore	2023-02-22	2023-02-22
Md Firoz Ali	Engineering Mathematics	Saveetha University	2022-10-18	2022-10-18

# 4.10.28Invited Expert in Selection Committees

Name of the Faculty	Discipline	University/Institute	From Date	To Date
Seema Sarkar (mondal)	Mathematics	Jadavpur University	2022-09-28	2022-09-28
Seema Sarkar (mondal)	Mathematics	For Recruitment of Primary Teachers under West Bengal Board of Primary Education	2023-01-14	2023-01-14
Lakshmi Kanta Dey	Assistant Teacher Selection	DAV Model School Durgapur	2023-04-22	2023-04-23

# 4.10.29Invited Lectures

Name of the	Title of the Lecture	Programme	Place	From Date	To Date
Faculty					
Lakshmi	RIEMANN	International Conference on	IIT BHU	2022-12-19	2022-12-22
Kanta Dey	INTEGRATION IN	Nonlinear Applied Analysis			
	BANACH SPACES AND	and Optimization			
	THE PROPERTY OF				
	LEBESGUE				
Seema Sarkar	Stochastic Optimization	One Day National Seminar	Durgapur	2022-07-16	2022-07-16
(mondal)					
Satya Bagchi	Linear codes with	Annual Foundation School –	NIT	2022-12-20	2022-12-20
	complementary duals	Ι	Durgapur		
Anita Pal	Modelling of Real Life	International Conference on	Mount	2022-04-21	2022-04-22
	Problems Using Graph	Emerging Trends in Applied	Carmel		
	Theoretic Approach	Mathematics	College,		
			Bengaluru		
Anita Pal	The Importance of Research	Fundamental Research Using	Dr. B. C.	2022-06-20	2022-06-20
	and ORSID's Contribution	Application Software	Roy		
	in This Field		Engineering		
			College,		
			Durgapur		
Anita Pal	Computer Information	International Conference on	Universidad	2022-07-15	2022-07-17
	Systems and Industrial	Computer Information	De La		
	Management-CISIM		Costa,		
			Colombia		



Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Anita Pal	Graph Theory and Its RealLife Applications	5-Days National Workshop on Recent Research Trends in Computer Science and Engineering	VIT AP University	2022-07-26	2022-07-30
Anita Pal	Graph Theory - Applications	Refresher Course in Mathematics and Statistics	Bharathiar University, Tamilnadu	2022-08-02	2022-08-02
Anita Pal	Optimization Using Graph Theory	Two days' workshop on Application of Optimazation Techniques in Engineering and Social Sciences	NSHM Knowledge Campus, Durgapur	2022-11-18	2022-11-18
Anita Pal	Modelling of Graphs in Real Life	International Conference on Green Supply Chain Management: New Challenges to Sustain Green Environment	Kazi Nazrul University	2022-11-19	2022-11-19
Anita Pal	Graph Theory	2nd International Conference on Intelligent Vision and Computing (ICIVC 2022)	NIT Agartala	2022-11-26	2022-11-26
Anita Pal	Fuzzy graph theory and its applications	International Conference on Applied Mathematics and Computing	DDGD Vaishnav College, Chennai	2023-02-27	2023-02-28

### 4.10.30Session Chair/Convenor

Name of the Faculty	Programme	Place	Session	From Date	To Date
Lakshmi Kanta Dey	International Conference on Nonlinear Applied Analysis and Optimization	IIT BHU	Technical Session-II	2022-12-20	2023-07-20

### 4.10.31Patents

Title	Inventors	Application Nos	Date of Filling
Flying Network Secured	Dr. K.P Manikandan, Saibal	202241062969	2022-11-03
Communication with Machine	Majumder, Debosree Pal, Goutam		
Learning Enabled Environment	Panigrahi, Swapna Halder, Dr. M. Ruban		
	Dr. T. N Anitha		

# 4.11 Department of Mechanical Engineering

### 4.11.1 Department at a Glance:

Department of Mechanical Engineering is the second largest and one of the oldest Departments of the Institute started in the year 1960. It offers both undergraduate (B.Tech.) and postgraduate (M.Tech.) degree courses apart from doctoral programme.

The annual intake of the UG course is 187+ and that of the PG course is 20 for three specializations each, totaling 60(app.). At present about 55 students are doing their doctoral research in the department. The department comprises of well-qualified faculty members, supporting staff and well-equipped laboratories. The continuous development of faculty and upgradation of the laboratories makes the department at per with the current day academic and research requirement of global standard which is reflected by continuously increasing student of the department opting for higher studies in India and abroad.



Department of Mechanical Engineering offers three PG courses with different specializations: Machine Design, Thermal Engineering, Fluid Mechanics & Heat transfer.

### 4.11.2 Mission & Vision

### Mission:

- Imparting quality education to the students and enhancing their skills to make them globally competitive mechanical engineers.
- Maintaining state-of-the art research facilities for providing our students and faculties with opportunities to innovate, interpret, apply and disseminate their knowledge.
- To develop linkages with reputed R&D organization, Institutes and Industries world-wide through education and research.

### Vision:

 Advancement of the society through excellence in teaching, research and innovation and services that exploits the rapidly changing technical diversity of Mechanical Engineering

## 4.11.3 Faculty

Name	Designation	Email id (Institute & other id)
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		sayantan.sengupta@me.nitdgp.ac.in

## 4.11.4 Patents

NIL

# 4.11.5 Equipments

Sl. No.	Name of the equipment	Date of Purchase	Amount
1	Data acquisition System	11-04-2022	325741.50
2	Photochemical Etching Machine	17-03-2023	1,83,490/-
3	GAS METAL ARC WELDING	28 March 2023	1,35,700/-
4	Gas Tungsten Arc welding	28 March 2023	1,28,620/-
5	Vertical Ram Turret Milling Machine	29 March 2023	6,37,700/-
			(Alumni Fund)
6	Submerged Arc Welding Machine	29 March 2023	4,17,001/-
			(Alumni Fund)
7	Stefan Boltzmann Apparatus	14th March 2023	28,900.00
8	Pin Fin Apparatus	14th March 2023	29,500.00
9	Parallel Flow/ Counter flow Apparatus	14th March 2023	29,500.00
10	Natural Convection Apparatus	14th March 2023	29,500.00

# 4.11.6 Labs

Sl. No.	Name of Laboratory	Major equipment
1.	Heat power	Heat conduction unit, Heat exchanger, Natural convection, Forced convection, Vacuum gauge, Stefan-Boltzmann apparatus, Automobile Laboratory, Boiler, Separating & Throttling Calorimeter, Variable CR multifuel IC Engine test rig, Variable CR Diesel Engine test rig, Morse test, Rope brake dynamometer, Air compressor test rig, Convective heat transfer over Artificial roughness, Liquid crystal thermography system
2.	Hydraulics and Fluid Mechanics Laboratory	Impact of Jet, Determination of Pipe friction, Determination of Minor Losses, Determination of Coefficient of Discharge in orifice & venture meter, Determination of coefficient of discharge in open channel flow, Performance test of Pelton Turbine, Performance test of Francis Turbine, Performance test of Kaplan Turbine, Performance test of Centrifugal Pump, Performance test of Reciprocating Pump.
3.	Thermal Engineering Laboratory	Fluidization and fluid bed heat transfer unit, Computer linked Refrigeration Laboratory unit, Air conditioned Laboratory unit Cross flow heat exchanger unit
4.	Production Laboratory	Lathe Machine, drilling Machine, welding equipment etc.
5.	CAD CAM Laboratory	CATIA, MSCNASTRAN, ANSYS, MSC.PATRAN, MSCEASY MSCADAMS, MATLAB CNC Vertical Machining Center, XY Positioning Table
6.	Machine dynamics Laboratory	Twin rotor MIMO system, Digital pendulum system, Precision modular servd workshop, Dynamic balancing machine, 3-axis gyroscope, Mechanical power transmission system, FFT analyser, Soccer robot set-up
7.	Metrology Laboratory	Tool Maker's Microscope, Floating Carriage Micrometer, Strain Measuring Device, Surface roughness measuring instrument.

### 4.11.7 PhD degree awarded till 2022-23

Ten.

### 4.11.8 Any other relevant information

NIL

### 4.11.9 Specialization

- · Thermofluids
- · Manufacturing Engineering
- Mechanical Engineering (Fluid Dynamics)
- · Robotics, Dynamics and Control, Soft Computing, Data Analytics
- · Thermal Engineering
- Thermal and Fluid Engineering
- · Thermal Engineering
- · Non-conventional Machining
- · Fluid Mechanics Heat Transfer
- · Machine Design
- · Manufacturing Engineering
- · Machine Design
- · Machine Design, Mechanical Engineering
- · Fluid and Thermal Engineering
- · Machine Design
- · Thermoacoustic instability
- · Production Engineering, Micro and Nano Scale Manufacturing
- · Fluid Mechanics
- · Thermal and Fluids Engineering
- · Control System
- · Production Engineering, Non-conventional Machining
- · Thermal Engineering
- · Solid Mechanics, Mechanics of Composite Materials, FEM
- Machine Design
- Thermal Engineering
- · Heat Power Engineering
- Machine Design, Modeling & Simulation
- Mechanical Engineering
- · Theory of Machines, Hydraulic Machines
- · Thermal Engineering
- · Mechanical Engineering
- Thermal Science and Engineering
- · Machine tool, machining, modeling and simulations
- · Machine tool, Machining, Production Engineering
- · Machine design

### 4.11.10 Proposed Plan for Research

- · Additive Manufacturing
- Friction Stir Welding
- Unmanned decision support systems
- · Working on Law of Motive Force as Discovered and Documented by Achintya Kumar Pramanick
- · Computation and experimentation on viscous instability through porous medium
- · Mixing and transport in active flows of biological systems
- · Numerical work
- Performance analysis of solar air heater using artificial roughness over absorber plate
- Performance test of CI engine using BIodiesel
- Set up a high speed aerodynamics lab.
- · Dynamics of cracked structures (beams, shafts, rotors, turbine blades and pipes) made of FGMs.
- · Friction Stir Welding
- Tribology of Machine components
- Defect Diagnosis of gear and bearing, Mathematical model of gear and bearing

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- Dynamics and control of flow past elliptic cylinders
- Analytical and semi-analytical solution techniques of problems of Dynamics, Vibration and Control, Investigation of the non-autonomous and autonomous dynamics and stability thereof. Analyses of primary and higher order subharmonic and super harmonic responses, Investigation of bifurcation behavior of Mechanical and Structural Vibration problems.
- · Study of Vortex Tube, Performance of Wind Turbine and optimum design of 3-D Diffuser.
- Developing set ups for micro scale manufacturing for semi conductor chips. Specifically Photochemical Etching, Hot Embossing, Laser Marking. Also aiming to develop set ups for large area fabrication for practical applications
- · Numerical Investigation of Multiphase Flow
- Analysis of Composite Laminated structures
- · Additive manufacturing
- · Plasticity of materials
- · Guiding UG, PG & PhD students
- Enhancement in thermal Performance of Solar Air Heater
- · Synamical analysis of Thermal Pulse Combustor
- · Experiments and Simulation of Rotary Atomizer
- Application of Turbulent Jet in Heat Transfer and Ejector Pump
- · CFD analysis of non-Newtonian fluid at cryogenics temperature
- Numerical simulation to study the effects of mixing vane spacer on flow and thermal characteristics of fluid in nuclear fuel channels

### 4.11.11 Area of Research Interest

- · Additive Manufacturing
- · Friction Stir Welding
- · Robotics, Data Analytics, Design Optimization
- Thermodynamics, Heat Transfer and Fluid Mechanics
- · Porous media and Hydrodynamic Instability
- · Biological Active Matter
- · Thermal Engineering
- Industry related problem
- Condensation
- Experimental Aerodynamics and Aeroacoustics, High Speed Flows, Shock Mitigation and Drag Reduction, Computational Fluid Dynamics, Subsonic and Supersonic jets, Jets in Cross-flow, Impinging Jets, Flow Control, Vortex Dynamics
- • Functionally graded materials (FGMs) structures: Designs, developments and applications. Dynamics of cracked structures (beams, shafts, rotors, turbine blades and pipes) made of FGMs. Experimental setup for studying dynamic behavior of FGMs rotor system. CFRC hydrogen pressure vessel: Optimized design, developments, and applications. CFRC wind turbine blades: Optimized design, developments, and applications. Mechanics of shear transformation zones in metallic glasses using LAMMPS and DFT-FE.
- · Machining Technology, Nonconventional Machining Processes, Micromachining, Process Optimisation
- · Tribology
- · Condition Monitoring, Vehicle Dynamics, Systems and Control, Rotor Dynamics, Signal Processing
- · Bluff body flows, Laminar flows, Vortex Shedding, Hydrodynamic Instability
- Aeromechanics of Aerial flyer
- · Dynamics, Vibration and Control
- Computational Fluid Dynamics and Heat Transfer
- · Micro and Nano Scale Manufacturing
- · Thermal and Fluid Science
- · Control System
- Industry related problems
- Sustainable Engineering
- Polygeneration
- Composite, FEM
- · Robotics, Additive Manufacturing
- · Power Plant Engineering, Energy, Thermodynamics, CO2 Capture, Fluidized Bed Technology
- · CFD, Cryogenics, Hydrogen Ice extrusion
- · Vehicle Dynamics, Modeling of Engineering Systems
- · Hydraulic machines, Green Energy Applications
- Dynamical Systems Analysis
- Heat Transfer
- Fluid Power, Fluid Mechanics and Heat Transfer, CFD
- Fluid mechanics, multiphase flow and heat transfer



- Experimental Fluid Dynamics
- Modeling and simulation, production management
- Multibody Mechanics

# 4.11.12Institute Industry Collaboration

Collaborating Institute Organization	Areas of collaboration	Collaboration Activities
Tata Steel Limited	Coal and Coke	Research and
	Research	Development
SAIL-DSP	Foring Dies for	Optmization of die
	Railway Wheels	geometry
Jadavpur University	Thermal Engineering	Research

# 4.11.13Collaboration with Academic and Research Institutions

Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
University of Stuttgart, Germany	Thermodynamics	Achintya Kumar Pramanik	Student and Faculty Exchange
Duke University, USA	Thermodynamics	Achintya Kumar Pramanick	Pedagogy and Research
University of Lorraine, France	Thermodynamics	Achintya Kumar Pramanick	Pedagogy and Research
Federal University of Rio Grande – FURG, Brazil	Thermodynamics	Achintya Kumar Pramanick	Pedagogy and Research
Central Mechanical Engineering Research Institute Durgapur, India	Heat Transfer	Achintya Kumar Pramanick	Research
IIT Madras	Porous medium and viscous instability through a membrane	Dr Sankha Karmakar	Research Article
University of Luxembourg	Biological Active Matter	Dr Anupam Sengupta	Research Article
Indian Institute of Technology Kharagpur	Heat Transfer	Prof. Abhijit Guha	Research
University of Rennes 1	Rayleigh-Taylor Instability at pore- scale resolution	Dr Yves Meheust	Research Article
IIT Guwahati	Hydrodynamics Instability, Bluff body flows	Dr. Bhaskar Kumar	Visited IIT Guwahati during June 2022-July 2022 and published one paper related to this work.
IIT Bombay	Multiphase Flow and Heat Transfer	Prof. Atul Sharma	Joint Ph.D. Research Guidance
National University Science and Technology, Sultanate of Oman	Use of nano particles in mechanical Engineering	Sudhir CV	Use of nano particles in mechanical Engineering on wear and corrosion
Jadavpur University	Dynamical analysis of thermal systems	Prof. Achintya Mukhopadhyay, Prof. Swarnendu Sen and Prof. Koushik Ghosh	Collaborative research project
Shiv Nadar University	Aeroelastic Instability	Dr. J. Venkatramani	Collaborative Research
National Institute of Technology, Raipur	Turbulence mixing, CFD	Prof. (Miss) Shobha Lata Sinha	PhD. Guidance



# 4.11.14Innovations and Technology Transfer (Patents filed during)

Inventors	Application Nos	Date of Filling
Biswajit Bera	1767/KOL/2008	2008-10-20
		Nos

# 4.11.15Workshops/Seminars Organized

NIL

# 4.11.16Journal: Published in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Dheeraj Kumar, Apurba Layek	Heat Transfer Augmentation of a Solar Air Heater Using a Twisted V-Shaped Staggered Rib Over the Absorber Plate	Journal of Solar Energy Engineering	Volume:Vol. 145 Issue No:021013-1 Page No: Year:2023 Month:
U.K Kar, S Sengupta, S Pramanik	Dynamics of condensate film in the vicinity of a pulling vapor stream	Physics of Fluids	Volume:34 Issue No:12 Page No:123611: 1-19 Year:2022 Month:Dec
S Chakraborty, UK Kar, S Sengupta, S Pramanik	Influence of jumping-droplet condensation on the properties of separated flow in an air-cooled condenser tube: An Euler-Lagrange approach	Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy	Volume:237 Issue No:4 Page No:747- 764 Year:2022 Month:Nov
UK Kar, S Sengupta, S Pramanik, S Chakraborty	An analytical theory for the forced convection condensation of shear-thinning fluids onto isothermal horizontal surfaces	Applied Mathematics and Computation	Volume:421 Issue No: Page No:126909: 1-15 Year:2022 Month:May
A Ganguly, S Sengupta, S Pramanik	Waste heat recovery using Tesla turbines in Rankine cycle power plants: Thermofluid dynamic characterization, performance assessment and exergy analysis	Applied Thermal Engineering	Volume:207 Issue No: Page No:118141:1-20 Year:2022 Month:May
J. Dhar, P. Meunier, F. Nadal and Y. Méheust	Convective dissolution of carbon dioxide in two- and three- dimensional porous media: The impact of hydrodynamic dispersion	Physics of Fluids	Volume:34 Issue No:6 Page No:064114 Year:2022 Month:Jun
J. Dhar, A. L. P. Thai, A. Ghoshal, L. Giomi, and A. Sengupta	Self-regulation of phenotypic noise synchronizes emergent organization and active transport in confluent microbial environments	Nature Physics	Volume:18 Issue No:8 Page No:945– 951 Year:2022 Month:Jul
S. Mukherjee, J. Dhar, S. DasGupta, and S. Chakraborty	Electrokinetically augmented load bearing capacity of a deformable microfluidic channel	Physics of Fluids	Volume:34 Issue No:8 Page No:082019

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Author(s) Name	Paper Name	Journal Name	Others Info
			Year:2022 Month:Aug
Amit Kumar, Apurba Layek	Heat Transfer Measurement in a Rectangular Channel of Solar Air Heater With Winglet-Type Ribs Using Liquid Crystal Thermography	Journal of Thermal Science and Engineering Applications	Volume:Vol. 14 Issue No:041006-1 Page No: Year:2022 Month:
A. Sengupta, J. Dhar*, F. Danza, A. Ghoshal, S. Müller and N. Kakavand (* Joint 1st author)	Active reconfiguration of cytoplasmic lipid droplets governs migration of nutrient-limited phytoplankton	Science Advances	Volume:8 Issue No:44 Page No:eabn6005 Year:2022 Month:Nov
Amit Kumar, Apurba Layek	Heat Transfer Measurement in a Rectangular Channel of Solar Air Heater With Winglet-Type Ribs Using Liquid Crystal Thermography	Journal of Thermal Science and Engineering Applications	Volume:Vol. 14 Issue No:041006-1 Page No: Year:2022 Month:
A. Sengupta, J. Dhar*, F. Danza, A. Ghoshal, S. Müller and N. Kakavand (* Joint 1st author)	Active reconfiguration of cytoplasmic lipid droplets governs migration of nutrient-limited phytoplankton	Science Advances	Volume:8 Issue No:44 Page No:eabn6005 Year:2022 Month:Nov
Amit Kumar, Apurba Layek	Thermo-hydraulic performance of solar air heater having winglet type roughness element	Journal of thermal analysis and calorimetry	Volume:10.1007/s10 973-022-11286-8 Issue No: Page No: Year:2022 Month:
Swarup Deshmukh and Arjyajyoti Goswami	Parametric study of microlens array fabricated on polymer substrate through hot embossing with a micro-EDM mould and its optical characterisation	Advances in Materials and Processing Technologies	Volume: Issue No:https://doi.org/10. 1080/2374068X.2022. 2101322. Page No: Year:2022 Month:Jul
Swarup Deshmukh and Arjyajyoti Goswami	Parametric study of microlens array fabricated on polymer substrate through hot embossing with a micro- EDM mould and its optical characterisation	Advances in Materials and Processing Technologies	Volume: Issue No:https://doi.org/10. 1080/2374068X.2022. 2101322. Page No: Year:2022 Month:Jul
Arora, A., Sarkar, D., Majumder, A., Sen, S., Roy, S.S.	Hybridized neural network inspired behavioural modelling of pneumatic artificial muscles for assistive robotic applications	Industrial Robot	Volume:50 Issue No:1 Page No:56-69 Year:2023 Month:Jan
Das, A.K., Singh, R.K., Roy, M., Kumar, A., Rana, S.C., Ansu, A.K., Goyal, A., Oza, A.D., Kumar, M., Gehlot, A.:	Optimum design of S-shaped diffuser by studying the effect of inlet velocity, turning angle and area ratio.	International Journal on Interactive Design and Manufacturing (IJIDeM).	Volume: Issue No: Page No:1-13 Year:2022 Month:Dec
Uttam Kumar Kar, Sayantan Sengupta, Shantanu Pramanik, Soumik Chakraborty	An analytical theory for the forced convection condensation of shearthinning fluids onto isothermal horizontal surfaces	Applied Mathematics and Computation	Volume:421 Issue No: Page No:126909 Year:2022 Month:May
Abhisek Ganguly, Sayantan Sengupta, Shantanu Pramanik	Waste heat recovery using Tesla turbines in Rankine cycle power plants: Thermofluid dynamic characterization, performance assessment and exergy analysis	Applied Thermal Engineering	Volume:207 Issue No: Page No:118141 Year:2022 Month:May



Author(s) Name	Paper Name	Journal Name	Others Info
Soumik Chakraborty, Uttam Kumar Kar, and Shantanu Pramanik	Influence of jumping-droplet condensation on the properties of separated flow in an air-cooled condenser tube: An Euler-Lagrange approach	Proc IMechE Part A: Journal of Power and Energy	Volume:237 Issue No:4 Page No:747- 764 Year:2023 Month:
Tanmoy Mondal, Neel Srivastava, S.M. O'Shaughnessy, Shantanu Pramanik	Comparison of the mean flow and turbulence characteristics of a single offset jet and a dual offset jet	European Journal of Mechanics - B/Fluids	Volume:98 Issue No: Page No:161-179 Year:2023 Month:Mar
Uttam Kumar Kar, Sayantan Sengupta and Shantanu Pramanik	Dynamics of condensate film in the vicinity of a pulling vapor stream	Physics of Fluids	Volume:34 Issue No: Page No:123611 Year:2022 Month:Dec
Arnab Ghosh Mazumder, Ritabrata Saha, Sirshendu Mondal, Koushik Ghosh, Achintya Mukhopadhyay, Swarnendu Sen	Dynamics of a single-phase natural circulation system under harmonic excitation	Chaos: An Interdisciplinary Journal of Nonlinear Science	Volume:32 Issue No:12 Page No:123125-1: 123125-10 Year:2022 Month:Dec
Anupam Ghosh, Sirshendu Mondal, RI Sujith	Occasional coupling enhances amplitude death in delay-coupled oscillators	Chaos: An Interdisciplinary Journal of Nonlinear Science	Volume:32 Issue No:10 Page No: Year:2022 Month:Oct
Somnath De, Sabyasachi Mondal, Arijit Bhattacharya, Sirshendu Mondal, Achintya Mukhopadhyay, Swarnendu Sen	Dynamics of Premixed Flames Near Lean and Rich Blowout	Combustion Science and Technology	Volume: Issue No: Page No:1-17 Year:2022 Month:Sep
Dheeraj Tripathi, R Shreenivas, Chandan Bose, Sirshendu Mondal, J Venkatramani	Experimental investigation on the synchronization characteristics of a pitch- plunge aeroelastic system exhibiting stall flutter	Chaos: An Interdisciplinary Journal of Nonlinear Science	Volume:32 Issue No:7 Page No: Year:2022 Month:Jul
Arijit Bhattacharya, Somnath De, Sirshendu Mondal, Achintya Mukhopadhyay, Swarnendu Sen	Early detection of lean blowout using recurrence network for varying degrees of premixedness	Chaos: An Interdisciplinary Journal of Nonlinear Science	Volume:32 Issue No:6 Page No: Year:2022 Month:Jun
Vishal Gupta, Ranjana Gangradey, Samiran S. Mukipul L. Tanna aherjee, Jyoti Shankar Mishra, Pratik A. Nayak, Paresh Panchal, V, Yuvakiran Paravastu, Dilip C. Raval, Ziauddin Khan, Siju George, Atul Garg, LN Srikanth, Avijit Dewasi, Shashi Kant Verma, Rohan Dutta, Hemang Agravat	Performance testing of the liquid nitrogen cooled sorption cryopump for application in SST-1 Tokamak	Fusion Engineering and Design	Volume:181 Issue No: Page No:113212 Year:2022 Month:Aug
Ranjana Gangradey, Samiran S. Mukherjee, Vishal Gupta, Paresh Panchal, Pratik Nayak, Jyoti S. Mishra, Avijit Dewasi, Shashi Kant Verma	Design and development of a liquid nitrogen cooled test cryopump for application in Steady-state Superconducting Tokamak-1	Vacuum	Volume:200 Issue No: Page No:110986 Year:2022 Month:Jun

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Author(s) Name	Paper Name	Journal Name	Others Info
Dheeraj Kumar, Apurba Layek	Nusselt number and friction characteristics of solar air heater roughened with novel twisted V- shaped staggered ribs using liquid crystal thermography	Renewable Energy	Volume:Vol 201 Issue No: Page No:651–666 Year:2022 Month:
Dheeraj Kumar, Apurba Layek	Heat Transfer Enhancement of Solar Air Heater Having Twisted V-Shaped Staggered Roughness Over Absorber Plate	Arabian Journal for Science and Engineering	Volume:48 Issue No:https:// doi.org/10.1007/s13 369-022-07319-x Page No:3931– 3946 Year:2023 Month:
R. K. Singh, A. K. Pramanick, and S. C. Rana	Computational study of temperature separation for a three- dimensional vortex tube with cold exit diameter and nozzle number variation	International Journal of Ambient Energy	Volume:43 Issue No:1 Page No:7046- 7060 Year:2022 Month:
Amit Kumar, Apurba Layek,	Effect of heat transfer and pressure drop characteristics on the performance analysis of an artificially roughened solar air heater	Heat and Mass Transfer	Volume:59 Issue No:891–907 Page No:10.1007/s0023 1-022-03296-x Year:2023 Month:
Dheeraj Kumar, Apurba Layek	Experimental assessment of thermo-hydraulic performance of a rectangular solar air heater duct using twisted v-shaped staggered ribs	Journal of Thermal Science and Engineering Applications	Volume:Vol. 15(4) Issue No:41009 Page No:doi:10.1115/1.4 056878. Year:2023 Month:
Dheeraj Kumar, Apurba Layek, Amit Kumar	Enhancement of Thermal efficiency and development of Nusselt number correlation for the solar air heater collector roughened with artificial ribs for thermal applications	Environmental Science and Pollution Research	Volume:https://doi. org/10.1007/s11356 -023-28096- 6. Issue No: Page No:https://doi.org/1 0.1007/s11356- 023-28096-6. Year:2023 Month:
Bishwajit Sharma, Geeta Verma and Rabindra Nath Barman	Steady flow of power-law fluids past a slotted circular cylinder at low Reynolds number	Physics of Fluids	Volume:34 Issue No:9 Page No:093615 Year:2022 Month:Sep
Avijit Dalal, Ankita Bebarta, Argha Deep Paul, Rabindranath Barman, Jean- Michel Nunzi, Alexey Tameev, Rajat Mahapatra, Aniruddha Mondal.	Iron-Sensitive Three-Terminal Device as a Universal Hybrid Platform With TiO2 Nanowires on the Channel	IEEE Sensors Journal	Volume:23 Issue No:3 Page No:1917 - 1924 Year:2023 Month:Jan
Bishwajit Sharma and Rabindra Nath Barman	Unsteady Flow past slotted circular cylinders in laminar regime: Effect of slit shapes and Reynolds number	Physics of Fluids	Volume:35 Issue No:1 Page No:3602 Year:2023 Month:Jan
Soumyoraj Mallick and Debabrata Gayen	Thermal behavior and thermal runaway propagation in lithium-ion battery systems – A critical review	Journal of Energy Storage	Volume:62 Issue No: Page No:106894 Year:2023 Month:Feb





Author(s) Name	Paper Name	Journal Name	Others Info
S Sengupta, U K Kar, N Kumar	Numerical investigation with the impact of collector's artificial roughness on the performance of a solar chimney power plant	ISME Journal of Thermo-fluids	Volume: Issue No: Page No: Year:2022 Month:Dec

# 4.11.18 Journal: Accepted in Others in 2022-2023

Author(s) Name	Paper Name	Journal Name	Others Info
Nil	Nil	Nil	Nil

## 4.11.19Conference: Published in 2022-2023 DOI/ISBN

Author(s)Name	Paper Name	ConferenceName	Other Info
Y. Méheust, J. Dhar, P. Meunier, and F. Nadal	Convective dissolution of Carbon Dioxide in two- and three-dimensional porous media: the impact of hydrodynamic dispersion	EGU General Assembly 2022	DOI/ISBN: 10.5194/egusphere- egu22- 13563 Volume: Issue No: Page No:EGU22-13563 Year:2022 Month:May Presenter:CO- AUTHOR
S. Ashraf, J. Dhar, P. Meunier, F. Nadal, and Y. Méheust,	Experimental study of miscible Rayleigh-Taylor convection in a granular porous medium	EGU General Assembly 2022	DOI/ISBN: 10.5194/egusphere- egu22-11813 Volume: Issue No: Page No:EGU22-11813 Year:2022 Month:May Presenter:CO- AUTHOR
Sk. Nasir Hasan, A. Kumar, K. Khan	Parametric Study of Stress Distribution in Bimodular Curved Beam	International Conference on Thermo- Fluids and System Design 2022	DOI/ISBN: https://doi.org/10.1016/j.matpr.2022 .03.301 Volume: Issue No: Page No:27-33 Year:2022 Month:Mar Presenter:CO- AUTHOR
Nagendra Kumar, Sujit Karmakar	Techno-Environmental- Economic Analysis of Distributed Trigeneration HRES	2022 International Conference on Electrical, Computer, Communications and Mechatronics, Maldives National University (MNU), Maldives	DOI/ISBN: 10.1109/ICECCME55909.2022.998 8579 Volume: Issue No: Page No:1-6 Year:2022 Month:Nov Presenter:SELF
R. K. Singh, A. K. Pramanick, and S. C. Rana	Study of the impact of flow valve design on the temperature separation in the vortex tube with computational approach	Fluid Mechanics and Fluid Power (FMFP2022)	DOI/ISBN: N/A Volume: Issue No: Page No:N/A Year:2022 Month:Dec Presenter:CO- AUTHOR
Animesh Patari, Shantanu Pramanik and Tanmoy Mondal	Comparative Study of Turbulent Heat Transfer in Plane Wall Jet Using Different k-& RANS Models	9th International and 49th National Conference on Fluid Mechanics and Fluid Power (FMFP)	DOI/ISBN: NA Volume: Issue No: Page No:NA Year:2022 Month:Dec Presenter:CO- AUTHOR
Orkodip Mookherjee, Shantanu Pramanik, and Atul Sharma	Comparative CmFD Study on Geometric and Algebraic Coupled Level Set & Volume of Fluid Methods	9th International and 49th National Conference on Fluid Mechanics and Fluid Power (FMFP)	DOI/ISBN: NA Volume: Issue No: Page No:NA Year:2022 Month:Dec Presenter:SELF
Arka Banerjee, Sayantan	Computational Fluid Dynamic	International Conference on Recent	DOI/ISBN: NA Volume: Issue No: Page
Sengupta and Shantanu Pramanik	Investigation of non- Newtonian Turbulent Duct-flow Subsequent to in- plane Double Bends	Advances in Fluid Mechanics ICRAFM- 2022, Organised by- Manipal Institute of	No:63-64 Year:2022 Month:Oct Presenter:CO-AUTHOR



Author(s)Name	Paper Name	ConferenceName	Other Info
		Technology, MAHE, Manipal (Online)	
Arka Banerjee, Sayantan Sengupta, Nawes Qamar, Shantanu Pramanik	Computational Analysis on the Three- dimensionality of Turbulent Duct Flow Subsequent to In-plane Double Bends	2nd International & 14th National Conference on "INDUSTRIAL PROBLEMS ON MACHINES & MEHANISMS (IPROMM 2022)",- IIT-ISM Dhanbad.	DOI/ISBN: NA Volume: Issue No: Page No:NA Year:2022 Month:Dec Presenter:CO- AUTHOR
Debabrata Roy, Apurba Layek,	Analytical Study of Emission and Combustion Characteristics of Biodiesel Fueled Conventional Diesel Engine	Advances in Basic and Applied Sciences In Digital Age: Few Selected Areas, Conference on "Science, Technology and Management – 2022.	DOI/ISBN: Volume: Issue No: Page No: Year:2022 Month:July 8-9 Presenter:
Apurba Layek	Performance, combustion and emission characteristics of CI engine using waste cooking oil methyl ester - diesel - ethanol blends,	International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), Maldives National University, Maldives	DOI/ISBN: 978-1-6654-7095-7/22 Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:SELF
Dheeraj Kumar, Apurba Layek,	Experimental study to determine the effect of staggered distance on the Nusselt number and friction charactertics of solar air heater using LCT technique	9th International and 49th National Conference on Fluid Mechanics and Fluid Power (FMFP),IIT Roorkee	DOI/ISBN: 978-981-99-5751-4 Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO- AUTHOR

# 4.11.20Conference: Published in Others in 2022-2023

Author(s)	Paper Name	Conference Name	Others Info
Name			
Sk. Nasir	Bending and undamped free	International Conference on	DOI/ISBN:
Hasan, A.	vibration analysis of	Thermo- Fluids and	https://doi.org/10.1016/j.matpr.2022.03.297
Kumar, K.	laminated bimodular	System Design 2022	Volume: Issue No: Page No:10-15
Khan	composite material thin		Year:2022 Month:Mar Presenter:CO-
	curved beam		AUTHOR
NiteshKumar	Comparative study of	1st International	DOI/ISBN: NA Volume: Issue No: Page
Choudhury,	different thermodynamic low-	Conference in Fluid,	No: Year:2022 Month:Jun Presenter:CO-
Gautam	grade power cycles for	Thermal and Energy	AUTHOR
Khankari,	utilization of waste energy	Systems 2022	
Sujit	from a 500 MWe Supercritical	(ICFTES'22), NIT Calicut,	
Karmakar	power plant with CO2 capture	Kozikode (Virtual)	
Nagendra	Performance Assessment of a	1st International	DOI/ISBN: NA Volume: Issue No: Page
Kumar, Sujit	Renewable Energy System	Conference in Fluid,	No: Year:2022 Month:Jun Presenter:CO-
Karmakar	with and without Net-	Thermal and Energy	AUTHOR
	Metering	Systems 2022	
		(ICFTES'22), NIT Calicut,	
		Kozikode (Virtual)	
Nitesh	Comparative Performance	3rd Energy System	DOI/ISBN: NA Volume: Issue No:
Kumar	Analysis of Organic Rankine	Modeling and Optimization	Page No: Year:2022 Month:Dec
Choudhury,	Cycle with Different Working	Conference (ESMOC	Presenter:SELF
Sujit	Fluids using Waste Heat from	2021), NIT Durgapur	
Karmakar	Post-combustion CO2		
	Capture Unit		



# 4.11.21 Books Authored

Author Name	Co-Author	Title of the Book	Title of the Chapter	Publication Details
Debajyoti	Asit Baran Puri	Advances in Processing of	Machinability Study of	Publisher: Springer
Ray		Lightweight Metal Alloys	Amorphous Bulk Metallic	Singapore Publication
		and Composites	Glass in Micro Milling	Date: 2022-11-19
Debajyoti	Asit Baran Puri	Futuristic	Mechanical Micro-milling A	Publisher: CRC Press,
Ray		Manufacturing- Perpetual	Broader Perspective of the	Taylor and Francis
		Advancement and	Process	Group Publication
		Research Challenges		Date: 2023-03-
				19
Apurba	Nagendra Kumar,	Artificial Intelligence for	Renewable energy and	Publisher: Woodhead
Layek	Dheeraj Kumar,	Renewable Energy	sustainable development: A	Publishing Series in
	Sunil Yadav	Systems	global approach towards	Energy Publication
			artificial intelligence	Date: 2022-09-
			_	01

# 4.11.22Seminars, Summer/Winter Schools, Short Term Courses Attended

Name of the Programme	Organized By	From Date	To Date	Organizing Country
The 4th International Conference on Energy and Power (ICEP2022) (Online)	Military Institute of Science & Technology, Dhaka, Bangladesh	2022-12-11	2022-12-13	Bangladesh
Autonomous Air Vehicles- Technologies & Applications AAV-2023	ADE-DRDO & Design Division- AeSI	2023-01-06	2023-01-07	India
9th International and 49th National conference on Fluid Mechanics and Fluid Power (FMFP)	IIT Roorkee	2022-12-14	2022-12-16	India
Do Drones	IISc Bangalore	2022-11-16	2022-12-18	India
Fluids Under Confinement (FUC-2023)	IIT Kharagpur and SPARC	2023-03-24	2023-03-25	India
2nd International Conference & Exposition on Mechanical, Material and Manufacturing Technology (ICE3MT 2022)	Department of Mechanical Engineering, CVR College of Engineering Hyderabad, Telangana	2022-10-28	2022-10-29	India
2022 International Conference on Electrical, Computer, Communications and Mechatronics	Maldives National University (MNU), Maldives	2022-11-16	2022-11-18	Maldives
3rd Energy System Modeling and Optimization Conference (ESMOC 2021)	NIT Durgapur	2021-12-05	2022-12-07	India
9th International and 49th National Conference on Fluid Mechanics and Fluid Power (FMFP)	IIT Roorkee	2022-12-14	2022-12-16	India

# 4.11.23 Ph.D. Supervisor

Topic Name	Scholar	Supervisor	Status	Status Date
Additive Manufacturing	Subhadeep Saha	Ratnesh Kumar	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status Date
Viscous instability in porous medium: Consistent analysis at pore-scale resolution	Abhishek Kumar	Dr Jayabrata Dhar and Dr Sirshendu Mondal	ONGOING	-
Numerical Investigation Of Solar Chimney Power Plant	Avishek Mukherjee	Dr. Achintya Kumar Pramanick and Dr. Sayantan Sengupta	ONGOING	-
Atypical Condensations	Uttam Kumar Kar	S Sengupta, S Pramanik	ONGOING	-
Numerical investigation of non-Newtonian secondary flow through ducts	Arka Banerjee	S Sengupta, S Pramanik	ONGOING	-
Numerical investigation of Solar Chimney Power Plant	Avishek Mukherjee	A. K. Pramanick, S Sengupta	ONGOING	-
von Karman instability over bluff body: The effect of upstream obstruction	Subhssh Chandra Paramanik	Deepak Kumar, Jayabrata Dhar	ONGOING	-
Fluid flow and convective heat transfer past a slotted circular cylinder	Bishwajit Sharma	Rabindra Nath Barman	SUBMITTED	2023-02-20
EXPERIMENTAL AND NUMERICAL STUDY OF VIBRATION AND STABILITY ANALYSIS OF ROTATING SHAFT USING BEARINGS AND LUBRICANTS	PRAVEEN SHARMA	Rabindra Nath Barman, S.C. Rana	DEGREE AWARDED	2022-11-14
Functionally Graded Cracked Structures	KRISHANU ROY	Dr. Debabrata Gayen and Dr. Ranjan Kumar Mitra	ONGOING	-
Numerical simulation to study the effects of mixing vane spacer on flow and thermal characteristics of fluid in nuclear fuel channels	Satish Kumar Dhurandhar	Prof. (Miss) S. L. Sinha Mechanical Engineering Department, NIT Raipur, Chhattisgarh, Shashi Kant Verma (Joint-Supervisor)	ONGOING	-
Friction Stir Welding	Megnnath Sen	Asit Baran Puri	ONGOING	-
Friction Stir Welding	Lalita Nayek	Asit Baran Puri	ONGOING	-
Heat transfer enhancement in microchannel	DEEPAK KUMAR RAJ	Aparesh Datta	ONGOING	-
Heat transfer enhancement in microchannel	Vivek Kumar	Aparesh Datta, Sirshendu Mondal	ONGOING	-
Heat transfer study in Phase change material	Subham Show	Aparesh Datta, Sirshendu Mondal	ONGOING	-
Study of Solar air heater with Surface roughness	Nirmalya Tripathi	Sirshendu Mondal, Aparesh Datta,	ONGOING	-
Active, passive control and dynamic stability of nonlinear flexible System	Saikat Suvra Mondal	Atul Krishna Banik, Ranjan Kumar Mitra	ONGOING	-
Modelling and Diagnosis of Gear Faults	Rajeev Kumar	Chintamani Mishra, Ranjan Kumar Mitra	ONGOING	-
Nonlinear dynamics and active control of flexible systems	Ranjan Kumar	Ranjan Kumar Mitra	ONGOING	-
Experimental and Numerical Investigation on Optimum Orientation of Fin Arrayed Heat Sinks	PABITRA KUMAR MANDAL	Dr. Subhas Chandra Rana and Dr Dipankar Bhanja( NIT, Silchar)	DEGREE AWARDED	2022-05-06
Experimental And Numerical Study Of Vibration And Stability Analysis Of Rotating	PRAVEEN SHARMA	Dr. Subhas Chandra Rana and Dr. Rabindra Nath Barman	DEGREE AWARDED	2022-11-14



Topic Name	Scholar	Supervisor	Status	Status Date
Shaft Using Bearings And Lubricants				
: Studies On Flow Physics Of A Vortex Tube	Ravi Kant Singh	Dr. Subhas Chandra Rana and Dr. Achintya Kumar Pramanick	ONGOING	-
Flow through S- shaped 3-D diffuser	Asim Kumar Das	Dr Subhas Chandra Rana	ONGOING	-
Performance study of Wind Turbine using appropriate air foil	Arunabha Mahato	Dr. Subhas Chandra rana	ONGOING	-
Studies on Fiber Laser parameters for different applications	Tuhin Kar	Arjyajyoti Goswami	ONGOING	-
Fabrication on advanced materials (tentative)	Sourav Das	Arjyajyoti Goswami	ONGOING	-
Development of Meta- Heuristic Algorithms tuned Artificial Intelligence-Based Models for Prediction and Optimization of Process Parameters of Metal Additive Manufacturing	Ananda Rabi Dhar	S.S.Roy, N.Mandal (CMERI)	DEGREE AWARDED	2022-04-16
Development and Modelling of Low Pressure Actuated Pneumatic Artificial Muscle for Assistive Applications	Aman Arora	S.S.Roy	SUBMITTED	2022-09-20
Studies on hot embossing of polymer substrate for different applications	Swarup Deshmukh	Arjyajyoti Goswami	ONGOING	-
Experimental and Numerical studies on Hot Embossing of polymers for different applications	Subir Datta	Arjyajyoti Goswami	ONGOING	-
reliability based maintenance	Arka chatterjee	jagannath de	ONGOING	-
Manufacturing Analytics	Tarak Nath De	Nirmal Baran Hui and Chandan Mandal	ONGOING	-
Supply Chain Management	Pravanjan Bera	Nirmal Baran Hui and Debabrata Das	ONGOING	-
Condition Monitoring	Samrat Mondal	Nirmal Baran Hui and Chintamani Mishra	ONGOING	-
Buyer-Vendor Relationship	Arghya Bagchi	Nirmal Baran Hui	ONGOING	-
A sharp interface coupled- level-set-volume- of- fluid method based cmfd development and its applications for analysis of droplet dynamics	Orkodip Mookherjee	Shantanu Pramanik, Atul Sharma (IIT Bombay)	ONGOING	-
Numerical investigation of fluid flow and heat transfer characteristics of wall-attached turbulent jets	Animesh Patari	Shantanu Pramanik	ONGOING	-
Investigation of condensation heat transfer in non-Newtonian fluids	Uttam Kumar Kar	Sayantan Sengupta, Shantanu Pramanik	ONGOING	-
Flow and heat transfer analysis through pipe bends	Arka Banerjee	Sayantan Sengupta, Shantanu Pramanik	ONGOING	-
Analysis of Bimodular Composite laminated sandwich beams	Yogesh Kumar	kallol Khan	ONGOING	-

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Topic Name	Scholar	Supervisor	Status	Status Date
Design and Control of Smart Material based Actuators for Robotic Assembly	Bhaskar Ghosh	S. Mukhopadhyay (NIT), S.S. Roy (NIT), R.K. Jain	SUBMITTED	2023-08-17
Numerical Simulation of Solar Air Heater	Mr. Nirmalya Tripathi	(CMERI) Dr. Sirshendu Mondal and Dr. Aparesh Datta	ONGOING	-
Studies on Flow Physics of a Vortex Tube	RAVI KANT SINGH	Dr. Achintya Kumar Pramanick and Dr. Subhas Chandra Rana	SUBMITTED	2023-08-07
Experimental and Computational Studies on Thermal Performance Enhancement of Solar Air Heater with Novel Hybrid Tape using Different Geometrical Shapes in Circular and Non-circular Pipes	Soumya Ghosh	Biswajit Halder, Suvanjanjan Bhattacharyya	ONGOING	-
Phase Change Material	Mr. Subham Show	Dr. Aparesh Datta and Dr.	ONGOING	-
		Sirshendu Mondal		
Thermodynamic Analysis of Oxy-Coal fired Thermal Power Plants	Soumya Jyoti Chatterjee	Sujit Karmakar	ONGOING	-
Thermodynamic Analysis of Advanced Coal based Power Generation Systems with CO2 Capture	Rajesh Kumar	Sujit Karmakar	SUBMITTED	2023-07-10
Thermodynamic Analysis of Integrated Gasification-Fuel cell Combined Cycle based Power Generation Systems	A Pruthvi Deep	Sujit Karmakar	ONGOING	-
Techno-Economics of Renewable based Energy systems for various loads: Some case studies in India	Nagendra Kumar	Sujit Karmakar	ONGOING	-
Combined Power and Cooling through Waste heat recovery from Thermal Power Plants and other sources	Nitesh Kumar Choudhary	Sujit Karmakar	ONGOING	-
Performance Analysis of Solar Air Heater having Staggered V-Shaped Twisted Ribs on Absorber Plate	Dheeraj Kumar	Apurba Layek	SUBMITTED	2023-08-07
Performance analysis of CI engine using biodiesel and its blends with diesel	Debabrata Roy	Apurba Layek	ONGOING	-
Performance analysis of CI engine using biodiesel and its blends with diesel	Bijoy Narayan Mohanty	Apurba Layek	ONGOING	-
Implementing electrostatics to split water molecules	Bikramjit Mukherjee	Apurba Layek	ONGOING	-
Performance of solar air heater having roughened absorber	Ramit Choudhury	Apurba Layek	ONGOING	-
Performance of solar air heater having roughened absorber	Abhimannyu Sharma	Apurba Layek	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status Date
Reliability based maintenance	Arka Chatterjee	Jagannath De	ONGOING	-

# 4.11.24Ongoing Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Amount (in Rs.)	Starting Year
Capacity building for human resource development in Unmanned Aircraft System (Drone and related Technology)	Dr. Deepak Kumar, Dr. Nilanjan Chattaraj, Dr. Jayati Dey, and Dr. Aritro Dey	Ministry of Electronics and Information Technology	898702000	2022
Design of high-performance microsinks with disruptive structure like cavity, secondary branch and rib	Dr. Aparesh Datta, Dr. Sirshendu Mondal, Prof. Amit Agarwal	SERB	3494202.0	2022
Controlled assembly of main frame of the ballistic missile	Nirmal Baran Hui, Ranjan Kumar Mitra	Research Centre Imarat (RCI), Hyderabad, DRDO)	2200000.0	2019
Design of a Smart Material based Soft Lower Limb Exoskeleton to Assist Soldier	S.S.Roy	DRDO, New Delhi	8450000.0	2019
Design and development of force reflecting hand exoskeleton (haptic device) for application in remote handling in defence	S.S.Roy, A.Mahapatra (CMERI)	DRDO, New Delhi	940000.0	2019
Development of Assembly Auto Alignment Methodology	Nirmal Baran Hui and Ranjan Kumar Mitra	Advanced Systems Laboratory, DRDO	1943500.0	2020
Investigation of Thermo hydraulic performance of Artificially Roughened Solar air heater Using Infrared Thermography Technique	Apurba Layek	DST - SERB, Govt India	3925000.0	2019

# 4.11.25Completed Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Complete Year
Development of Compliant Actuators with Mechanical Impedance Variability	S.S.Roy	DRDO, New Delhi	2022

# 4.11.26Testing & Consultancy Services Rendered

Sponsoring Industry / Institute Name	Title of the Project	Total Amount (inRs.)	Remarks
Nil	Nil	Nil	Nil



# 4.11.27 Reviews of Manuscripts for Publication in Journal

Reviewer	Name of the Journal	Publisher	Date of Final Review
Ratnesh Kumar	Sadhana	Springernature	2022-12-30
Ratnesh Kumar	Transactions of the Indian Institute of Metals	Springer	2023-03-22
Jayabrata Dhar	Journal of Porous Media	Begell House	2023-06-29
Achintya Kumar Pramanick	Institute of Engineers India Series C	Springer	2022-12-07
Saif Akram	Physics of Fluids	AIP Publishing	2023-01-25
Saif Akram	Physics of Fluids	AIP Publishing	2022-10-25
Debabrata Gayen	Reviews on Advanced Materials Science	De Gruyter	2022-04-27
Debabrata Gayen	Mechanics of Advanced Materials and Structures	Taylor & Francis	2022-05-03
Debabrata Gayen	Results in Engineering	Elsevier	2022-04-27
Debabrata Gayen	Advances in Applied Mathematics and Mechanics	Global Science Press	2022-07-12
Debabrata Gayen	Journal of Aerospace Technology and Management	Instituto de Aeronautica e Espaco-IAE	2022-08-19
Debabrata Gayen	Journal of Structural Integrity and Maintenance	Taylor and Francis	2022-11-02
Debabrata Gayen	Modern Physics Letters B	World Scientific	2022-11-21
Debabrata Gayen	Journal of Thermal Stresses	Taylor & Francis	2023-01-14
Shashi Kant Verma	Cryogenics	ELSEVIER	2023-01-01
Asit Baran Puri	The International Journal of Advanced Manufacturing Technology	Springer	2022-05-15
Asit Baran Puri	The International Journal of Advanced Manufacturing Technology	Springer	2022-06-11
Asit Baran Puri	Alexandria Engineering Journal	Elsevier	2022-07-08
Asit Baran Puri	Sadhana	Springer	2022-10-12
Asit Baran Puri	Sadhana	Springer	2022-11-20
Asit Baran Puri	The International Journal of Advanced Manufacturing Technology	Springer	2023-01-14
Deepak Kumar	Physics of Fluids	American Institute of Physics	2023-08-01
Shashi Kant Verma	Fusion Science and Technology	American Nuclear Society	2020-12-28
Shashi Kant Verma	Fusion Science and Technology	American Nuclear Society	2023-03-12
Aparesh Datta	International Journal of Heat and Mass Transfe	Elsevier	2022-06-21
Arjyajyoti Goswami	Part E: Journal of Process Mechanical Engineering	SAGE Publications	2022-05-10
Arjyajyoti Goswami	Applied Sciences	MDPI	2022-07-22
Arjyajyoti Goswami	Optics and Laser Technology	ELSEVIER	2022-08-30
Nirmal Baran Hui	Applied Soft Computing	Sciencedirect	2023-05-29
Nirmal Baran Hui	Computers & Industrial Engineering	Sciencedirect	2023-05-09



Reviewer	Reviewer Name of the Journal		Date of Final Review
Nirmal Baran Hui	IEEE Transactions on Emerging Topics in Computational Intelligence	IEEE	2023-03-09
Sayantan Sengupta	Fluid Dynamics and Materials Processing	Tech Science Press	2022-07-22
Apurba Layek	Solar Energy	Elsevier, SEJ-D-22- 00074	2022-04-24
Apurba Layek	Thermal Science and Engineering Progress	Elsevier, TSEP-D-22- 00158R1	2022-06-25
Apurba Layek	Renewables: Wind, Water, and Solar	Springer; RWWS-D- 22- 00010	2022-07-18
Apurba Layek	Environmental Progress & sustainable Energy	American Institute of Chemical Engineers; EP-22- 447	2022-07-21
Apurba Layek	Solar Energy	Elsevier, SEJ-D-22- 02169	2022-08-2
Apurba Layek	Environmental Science and Pollution Research	Springer, ESPR-D-22- 19685	2022-12-29
Apurba Layek	Thermal Science and Engineering Progress	Taylor & Francis, TSEP-D- 23-00072	2023-01-10
Apurba Layek	International Journal of Ambient Energy	Taylor & Francis, TAEN- 2023-0003	2023-02-03
Apurba Layek	International Journal of Ambient Energy	Taylor & Francis, TAEN- 2019-0786.R1	2023-02-2
Apurba Layek	International Journal of Ambient Energy	Taylor & Francis, TAEN- 2023-0056	2023-02-2
Apurba Layek	Advances in Materials Science and Engineering	Hindawi, 3611416	2023-02-2
Apurba Layek	International Journal of Ambient Energy	Taylor & Francis, TAEN- 2023-0070	2023-03-1
Apurba Layek	International Journal of Energy Research	Hindawi, 4851352	2023-03-2

# 4.11.28Invited Examiners/Paper-Setters/Board of Studies

Name of the Faculty	Name of the Examination	University/Ins titute	From Date	To Date
Asit Baran Puri	Ph.D open Viva-voce Examination	VSSUT	2022-05-12	2022-05-12
Asit Baran Puri	Ph. D Thesis Examination	Jadavpur	2022-09-06	2022-10-10
		University		
Asit Baran Puri	Ph. D Thesis Examination	VSSUT	2022-10-01	2022-11-14
Asit Baran Puri	Ph.D open Viva-voce Examination	VSSUT	2022-12-09	2022-12-09
Asit Baran Puri	Ph. D Thesis Examination	NIT Patna	2022-09-28	2023-01-30
Shibendu	MTech Thesis Evaluation	IIEST Shibpur	2022-07-15	2022-07-15
Shekhar Roy		_		
	PhD defense, of Iftikar Ahmad Khan,	NIT Jamshedpur	2022-08-01	2022-08-01
Apurba Layek	Experimental Investigation of the			
	Performance and Emission of a Diesel Engine			
	Fuelled by Biodiesel-Diesel Blends with			

# 4.11.29 Invited Expert in Selection Committees

Name of the Faculty	Discipline	University/Institute	From Date	To Date
Apurba Layek	PhD defense, of Sanjay Singh Rathore, Computational Analysis of Flow and Heat Transfer Characteristics of Wall- Bounded Turbulent Jets	NIT Patna	2022-11-25	2022-11-25

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Name of the Faculty	Discipline	University/Institute	From Date	To Date
Apurba Layek	hD defense, of Bhargava Srusti, Investigations on reducing the car cabin temperature subjected to solar load by incorporating phase change material	VIT Chennai,	2022-12-26	2022-12-26
Apurba Layek	PhD defense, of Rahul Ganpatrao Makade, Empirical modelling and analysis of solar radiation for Indian locations	OPJU, Raigarh, Chhatishgarh	2023-01-22	2023-01-22

# 4.11.30 Invited Lectures

Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Dat e
Deepak Kumar	Unmanned Aerial Vehicles (Drone technology applications)	Re-Union & Symposium 2K23	Asansol Polytechnic	2023- 01-08	2023- 01-08
Deepak Kumar	Recent Development in Drone Technology and Basic Flight Mechanics	Workshop on Data Science, Machine Learning & Drone	Bengal College of Engineering & Technology Durgapur	2023- 03-29	2023- 03-29
Shibendu Shekhar Roy	Computer Aided Design and Development of Agricultural Machinery	DST-SERB sponsored Workshop named "KAARYASHALA"	CMERI Durgapur	2022- 07-22	2022- 07-22
Arjyajyoti Goswami	Critical thinking and Innovation Design	3 Days National Level Workshop on "Innovative Technologies to Improve Quality of Teaching & Learning" (Hybrid Mode)	G H RAISONI INSTITUTE OF ENGINEERING & TECHNOLOGY, Nagpur	2022- 04-03	2022- 04-05
Arjyajyoti Goswami	Design Thinking, Critical thinking and Innovation Design	SVIST IIC activities, 2022	Swami Vivekananda Institute Of Science And Technology, Kolkata	2022- 05-03	2022- 05-03
Arjyajyoti Goswami	Structured Surfaces	FDP organized by Swami Vivekananda Institute of Science and Technology	Swami Vivekananda Institute Of Science And Technology, Kolkata	2022- 05-31	2022- 05-31
Arjyajyoti Goswami	Design Thinking Approach and Critical thinking	Invited talk	DAV Model School Durgapur	2022- 09-03	2022- 09-03
Nirmal Baran Hui	New Education Policy	ATAL Academy Program on "Zero Wastage Practice in Industries	NIT Durgapur	2023- 01-09	2023- 01-20
Nirmal Baran Hui	Motion Planning of Mobile Robots	SERB Sponsored Karyashala entitled "Application of Artificial Intelligence (AI) and Machine Learning (ML) Techniques in Robotics	CMERI Durgapur	2023- 01-06	2023- 01-13
Nirmal Baran Hui	Multi-objective optimization using genetic algorithms	SERB Sponsored Karyashala entitled "Highend workshop on Internet- of-thing (IoT) and Artificial Intelligence (AI) and its	CMERI Durgapur	2023- 06-26	2023- 07-02
Apurba Layek	Artificial Roughness- A Potential Method to Enhance the Performance of Solar Air Heater	FDP on 'Recent Advancement in Heat Exchanger Technologies: Experimentation & Simulations'	OP Jindal University, Raigarh, Chhattisgarh	2022- 03-14	2022- 03-18



Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Dat e
Shashi Kant	Basics of Research	Faculty Development	Shri Shankaracharya	2022-	2022-
Verma	Publications and Its Best Practices	Programme (FDP)	Institute of Professional Management &	10-10	10-14
			Technology, Raipur (C.G.)		

#### 4.11.31Session Chair/Convenor

Name of the Faculty	Programme	Place	Session	From Date	To Date
Nil	Nil	Nil	Nil	Nil	Nil

#### 4.11.32 Patents

Title	Inventors	Application Nos	Date of Filling
Artificial Articular Cartilage And A Method Of Manufacturing The Same	Biswajit Bera	1767/KOL/2008	2008-10-20

## 4.12 Department of Metallurgical and Materials Engineering

### 4.12.1 Department at a Glance:

#### **Brief Outline of the Department:**

The Department, which started its journey in the year 1960, presently offers B.Tech. (Metallurgical and Material Engineering), M.Tech.(Metallurgy and Materials Technology) and Ph.D Programme. The Department maintains high level of interactions with other academic institutes (IIT Kharagpur, Jadavpur University, IIEST (Shibpur) and NIFFT (Ranchi)), CSIR Laboratories, SAIL and other steel plants in India. At present, fifteen highly qualified and dedicated faculty members are serving this Department.

#### **Teaching & Research Activities:**

The teaching at B.Tech level focuses on the fundamental knowledge base development in various areas of Metallurgical and Materials Engineering, such as, Extractive Metallurgy, Physical Metallurgy, Mechanical Metallurgy and Corrosion Science and Engineering. M.Tech level teaching emphasizes on advanced knowledge input in new material development and latest techno-scientific progress in Metallurgical Industry. The research activities of the Department are centered on B.Tech and M.Tech Projects, Ph.DProgrammes and sponsored research projects. Many research papers have been published in reputed peer reviewed Journals.

# 4.12.2 Mission & Vision

#### Mission:

- To produce highly educated, well-rounded and motivated graduates possessing fundamental understanding and knowledge in Metallurgical and Materials Engineering, who can provide service and leadership to the nation and the world.
- To pursue creative research and new technologies in Metallurgical and Materials Engineering in order to cater the needs of industry, government and society.
- To accomplish visibility by active participation in conferences and technical activities.

#### Vision:

1. To prove and be accepted globally as a leading department and as a quality establishment for gathering and disseminating knowledge in the field of metallurgical and materials engineering.

#### 4.12.3 Faculty

Name	Designation	Email-id
Ghosh Karuna Sindhu, PhD	Professor	ksghosh2001@mme.nitdgp.ac.in
Maity Joydeep, Ph.D	Professor	joydeep.maity@mme.nitdgp.ac.in
Show Bijay Kumar, Ph.D	Associate Professor	bijay.show@mme.nitdgp.ac.in

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Name	Designation	Email-id
Ghosh Madan Mohan, Ph.D	Associate Professor	madanmohan.ghosh@mme.nitdgp.ac.in
Mondal Manas Kumar, Ph.D	Associate Professor	manas.mandal@mme.nitdgp.ac.in
Bera Supriya, PhD	Associate Professor	sbera.mme@nitdgp.ac.in
Ghorai Satadal, PhD	Associate Professor	Sghorai.mme@nitdgp.ac.in
Pramanik Susanta, Ph.D	Associate Professor	spramanik.mme@nitdgp.ac.in
Maji Barnali, Ph.D	Assistant Professor	bmaji.mme@nitdgp.ac.in
Mallik Manab, Ph.D	Assistant Professor	mmallik. mme @nitdgp.ac.in
Mandal Arup Kumar, PhD	Assistant Professor	arup.mandal@mme.nitdgp.ac.in
Mandal Durbadal, Ph.D	Associate Professor	dmandal. mme@nitdgp.ac.in
Yagati Krishna Priya, Ph.D	Assistant Professor	kp.yagati@mme.nitdgp.ac.in
Roy Barna, Ph.D.	Assistant Professor	broy.mme@nitdgp.ac.in

# 4.12.4 Equipments

Sl. No.	Name of the equipment	Date of Purchase	Amount (Rs.)
1	Pelletizer	13/12/2022	1,42,780
2	Mortar Grinder	28/09/2022	8,48,400
3	Augmentation of UTM (Instron)	08.07.2022	44, 92,996
4	Sieve shakers	20/04/2022	45,800
5	Tap density tester	20/04/2022	89,775
6	Polishing Machine	25.11.2022	2,05,452
7	Melting Furnace	17.02.2022	1,26,525
8	aczet LCD Micro weighing Balance with licensed software	19.04.2022	34,394
9	AVISION CIS Flat Bed scanner	30.05.2022	12,100

# 4.12.5 Labs

Sl. No.	Name of Laboratory	Major equipment	
1	X-Ray Diffraction Laboratory	XRD	
2	Mechanical Working Laboratory	Rolling Mill	
3	Transport Phenomena Laboratory	Bernoull's Theorem Apparatus	
4	Thermodynamics of Materials	Gas-Solid Dissociation Unit and Oxidation Furnace,	
	Laboratory	Fluidized Bed Furnace(High Temperature)	
5	Metal Joining Laboratory	Welding Unit	
6	Composites Laboratory	Stir-Casting Unit	
7	Agglomeration Laboratory	Disk Pelletizer, Sintering Unit, Ball Mill	
8	Foundry and Casting Laboratory	Sand Casting Unit	
9	Powder Metallurgy Laboratory	Planetary Ball Mill	
10	Heat Treatment Laboratory	Furnaces	
11	Metallography Laboratory	Optical Microscopes	
12	Corrosion Testing Laboratory	SSRT, Potentiostat	
13	Surface Engineering Laboratory	Potentiostat / Galvanostat	
14	Extractive Metallurgy Laboratory	Grinding Ball Mill, Pelletizer, Sintering unit	
15	Plastic Deformation and	UTM Instron-100kN Hardness Tester	
	Strengthening of Materials	Impact testing machine Torsion testing machine	
	Laboratory		
16	Manufacturing Processes	Melting Furnace, Indirect Arc Melting Furnace	
	Laboratory	<u> </u>	
17	Mineral Beneficiation Laboratory	Flotation Cell, Sieve Shaker	
18	Nanomaterials Laboratory	Particle Size Analyser, Thermal Conductivity Measuring	
		Equipment	
19	Computation Laboratory	Computers, Servers	
20	Reducibility Testing Laboratory	Reducibility Testing Unit	
21	Materials Characterization	DSC, Composition analyser, Wear testing unit	
	Laboratory		
22	Mechanochemical synthesis Lab	PM400 planetary Ball Mill PM200 Planetary Ball	
		Polishing Unit Micro oven Weighing Balance	

### 4.12.6 PhD degree awarded till 2022-23

Two.

#### 4.12.7 Any other relevant information

NIL

#### 4.12.8 Specialization

- Physical Metallurgy
- Process Metallurgy
- Physical Metallurgy, Foundry Technology, Welding, Casting, Composite materials
- Process Metallurgy
- Metallurgical and Materials Engineering
- Materials Modelling and Simulation, Mechanical Behaviour of Materials, Nanotechnology, Advanced Materials
- Advanced Materials
- Extractive Metallurgy
- Process Metallurgy
- Corrosion Engineering; Physical Metallurgy, Charactersation of Al-alloys and Biomaterials; Welding Technology
- Physical Metallurgy (Structure-property correlation)

### 4.12.9 Proposed Plan for Research

- Development of Al-based alloys for high temperature applications, Cu-based alloys for electrical applications, Ti/Mg based biomaterials
- Development of wear resistant materials (Al alloys and Al based composites))
- Alloy development for aerospace/automobile applications
- Development of semi solid process,
- Green Steel Making
- Waste Utilization
- Submit a project in SERB
- Oxidation of illmenite ore
- Thermal stabilization of Boron/Zirconium doped Inver alloy
- Development of bulk nanostructured stainless steel with superior strength and enhanced ductility.
- Design and Development of New Challenging Materials through Modelling and Experiments
- Additive Manufacturing of light weight materials
- Structure-property correlation of ultra high temperature ceramics
- Stress Corrosiion Cracking (SCC) AND Hydrogen Embrittlement (HE) of Al-alloys, Ti-alloys and Mg-alloys.
- Structure-property correlation

#### 4.12.10 Area of Research Interest

- Phase transformation in new alloys, Biomaterials, Materials Characterization
- Microstructure-property correlation and wear behaviour of different materials
- Composites
- Alloy development
- Finite Element Analysis
- Tribological behaviour of materials
- Microstructure property correlation, Development of Al alloys,
- Decarbonization of Steelmaking
- Composite Materials, Non-ferrous Metal casting
- Alternative iron making, Agglomeration and raw materials characterization, Refining of liquid metal, Utilization of fines and waste materials,
- Recovery of valuable metal from low grade ore, Physical modeling
- Thermal stabilization
- Bulk nanostructured materilas
- Design and Development of Materials for Biomedical Applications
- Additive Manufacturing
- Joining of Materials

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- Laser Processing of Materials
- Powder Metallurgy
- Corrosion of Weldments
- Solidification & phase studies
- Waste Management
- Ultra high temperature ceramics, Nanomaterials, Biomaterials, Refractory, ODS alloys
- Industry waste and Use of Bio char in iron making

## 4.12.11 Institute Industry Collaboration

Collaborating Institute Organization	Areas of collaboration	Collaboration Activities
SAIL-DSP	Iron Making And Coke Oven	Research Work- Optimisation of Coke Moisture and Prediction of Sinter Qualit
CSIRO Australia	Green Stee	Decarbonization in iron and steel sectors
University of Southampton, UK	Biomaterial of Ti-alloys; High Pressure Torsion (HPT) of Al-Alloys	Preparation of HPT of alloys

## 4.12.12Collaboration with Academic and Research Institutions

Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
Materials Engineering Division, CSIR-NML, Jamshedpur, India	Mechanical Metallurgy	Dr. H. N Bar	Ph.D student supervised
Metallurgical Engineering Department, Indus University, Ahmedabad, India	Materials Characterisation	Dr. S. K Chaudhury	Research Work
ESI, Leoben, Austria	Al based alloys	Prof. J. Eckert	Joint work
CGCRI, Kolkata	Biomaterials	Dr. M. Das	Joint PhD student
IIT Roorkee	Al-based alloys	Dr. S. Das	Joint Project
NML Jamshedpur	Cu-based alloys	Dr. J. Chakraborty	Joint undergraduate Student
KNU Asansol	Steel, Al alloys	Dr. A. Sinha, Dr. G. Mandal	Joint Student, Project
Indian Institute Of Technology Kharagpur	Thermodynamics Analysis	Dr. Manas Paliwal	Joint Research Work, Publications
CSIR-Central Mechanical Engineering Research Institute, Durgapur, West Bengal 713209, India	Material Characterization	Dr. Manidipto Mukherjee	Joint Research Work, Publications
Sikkim Manipal University, Majhitar, East Sikkim 737136, India	Material Characterization	Dr. Joydeep Biswas	Joint Research Work, Publications
IIT Roorkee	Al based Al-Cu-Ni alloys	Dr. S. Bera (PI), Dr. B.K.Show and S.Das (IIT Roorkee)	Joint DST project
CSIRO Australia	CSIRO Australia	Dr. Nawshad Haque	Decarbonization of Iron and Steel making
CSIR-CMERI	Welding	Barnali Maji	Research work
R&D Centre for Iron and Steel, Ranchi	Flux development for refining of steel	Satadal ghorai	Joint PhD Student
National Institute of Advanced Manufacturing Technology	Thermal stabilization	Prof. Koushik Sikdar	Sharing ideas and doing research



Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
Kazi Nazrul University	Bulk nanostructured materilas	Prof. Gurudas Mondal	Sharing ideas and doing research
NIT Raipur	Modeling and Simulations	Prof. Subhas Ganguly	Sharing ideas and doing research

# 4.12.13 Workshops/Seminars Organized

Name of Key Speaker(s)	Name of the Programme	Date of the Programme
Dr B.K. Dubey, Prof PankajKumar ray, Prof Anupam Debsarkar Dr Alok Bajpai	Green Technology and Sustainability	2022-02-25

# 4.12.14Journal: Published in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Chandan Choudhary, A.K Pramanik, K.L Sahoo and D.Mandal	ramanik, K.L Sahoo and and Mechanical Properties of		Volume:38 Issue No:13 Page No:912-925 Year:2022 Month:Jul
Ritwik Das, Manas Kumar Mondal & Susanta Pramanik	Effect of Extrusion on the Physical and Mechanical Properties of Briquette Made with Blast Furnace Flue Dust and Iron Ore Fines	Journal of The Institution of Engineers (India): Series D	Volume:103 Issue No:2 Page No:473-478 Year:2022 Month:Apr
Atosh Kumar Sinha, Susanta Pramanik, Krishna P Yagati	WAAM of Al-Cu Alloy: Effect of Cooling and Remelting on Grain Size and Mechanical Properties	MEASUREMENT	Volume:200 Issue No: Page No: Year:2022 Month:Jun
Atosh Kumar Sinha, Susanta Pramanik, Krishna P Yagati	WAAM of Al-Cu Alloy: Effect of Cooling and Remelting on Grain Size and Mechanical Properties	Transactions of the Indian Institute of Metals	Volume:76 Issue No:5 Page No:1331-1339 Year:2023 Month:Mar
P. Siva Prasad and K. S. Ghosh	Effect of Heat Treatment and NC Ni Coating on Electrochemical and Hydrogen Embrittlement Behaviour of a High Strength Low Alloy (HSLA) Steel	Electrocatalysis (Springer)	Volume:13 Issue No:5 Page No:551-566 Year:2022 Month:May
Imran Rizwi, D. Mandal, B.K Show  B.K Show  Development of wear resistant aluminium based nano-composite reinforced with nano-AlN		Tribology	Volume:145 Issue No: Page No:021702-1-10 Year:2022 Month:Oct
M. Salot, K. Santhy, D. Mandal, A. Awasthi, S.K Chaudhury	A New Electrolytic Process for synthesis of tungsten oxide nanopowder from WC- 6Co scrap	Ceramics International	Volume:49 Issue No: Page No:1507-1512 Year:2022 Month:Oct
Prosanta Biswas, Durbadal Mandal, Manas Kumar Mondal	Compressive failure analysis of in-situ Al- Mg2Si composites: An experimental and finite element based study,	Engineering Fracture Mechanics	Volume:277 Issue No: Page No:108986 Year:2022 Month:Dec



Author(s) Name	Paper Name	Journal Name	Others Info
Rahul Bhandari, Prosanta Biswas, Manab Mallik and Manas Kumar Mondal	Microstructure based numerical simulation of the micromechanics and fracture in hypereutectic Al–Mg2Si composites	Materials Chemistry and Physics	Volume:297 Issue No: Page No:127427 Year:2023 Month:March
Suveksha Tamang, Sadhna Rai, Manas Kumar Mondal, Nayan Kamal Bhattacharyya, Bibhu Prasad Swain and Joydeep Biswas	Microwave-assisted reduction of graphene oxide using Artemisia vulgaris extract for supercapacitor application	Journal of Materials Science: Materials in Electronics	Volume:35 Issue No: Page No:575 (1 to 18) Year:2023 Month:February
Prosanta Biswas, Durbadal Mandal and Manas Kumar Mondal	Compressive failure analysis of in-situ Al- Mg2Si composites: Experiment and finite element modelling	Engineering Fracture Mechanics	Volume:277 Issue No: Page No:108986 Year:2023 Month:January
Tanay Rudra Paul, Manas	Thermal shock behavior of	Journal of Alloys	Volume:924 Issue No: Page
Kumar Mondal, and Manab Mallik	ZrB2-MoSi2- SiC Composites	and Compounds	No:166443 Year:2022 Month:November
Sadhna Rai, Rabina Bhujel, Manas Kumar Mondal, Joydeep Biswas and Bibhu P. Swain	Investigation of optical and electrical properties of graphene oxide/silicon nanowires heterojunction	Journal of Materials Science: Materials in Electronics	Volume:33 Issue No: Page No:16501–16510 Year:2022 Month:June
Md. Imran Rizwi, Durbadal Mandal, Bijay Kumar Show	Development of Wear Resistant Aluminum Based Nano-Composite Reinforced With Nano-AlN	Journal of Tribology	Volume:145 Issue No:2 Page No:021702-01 to 021702-10 Year:2022
Ramesh Kumar, Avash Kumar Saha & Arup Kumar Mandal	Removal of metallic and non-metallic impurities by hydrogen plasma-arc	Journal of The Institution of Engineers (India):	Volume:62 Issue No:2 Page No:383- 395 Year:2022 Month:Jul
	melting	Series D	
Amit Kumar Singh, Sharvan Kumar, Biswajit Mishra, Raj Kumar Dishwar, Arup Kumar Mandal, Lakkoju Sankara Rao & Om Prakash Sinha	Direct reduction of fluxed iron ore pellets made from coarse iron ore particles,	Canadian Metallurgical Quarterly	Volume:61 Issue No:4 Page No:475- 482 Year:2022 Month:Mar
Tanay Rudra Paul, Manas Kumar Mondal, Manab Mallik	Thermal shock behavior of ZrB2-MoSi2- SiCw composites	Journal of Alloys and Compounds	Volume:924 Issue No: Page No:166443 Year:2022 Month:Jul
Sujeet Kumar Gautam, Sudip Kumar Samanta, Manab Mallik, Himadri Roy and Aditya Kumar Lohar	Wear And Mechanical Properties Of In Situ A356/5%Tib2 Composite Synthesis By Cooling Slope Technique	International Journal of Metalcasting	Volume:17 Issue No: Page No:2239– 2251 Year:2022 Month:Dec
Rahul Bhandari, Prosanta Biswas, Manab Mallik, Manas Kumar Mondal	Microstructure based numerical simulation of the micromechanics and fracture in hypereutectic Al–Mg2Si composites	Materials Chemistry and Physics	Volume:297 Issue No: Page No:127427 Year:2023 Month:Jan
Atosh Kumar Sinha, Susanta Pramanik, Krishna P Yagati	Research progress in arc based additive manufacturing of aluminium alloys-A review	Measurement	Volume:200 Issue No:111672 Page No: Year:2022 Month:Jul
Atosh Kumar Sinha, Susanta Pramanik, Krishna P Yagati	Atosh Kumar Sinha WAAM of Al–Cu Alloy: Effect of Cooling and Remelting on	Transactions of the Indian Institute of Metals	Volume:76 Issue No:5 Page No:1331-1339 Year:2023 Month:Jan



Author(s) Name	Paper Name	Journal Name	Others Info
	Grain Size and Mechanical Properties		
F Hijazi, B Roy, D Srinivasan, P Kumar, V Jayaram	Non-uniform mechanical behaviour of uniaxially rolled Ti–6Al–4V with	Materials Science and Engineering:	Volume:869 Issue No: Page No:144813 Year:2023 Month:Mar
K Sikdar, A Mahata, B Roy*, D Roy	Thermokinetic stabilisation of nanocrystalline Cu by ternary approach	Philosophical Magazine	Volume:103 Issue No:1 Page No:27- 42 Year:2022 Month:Jan
K Sikdar, B Roy*, A Mahata, D Roy	Enhanced thermal stability of nanocrystalline CuAl alloy by nanotwin and nanoprecipitate	Journal of Alloys and Compounds	Volume:922 Issue No: Page No:166273 Year:2022 Month:Nov
F Hijazi, D Srinivasan, B Roy, P Kumar, V Jayaram	Micro-texture regions in rolled Ti6Al-4V under polarized light.	Scripta Materialia.	Volume:213 Issue No: Page No:114588 Year:2022 Month:May
K. Bandyopadhyay, S. Das, K.S. Ghosh and M.M. Ghosh	Molecular Dynamics based Scheme of Designing Nanostructured Cu-Ni Alloy Thin Film for Coating on Advanced Structural Components in Naval Vessels	Journal of Materials Engineering and Performance	Volume:32 Issue No: Page No:3401-3419 Year:2022 Month:Sep
Krishnan Bandyopadhyay, Ajay Kumar Mishra, Sujoy Das, K.S. Ghosh and M.M. Ghosh	A Multiscale Model based Scheme for the Design and Development of Nanocomposites for Advanced Structural Applications	Journal of Materials Engineering and Performance	Volume:32 Issue No: Page No:5798-5812 Year:2022 Month:Oct
Suvam Chatterjee, Manas Kumar Mondal and Joydeep Maity	Diffusional evolution of σ- phase to resolve a long- standing dissimilar material joining issue in supercritical boiler	Philosophical Magazine	Volume:102 Issue No:7 Page No:559- 588 Year:2022 Month:Jul
Samata Saha, Manojit Ghosh, Ashit Kumar Pramanick, Chandan Mondal and Joydeep Maity	Microstructure and Mechanical Properties of Al/Cup/SiCp/TiCp-Based Hybrid Composites Fabricated by Spark Plasma Sintering	Journal of Materials Engineering and Performance	Volume:31 Issue No:1 Page No:424- 438 Year:2022 Month:Jan
Mousumi Mallick, Biplab Hazra, Swapan Kumar Mitra, Debasish Basak, Bijay Kumar Show and Joydeep Maity	Temperature-Dependent Wear Characteristics of a High-Voltage Low- Current Electric Energy-Treated AISI 1080 Steel	Journal of Materials Engineering and Performance	Volume:31 Issue No:5 Page No:3661–3678 Year:2022 Month:May
Joydeep Maity	An analytical model of grain growth considering the conjoint effects of precipitate pinning and solute drag in steel	Philosophical Magazine Letters	Volume:102 Issue No:10 Page No:307–323 Year:2022 Month:Oct
Joydeep Maity and Anupam Sharma	A novel analytical approach to ascertain hardenability of plain carbon steel	Philosophical Magazine	Volume:103 Issue No:5 Page No:407- 434 Year:2023 Month:May
Joydeep Maity	An analytical model to ascertain the fragmentation of cementite lamella at lamellar fault sites	Philosophical Magazine	Volume:103 Issue No:7 Page No:611-629 Year:2023 Month:Apr





Author(s) Name	Paper Name	Journal Name	Others Info
J. Maity, S. A. Rahman, S. Alam, K. K. Singh, P. Kumar and S. Hembram	On ascertaining hardness- microstructure relationship in annealed steel for varying carbon content	J. Maity, S. A. Rahman, S. Alam, K. K. Singh, P. Kumar and S. Hembram	Volume:54 Issue No:3 Page No:335- 344 Year:2023 Month:Mar
Ritwik Das, Manas Kumar Mondal & Susanta Pramanik	Comparison of Compressive Strength of Fly Ash Bonded Flue Dust Briquettes with that of Briquettes made with Bentonite, Sodium Silicate, Lime, Starch, Pitch, Molasses and Dextrin Binder	Transactions of the Indian Institute of Metals	Volume:76 Issue No:5 Page No:1253- 1262 Year:2022 Month:May
Ritwik Das, Manas Kumar Mondal & Susanta Pramanik	Strengthening Behaviour and Microstructural Properties during the Compaction of Reduced Blast Furnace Flue Dust— Fly Ash—Iron Metal Matrix Composite Fines using Powder Metallurgy Route	Transactions of the Indian Institute of Metals,	Volume:75 Issue No:9 Page No:2255- 2263 Year:2022 Month:Nov
Sk. Md. Arif. S. Ghorai H.N Bar, D. Mandal	Effect of Quenching and Partitioning time on microstructure and mechanical properties of low carbon micro-alloyed steels	Materials Today: Proceedings	Volume:66 Issue No: Page No:3865-3869 Year:2022 Month:Jun
Gaurav Pandya, Vatsal Ramani, Gaurav Awasthi, D.K Basa, D. Mandal, Sujoy Krishna Chaudhury	Optimisation of Sea Beach sand composition for Cast Iron Foundry Applications	Materials Transactions (Japan)	Volume:64 Issue No:1 Page No:260- 266 Year:2023 Month:Jan
Sk Md Arif, Satadal Ghorai, Himadri Nandan Bar and Durbadal Mandal	Effect of quenching and partitioning time on microstructure and mechanical properties of low carbon micro-alloyed steel	Materials Today: Proceedings	Volume:66 Issue No:9 Page No:3865–3869 Year:2022 Month:Sep
Ritwik Das, Manas Kumar Mondal and Susanta Pramanik	Effect of Extrusion on the Physical and Mechanical Properties of Briquette Made with Blast Furnace Flue Dust and Iron Ore Fines	Journal of The Institution of Engineers (India): Series D	Volume:103 Issue No: Page No:473–478 Year:2022 Month:May

# 4.12.15 Journal: Accepted for Publication in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Arvind Jaiswal, Barnali	Structure-property correlation of a newly	Journal of Materials	Volume: Issue
Maji, Manoj Kumar,	synthesized 6351Al/bct-BN composite	Engineering and	No: Page No:
Joydeep Maity		Performance	Year:2023 Month:



# 4.12.16Journal: Published in Others in 2022-2023

Author(s) Name	Paper Name	Journal Name	Others Info
Abdur Rouf, Krishna	Synthesis and Characterization of	TRANSACTIONS OF POWDER	Volume:47 Issue No:
Priya Yagati and	Magnesium Aluminate (MgAl2O4)	METALLURGY ASSOCIATION	Page No:32-40
Manab Mallik	Spinel Through Solid State	OF INDIA	Year:2022
	Pressureless Sintering		Month:Jun
Sonam Kumari and	Densification and	TRANSACTIONS OF POWDER	Volume:47 Issue No:
Divyadutta Behura	Characterization of Pressureless	METALLURGY ASSOCIATION	Page No:77-82
	Sintered ZrB2 -20 vol% MoSi2	OF INDIA	Year:2022
	Ultra High Temperature Ceramic		Month:Jun
	Composites		
K S Ghosh	BOOK: "Foundation of Welding	Prentice Hall International (PHI)	Volume:1 Issue No:9
	Technology"		Page No:530
			Year:2022
			Month:Sep

# 4.12.17 Journal: Accepted in Others in 2022-2023

NIL

# 4.12.18 Conference: Published in Others in 2022-2023

Author(s) Name	Paper Name	Conference Name	Others Info
Sayandip Sarkar, Manas Kumar Mondal, and Manab Mallik	Synthesis and characterization of ZrB2-SiC composite powder	International Conference on Powder Metallurgy (PMAI- PM 2022)	DOI/ISBN: https://doi.org/10.1016/j.matpr.2022.07.164 Volume: Issue No: Page No: 320-325 Year:2022 Month:Jun Presenter:CO- AUTHOR
Akash Maity, Bishal Bidyut Buragohain, Prosanta Biswas, Rahul Bhandari, Anjan Pal, and Manas Kumar Mondal	Effect of Mn addition on the micromechanical response and failure of Al-12.6Si alloy using actual microstructure based RVE model	Symposium on Failure and Preventive Maintenance of Machineries 2022	DOI/ISBN: https://doi.org/10.1016/j.matpr.2022.06.128 Volume: Issue No: Page No:3790-3798 Year:2022 Month:Sep Presenter:CO-AUTHOR
Anirban Hazra, Manab Mallik	Synthesis and characterization of Co- based alloy	International Conference on PM 22	DOI/ISBN: https://doi.org/10.1016/j.matpr.2022.06.454 Volume: Issue No: Page No:301–308 Year:2022 Month:Jul Presenter:CO- AUTHOR
Sayandip Sarkar, Manas Kumar Mondal, Manab Mallik	Synthesis and characterization of ZrB2-SiC composite powder	International Conference on PM 22	DOI/ISBN: https://doi.org/10.1016/j.matpr.2022.07.164 Volume: Issue No: Page No:320–325 Year:2022 Month:Jul Presenter:CO- AUTHOR
Sk. Md. Arif. H.N Bar, D. Mandal	Study the microstructure, hardness and tensile properties of low carbon microalloyed steels processed through quenching and partitioning treatment	59th NMD and 75th ATM	DOI/ISBN: NA Volume: Issue No: Page No: Year:2022 Month:Nov Presenter:CO- AUTHOR

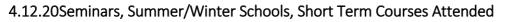


Author(s)	Paper Name	<b>Conference Name</b>	Others Info
Name		27121 1 2	D.O.M. S.D.
Kashi Nath	Investigation on Indian Coal	35th National Convention of	DOI/ISBN: NA Volume: Issue No: Page
Malik, Satadal	utilization in Coke making	Metallurgical and Materials	No:2 Year:2023 Month:Jan Presenter:CO-
Ghorai, Arup		Engineers and National	AUTHOR
Kumar Mandal		Conference on Valuing Low	
		grade ore and waste:	
		Challenges and Remedies	
		(VLOW:CR-2023), NIT	
A 1 TZ	T 2 2 36 1 1 1	Durgapur	DOL/ICDN NA VI I N D
Avash Kumar	Investigation on Mechanical	35th National Convention of	DOI/ISBN: NA Volume: Issue No: Page
Saha, Ramesh	characteristics of Fluxed	Metallurgical and Materials	No:3 Year:2023 Month:Jan Presenter:CO-
Kumar, Kashi	Composite Pre-Reduced	Engineers and National	AUTHOR
Nath Mallik,	Pellets made with High ash	Conference on Valuing Low	
Arup Kumar	Coal	grade ore and waste:	
Mandal		Challenges and Remedies	
		(VLOW:CR-2023), NIT	
		Durgapur	
Ramesh	Comparative study on the	35th National Convention of	DOI/ISBN: NA Volume: Issue No: Page
Kumar, Avash	characteristics of Fluidized	Metallurgical and Materials	No:4 Year:2023 Month:Jan Presenter:CO-
Kumar Saha,	bed combustion and	Engineers and National	AUTHOR
Kashi Nath	Pulverized coal combustion	Conference on Valuing Low	
Mallik, Arup	bottom ash bricks	grade ore and waste:	
Kumar Mandal		Challenges and Remedies	

# 4.12.19Books Authored

Author	Co-Author	Title of the Book	Title of the Chapter	Publication
Name				Details
Mainak Saha Mainak Saha, Manab Mallik	Sourajit Pramanik, Rajdeep Banik, Pooja Maurya, Simrat Singh, S. Vandan Raj, D. Prem Madhur, Tanay Rudra Paul, Rahul Mitra, Manas Kumar Mondal and Manab Mallik	Modern Manufacturing Systems Trends and Developments Smart Multifunctional Nano-inks Fundamentals	An Insight into Cyclic Oxidation Behavior of ZrB2 -20 Vol.%MoSi2 Based Ultra-High Temperature Ceramic Matrix Composite Metal-based conducive nano- inks: synthesis and characterization techniques	Publisher: Apple Academic Press Publication Date: 2022-12- 27 Publisher: Elsevier Publication Date: 2023-01-
		and Emerging Applications		27
Mainak Saha, Manab Mallik		Surface Engineering Methods and Applications	Surface engineering of nanomaterials	Publisher: CRC Press Publication Date: 2022-12- 19
Mainak Saha, Manab Mallik		Advanced Materials for Biomechanical Applications	Additive Manufacturing and Characterisation of Biomedical Materials	Publisher: CRC Press Publication Date: 2022-05-
Mainak Saha, Manab Mallik	Sourajit Pramanik, Rajdeep Banik, Pooja Maurya, Simrat Singh, S. Vandan Raj, D. Prem Madhur, Tanay Rudra Paul, Rahul Mitra, Manas Kumar Mondal,	Modern Manufacturing Systems	An Insight Into Cyclic Oxidation behavior of ZrB2- 20 Vol.% MoSi2 Based Ultrahigh Temperature Ceramic Matrix Composite	Publisher: Apple Academic Press Publication Date: 2022-12- 27





Name of the Programme	Organized By	From Date	To Date	Organizing Country
International conference on "Laser Assisted Material Processing (LAMP 2022)	IIT Kharagpur	2022-08-29	2022-08-31	India
International Conference on Advances in Materials and Processing: Challenges and Opportunities"	IIT Roorkee	2022-10-17	2022-10-19	India
International Conference on Powder Metallurgy and Particulate Materials (PM23) 2023	PMSI	2023-03-13	2023-03-15	India
DAE-BRNS Two-Day Theme Meeting on "Strategic Planning for Enhancing Research Reactor Utilization (RRU- 2022)"	Bhabha Atomic Research Centre, Mumbai	2022-05-06	2022-05-07	India
ICPCM-2022	NIT Rourkela, India	2022-12-09	2022-12-11	India
4th Structural Integrity Conference and Exhibition (SICE 2022)	IIT Hyderabad	2022-12-14	2022-12-16	India
International Conference on Future Technologies in Manufacturing, Automation, Design & Energy	NIT Puduchery	2022-12-14	2022-12-16	India
NMD ATM 2022	Indian institute of Metals	2022-11-14	2022-11-16	India

# 4.12.21Ph.D. Supervisor

Topic Name	Scholar	Supervisor	Status	Status Date
Structure property correlation of ODS alloys	Anirban Hazra	Manab Mallik	ONGOING	-
Synthesis and Characterization of Mg- based alloys for biomedical application	Sudeep Paul	S. Bera, D. Mandal, M. Das	ONGOING	-
Development of Cu-Co-Ni Alloys for Magnetic Applications	A. Sarkar	S. Bera, S. Chhabri	ONGOING	-
Development of Cu-based alloys and alloy composites for electrical applications	A Mahato	S. Bera, BK Show	ONGOING	-
Development of Al-Cu-Ni alloys for high temperature applications	S Das	S. Bera, BK Show	ONGOING	-
Synthesis and Characterization of Titanium based alloys for biomedical applications	S Arulmozhiselvar	S. Bera, D. Mandal	ONGOING	-
Processing, microstructure and characterization of biomaterials microstructure	A. Dhar	M. Mallik, S. Bera	ONGOING	-
Study on the mechanical working of blast furnace flue dust – iron oxide – graphite composite briquette made with fly ash as a binder	Ritwik Das (Registration No.: NITD/PhD/MM/2018/01023, Roll No: 16/MM/1102)	Dr. S.Pramanik and Dr. M. K. Mondal	DEGREE AWARDED	2022- 07-28
Development and micromechanics of in- situ Al-Mg2Si composites	Prosanta Biswas (Registration No. NITD/PhD/MME/2017/00856, Roll No: 15/MME/1104)	Dr. M. K. Mondal and Dr. D. Mandal	DEGREE AWARDED	2022- 04-29



Topic Name	Scholar	Supervisor	Status	Status Date
Coupled multi-scale modeling and experimental approach to develop carbon fiber reinforced epoxy resins composites with enhanced mechanical properties for advanced structural applications.	Ajay Kumar Mishra (18MM1103)	Dr. Madan Mohan Ghosh and Dr. Bijay Kumar Show	ONGOING	-
Development of nano-AlN and nano-TiN reinforced aluminum metal matrix composite by stir casting method	Md. Imran Rizwi (20MM1102)	Dr. Bijay Kumar Show and Dr. Durbadal Mandal	ONGOING	-
Development of Cu-based alloys and alloy composite for electrical applications	Amar Mahato (20MM1101)	Dr. Supriya Bera and Bijay Kumar Show	ONGOING	-
Development of Al-Cu-Ni alloys for high temperature applications	Sagar Das (20MM1105)	Dr. Supriya Bera and Bijay Kumar Show	ONGOING	-
Studies on Fatigue behaviour of Multiphase steels	Sk Md Arif	Dr H.N Bar (CSIR- NML Jamshedpur)	ONGOING	-
Development of high entropy bulk metallic glass for structural and biomedical applications	Sudeep Paul	Dr. Supriya Bera	ONGOING	-
Development of nano AlN and Nano TIN reinforced Aluminium metal matrix composites by stir casting methods	MD IMRAN RIZWI	Dr. B K Shaw	ONGOING	-
Synthesis and Characterization of Titanium-based alloys for biomedical applications	S Arulmozhiselvar	Dr. Supriya Bera	ONGOING	-
Composite Materials	Abhishek Kumar	Dr. M. Mallik and Dr. Barnali Maji	ONGOING	-
Desulphurization studies of liquid iron by hydrogen in an indigenously fabricated transferred arc plasma furnace	Ramesh Kumar	Arup Kumar Mandal	SUBMITTED	2023- 07-18
Studies on enhanced utilization of Indian coking coal in coke making	Kashi Nath Malik	Arup Kumar Mandal; Satadal Ghorai	ONGOING	-
Production of Steel by green DRI using biomass as a reductant	Avash Kumar	Arup Kumar Mandal	ONGOING	=
Low-Cost Synthesis and Characterization of Boron Nitride Reinforced Aluminum Based Metal Matrix Composite	Arvind Kumar Jaiswal	Dr. Barnali Maji and Prof. J. Maity	SUBMITTED	2023- 04-13
Design and Development of Ti- based Alloys by Multiscale Modelling to Manufacture through 3D Printing Technique for Advanced Applications.	Pritam Shadukhan	Dr. Barnali Maji and Dr. M.M.Ghosh	ONGOING	-
Design and Development of Nanostructured Zr–Nb-based Alloy with Enhanced Irradiation Tolerance	Satadipa Banerjee	Dr. M.M.Ghosh and Dr. Barnali Maji	ONGOING	-
Study on Calcium Ferrite formation under Microwave	Raj Kumar Kalshyan	Satadal Ghorai & G. M. Chowdhury	ONGOING	-



Topic Name	Scholar	Supervisor	Status	Status Date
Studies on increased utilization of high ash Indian coal in coke making	Kashinath Mallik	Arup Kumar Mandal & Satadal Ghorai	ONGOING	-
Study on titanium carbide formation	Rahul Dhibar	Satadal Ghorai	ONGOING	-
Thermal stabilization of nanostructured alloys	Ajfarul Islam	Barna Roy	ONGOING	-
Molecular Dynamics and Finite Element Method based Modelling and Simulations of Nanoparticles and Nanocomposites for Advanced Structural Applications	Krishnan Bandyopadhyay	MM Ghosh and KS Ghosh	DEGREE AWARDED	2022- 04-19
Characterisation of Aluminium Alloys and Corrosion Behaviour	Abhishek Kumar Sinha	K.S. Ghosh and M.M. Ghosh	ONGOING	-
Design and Development of Nanostructured Cu-Ni Alloy Thin Film Coated Structural Materials for Naval Applications	Hrishikesh Kumar	M.M. Ghosh and S. Pramanik	ONGOING	-
Studies on Wire Arc Additive Manufacturing of high strength Aluminium alloys: Process Parameters - Structure - Property Correlation	Atosh Kumar Sinha	Dr. Krishna Priya Yagati, Dr. Susanta Pramanik	ONGOING	-
Structure property correlation of magnesia refractory	Abdur Rouf	Dr. M. Mallik & Dr. K. P. Yagati	ONGOING	-
Structure property correlation of high	ABHISHEK KUMAR	Dr. M. Mallik & Dr. B.	ONGOING	-
ZrB2—SiC based ultrahigh temperature ceramic composites for high temperature applications	Sayandip Sarkar	Dr. M. Mallik & Dr. M.K. Mondal	ONGOING	-
Equal Channel Angular Pressing (ECAP) of in-situ Al-Mg2Si composites: Mechanical and Tribological Properties.	Rahul Bhandari	Dr. M.K. Mondal & Dr. M. Mallik	ONGOING	-
Processing, microstructure and characterization of biomaterials	Amit Dhar	Dr. M. Mallik & Dr. Supriya Bera	ONGOING	-
Study of Agglomerated Waste for Removal of Sulphur in Steel	Mohammad Hamza	Dr K.P. Yagati and S Pramanik	ONGOING	-
Design and Development of Surface Nano- Structured Materials	Hrishikesh Kumar	Dr M.M. Ghosh and Dr S Pramanik	ONGOING	-
Studies on Wire Arc Additive Manufacturing of High Strength Aluminium alloys: Process Parameters – Strucutre – Property Correlation	Atosh Kumar Sinha	Dr K.P. Yagati and S Pramanik	ONGOING	-
Low-Cost Synthesis and Characterization of Boron Nitride Reinforced Aluminium Based Metal Matrix Composite	Mr. Arvind Kumar Jaiswal	Dr. B. Maji and Prof. J. Maity	SUBMITTED	2023- 08-31
Tentative: Analysis of Rolling of Sheet Steels	Arijit Bannerjee	M M Ghosh and K S Ghosh	ONGOING	-

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# 4.12.22Ongoing Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Amount(in Rs.)	Starting Year
Development of Al-Mg2Si Composite through Novel Equal Channel Angular Squeeze Casting (ECASC) Technique	Dr. M. K. Mondal	Science and Engineering Research Board (SERB) Department of Science and Technology, Government of India	3045000.0	2019
Tailoring the architecture of microstructure in Al-based Al-Cu-Ni alloys to improve the mechanical properties	PI: Dr. Supriya Bera NIT Durgapur Other Investigators: Dr. Sourav Das IIT Roorkee Dr. Bijay Kumar Show NIT Durgapur	DST-SERB	4419900.0	2020
Development of Al-Si alloys with and without grain refiner or eutectic modifier by Strain Induced Melt Activation Process	Durbadal Mandal	SERB DST Govt. of India	2405400.0	2019
Tailoring the architecture of microstructure in Al-based AI-Cu-Ni alloys to improve the mechanical properties	S. Bera, BK Show, S. Das	DST-SERB	48.0	2020
Studies on Sustainable Steelmaking in 2050 using biomass as a reductant	Arup Kumar Mandal	SERB	3564000.0	2022
Effect of Y2O3 Addition on Oxidation Behavior of Pressure- less Sintered ZrB2- SiC Composite	Dr. Manab Mallik	DST-SERB-CRG	3498959.0	2020

# 4.12.23Completed Sponsored Projects Details

NIL

# 4.12.24 Reviews of Manuscripts for Publication in Journal

Reviewer	Name of the Journal	Publisher	<b>Date of Final Review</b>
Manas Kumar Mondal	Crystals	MDPI	2022-06-26
Manas Kumar Mondal	Metals	MDPI	2022-08-27
Manas Kumar Mondal	Crystals	MDPI	2022-09-09
Manas Kumar Mondal	Advanced Engineering Materials	Wiley-VCH GmbH	2022-10-12
Manas Kumar Mondal	Transactions of the Indian Institute of Metals	Springer	2022-10-20
Manas Kumar Mondal	Manas Kumar Mondal Transactions of the Indian National Academy of Engineering		2022-10-26
Manas Kumar Mondal	Materials Research Express	IOP Publishing	2022-11-14
Manas Kumar Mondal	Materials	MDPI	2022-12-12
Manas Kumar Mondal	Materials	MDPI	2022-12-21
Manas Kumar Mondal	Manas Kumar Mondal Advances in Materials and Processing Technologies		2023-01-09
Manas Kumar Mondal	Manas Kumar Mondal Silicon		2023-01-10
Manas Kumar Mondal	Lubricants	MDPI	2023-01-20
Manas Kumar Mondal	Materials	MDPI	2023-01-19
Manas Kumar Mondal	International Journal of Metalcasting	Springer	2023-02-27



Reviewer	Name of the Journal	Publisher	Date of Final Review
Bijay Kumar Show	Materials Today: Proceedings	Elsevier Ltd.	2022-04-19
Manas Kumar Mondal	Advanced Engineering Materials	Wiley-VCH GmbH	2022-04-24
Durbadal Mandal	Materials Science and Technology	Taylor & Francis	2022-12-03
Durbadal Mandal	Journal of Alloy and Compounds	Elsevier	2022-10-22
Durbadal Mandal	Journal of Alloy and Compounds	Elsevier	2022-07-02
Durbadal Mandal	Crystals	MDPI	2021-10-06
Supriya Bera	Journal of alloys and compounds	Elsevier	2022-09-14
Supriya Bera	Trans IIM	Springer	2022-05-23
Arup Kumar Mandal	Transactions of the Indian Institute of Metals	Springer	2022-06-08
Arup Kumar Mandal	up Kumar Mandal Biomass Conversion and Biorefinery		2022-06-08
Arup Kumar Mandal Mineral Processing and Extractive Metallurgy Review		Taylor and Francis	2023-01-28
Satadal Ghorai	Transactions of the Indian Institute of Metals	Springer	2023-01-16
Satadal Ghorai	Transactions of the Indian Institute of Metals	Springer	2022-06-09
Barna Roy	Transactions of the Indian Institute of Metals	Springer	2023-01-11
Madan Mohan Ghosh Journal of Materials Engineering and Performance		Springer	2022-11-19
Madan Mohan Ghosh Journal of Materials Engineering and Performance		Springer	2022-11-19
Madan Mohan Ghosh Transactions of the Indian Institute of Metals		Springer	2023-02-18
Susanta Pramanik	Iron Making and Steel Making _ Products and Processes	Taylor and Francis	2023-02-20

# 4.12.25Invited Examiners/Paper-Setters/Board of Studies

Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Supriya Bera	BTech-Semester Exam	KNU	2022-06-05	2023-06-05

## 4.12.26Invited Lectures

Name of the Faculty	Title of the Lecture	Programme	From Date	To Date
Durbadal Mandal	Expert member of the selection Committee for selecting Project staff of various Categories	CSIR National Metallurgical Laboratory Jamshedpur	2022-04-04	2022-04-05
Durbadal Mandal	Member of Assessment Committee to interview the candidates belonging to Technical Cadre	CSIR National Metallurgical Laboratory, Jamshedpur	2022-09-15	2022-09-15
Durbadal Mandal	Expert member of the selection Committee for selecting project staff of various categories	CSIR National Metallurgical Laboratory Jamshedpur	2022-12-13	2022-12-13
Supriya Bera	Metallurgy	KNU	2023-02-16	2022-02-16



Satadal Ghorai	Expert Member (External) of the selection Committee for selecting Project staff	CSIR-National Metallurgical Laboratory, Jamshedpur	2022-08-04	2022-08-04
Satadal Ghorai	Member of Assessment Committee to interview the candidates belonging to Technical Cadre	CSIR-National Metallurgical Laboratory, Jamshedpur	2022-09-15	2022-09-15

#### 4.12.27Patents

NIL

### 4.13 Department of Management Studies

#### 4.13.1 Department at a Glance:

DMS offers MBA with specialization in Marketing, Finance, OB & HR and Systems and Operations. DMS in Collaboration with Mathematics and Computer Science and Engineering Departments offer M Tech in Operation Research. DMS offers Courses Like Principle of Management and Accounting for all streams of B Tech courses and open elective courses namely Marketing Research and Analytics, Security and Stock Market Analysis and Industrial Marketing. Already DMS has started offering Minor programs namely Financial Management and Marketing Management in BTech streams.

#### 4.13.2 Mission & Vision

#### Mission

To deliver rigorous and relevant education of international standing that inspires students to implement their
professional skills in an enterprising manner and become architects of an equitable world. Through vibrant
collaboration, and innovation we drive excellence in teaching and research to contribute to the intellectual, social
and economic development of the communities. We serve thereby shaping a responsible future for both business
and society.

#### Vision

• To become center of academic excellence with commitment to provide quality education in management, liberal studies, entrepreneurship and related fields to the students and working executives with a holistic approach, to develop them as entrepreneurs and future leaders of the industry.

#### 4.13.3 Faculty

Name	Designation	Email-id
Dr. Mousumi Roy	Professor	mousumi.roy@dms.nitdgp.ac.in
Dr. Avijan Dutta	Professor	avijan.dutta@dms.nitdgp.ac.in
Dr.Gautam Bandyopadhyay	Professor	gautam.bandyopadhyay@dms.nitdgp.ac.in
Dr. Neelotpaul Banerjee	Associate Professor	neelotpaul.banerjee@dms.nitdgp.ac.in
Dr. Kaushik Mandal	Associate Professor and HOD	kaushik.mandal@dms.nitdgp.ac.in
Dr. Anupam De	Associate Professor	anupam.de@dms.nitdgp.ac.in
Dr. Durba Pal	Associate Professor	durba.pal@dms.nitdgp.ac.in
Dr. Amlan Ghosh	Associate Professor	amlan.ghosh@dms.nitdgp.ac.in
Dr. Subhadip Sarkar	Assistant Professor	subhadip.sarkar@dms.nitdgp.ac.in
Dr. Ujjwal Kanti Paul	Assistant Professor	ujjwalkanti.paul@dms.nitdgp.ac.in
Dr. Umamaheswarrao Jada	Assistant Professor	umamaheswararao.jada@dms.nitdgp.ac.in

#### 4.13.4 Equipments

Sl.	Name of the equipment	<b>Date of Purchase</b>	Amount
No.			
1	Peoplelink Interactive Display S75 without OPS (1 Nos)	22.02.2023	179960.40



2	Ricoh Multifunction Machine with ARDF & Network (1 Nos)	24.02.2023	98887.00
3	Dell Computer (8 Nos)	22.11.2022	637200.00

#### 4.13.5 Labs

Sl. No.	Name of Laboratory	Major equipment
1	Business Laboratory for MBA	Desktop Computer
2	Finance Lab for Minor program Financial	Desktop computers
	Management	
3	Marketing Lab for Minor Program Marketing	Desktop computers/ Laptop
	Management	

#### 4.13.6 PhD degree awarded till 2022-23

Fifty One

### 4.13.7 Any other relevant information

#### **Unique Selling Proposition of DMS**

- 1) High Return on Investment (ROI) for students (Average package/Total expenditure for the study)
- 2) Multiple courses relevant to Business analytics
- 3) Focus on practical implementation through hybrid courses (theory and practical)

#### **SWOT of DMS**

#### **Strengths:**

- Well-qualified and motivated faculty members with industry background
- An ideal mix of experience and youth in the faculty members
- Regular revision of curricula and syllabi with the help of experts from academia and industries
- Large number of publication and reviews by faculty members.
- Students encouraged to take up research early
- Faculty development programmes given highest priority
- Low tuition fee, higher average package
- Over 50 PhDs earned by the students of the DMS since its inception
- Providing exposure to all the BTech students through core, minor and open elective courses

### Weaknesses:

- Inadequate facilities for the post graduate laboratories and research
- Limited number of Institute research scholars
- Limited number of students in reserved categories
- Inadequate number of technical and supporting staffs
- Inadequate space for expansion of laboratories and setting up new laboratories
- Limited access to case studies, and full text research articles of international peer-reviewed journals
- Inadequate number of equipped class rooms
- Budget constraint for promotion of MBA and PhD courses

#### **Opportunities**

- Globalisation of education opening up huge opportunities for market driven courses and research
- Government focus on skill based education and entrepreneurship.
- Huge demand for job oriented courses
- Rising demand for online and executive management programs
- Corporate Spending on CSR has increased as per new regulation. Thus, scopes for CSR based consultancies have risen.

#### **Threat**

- Challenges from newer IIMS and private management Institutes including newer branches spread over the country.
- Gradual reduction in number of applicants (CAT, XAT)
- Declining industrial activities in and around Durgapur



- Limited job opportunities in few specialisation areas like OB& HR, Systems and operations Management and Finance.
- Availability of online courses (certificate, regular and executive MBA)

#### 4.13.8 Specialization

- Finance
- Marketing
- Managerial Economics; Sustainable Development; Environmental Economics; Technology Strategy; International Business
- Finance
- Human Resource Management and Organizational Behaviour
- Finance
- Organizational Behaviour
- OPERATIONS MANAGEMENT
- Operations Research
- Marketing Management, Marketing Research, Brand Management, Service Marketing
- Systems & Operations Management

### 4.13.9 Proposed Plan for Research

- Pension Resaerch
- Complete the project received from ICSSR for the AY 23-24
- Complete the pending research pipeline comprising a few papers and a book chapter
- Insert a few fresh articles in the pipeline
- Development of Strategy for Sustainable Development, Marketing & Behavioral Finance
- Financial Inclusion, Multi-criteria decision-making (MCDM), Etc.
- In the field of Capital Market and Strategic Management
- Green OCB, Workplace Inclusion, Employee Engagement, Sports Leadership, Psychological Capital
- NEW MODELS FOR SOLVING LPP AND QUADRATIC PROBLEMS
- Famvertising and its impact on consumer, Societal Marketing and company performance.

#### 4.13.10 Area of Research Interest

- Banking, Insurance and Pension
- Sustainable marketing, digital marketing, rural marketing, agricultural marketing
- Sustainable Strategy for Human Resource Development, Industrialization and Knowledge management
- Corporate Finance, Behahioural Finance, Capital Structure Issues, Dividend Policy, Working Capital Management, Financial Ratio Analysis, Capital Budgeting, Banking and Insurance, Stock Market Analysis
- Positive Organizational Behaviour, Leadership, Employee Well Being
- Capital Market, Corporate Finance
- Psychological Capital, OCB, Employee Engagement, Workplace Adaptability, Employee Green Behaviour, Workplace Resilience, Sports Leadership, Workplace Inclusivity
- OPERATIONS RESEARCH
- Marketing
- Portfolio optimization, Application of DEA in Tourism/Destination Marketing, Application of DEA for
  evaluating performance efficiency in Banking Sector, Application of optimization techniques in Business,
  Application of statistical software's in Marketing & Human resource Management, Financial market data
  analysis using soft computing techniques
- CSR led Marketing. Service Marketing, Famvertising and its impact. Specialised Service Marketing

### 4.13.11 Institute Industry Collaboration

Collaborating Institute Organization	Areas of collaboration	Collaboration Activities
Tata Metallics	Determination Of The Optimal Mix Of The Ingradiants	Application Of Statistical Techniques
DSP CSR Department	CSR impact assessment	Consultancy





# 4.13.12 Collaboration with Academic and Research Institutions

Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
NIT Silchar	Ph D supervision	Prof. Gurudas Das, Ujjwal	Joint Ph D supervision,
		Paul	research
LUT, Finland	Circular Economy	Prof. L. Linnanen &	Research & Publication
		Prof.M.Roy	

# 4.13.13 Workshops/Seminars Organized

Name of Key Speaker(s)	Name of the Programme	Date of the Programme
Prof. G Bandyopadhyay and Amlan Ghosh	Workshop On Economics & Management Research	2022-05-27
Prof. Gautam Bandyopadhyay, Dr. Amlan Ghosh	Workshop On Quantitative Techniques In Research 29th June to 3rd July, 2022.	2022-06-29

# 4.13.14Journal: Published in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
M.Malhotra, M.Roy, P.Pal	A Membrane-based Green and Low- cost system for ensuring safe Drinking water in a Selenium- affected region	Journal of Environmental Management, Elsevier	Volume:324C Issue No: Page No:116361 Year:2022 Month:Dec
Soumya Banerjee, Banhi Guha, Amlan Ghosh, G Bandyopadhyay	Forecasting The Performance of Efficient Indian Equity Mutual Funds Portfolio Using Auto-Regressive Integrated Moving Average Model	The Seybold Report	Volume:17 Issue No:109 Page No:161-179 Year:2022 Month:Aug
Soumya Banerjee, Sayan Gupta, Amlan Ghosh, G Bandyopadhyay	Optimal Portfolio Selection of Equity Mutual Funds using Genetic Algorithm: An Indian Perspective	Mathematical Statistician and Engineering Applications	Volume:71 Issue No:4 Page No:4620 - 4631 Year:2022 Month:Oct
Abhijit Mukherjee and Amlan Ghosh	Role of economic factors in property liability insurance consumption: empirically examining the Indian market	Studies in Business and Economics	Volume:17 Issue No:1 Page No:112 - 129 Year:2022 Month:Apr
Divya Singh, Ujjwal Paul, Neeraj Pandey	Does electric vehicle adoption (EVA) contribute to clean energy?  Bibliometric insights and future research agenda.	Cleaner and Responsible Consumption	Volume:8 Issue No: Page No:1-12 Year:2022 Month:Dec
Ujjwal Paul	Estimation of Technical Efficiency of Chemical-free Farming using Data Envelopment Analysis and Machine Learning: Evidence from India	Benchmarking: An International Journal	Volume:ahead of print Issue No: Page No: Year:2023 Month:Jan
Bijoy Kumar Dey, Gurudas Das, Ujjwal Paul	Technical Efficiency and its Determinants of handloom micro- enterprises in the Indian state of Assam: A Two-stage double bootstrap DEA approach	. Indian Growth and Development Review	Volume:16 Issue No:2 Page No:123- 140 Year:2023 Month:Mar
Tanuj Mathur, Ujjwal Paul	Predictors of home insurance purchase: the homeowners' knowledge, perceived benefits and perceived vulnerability towards disaster losses. International Journal of Housing Markets and Analysis	International Journal of Housing Markets and Analysis	Volume: Issue No: Page No: Year:2022 Month:Dec



Author(s) Name	Paper Name	Journal Name	Others Info
M.M.Chanda, Neelotpaul Banerjee, & G. Bandyopadhyay.	Effective implementation of Knowledge Management Systems (KMS) in Government Schemes/Programs of selected sectors using soft computing.	International Journal of Knowledge Management.	Volume:Vol.18 Issue No:No.1 Page No:1-22 Year:2022 Month:
Aviit Sarkar and Avijan Dutta	The Milk Producers' Organization and Indian dairy sector: a strategic alignment	Veterinarska stanica	Volume:53 Issue No:3 Page No:329- 341 Year:2022 Month:Jun
Aviit Sarkar , Hemant Gupta ,Avijan Dutta	In Search of the Determinants of Dairy Production in an Emerging Market: A Panel Data Approach	Veterinarska stanica	Volume:53 Issue No:4 Page No:441- 448 Year:2022 Month:Jul
Amrita Bhattacharya Avijan Dutta Samarjit Kar	Does Demographics Influence the Risk Behaviour of Urban Investors? A Machine Learning Model Based Approach	Operation Research in Engineering science: Theory and application	Volume:5 Issue No:2 Page No:190-205 Year:2022 Month:Apr
Biswas, S., Bandyopadhyay, G., & Mukhopadhyaya, J. N.	A multi-criteria framework for comparing dividend pay capabilities: Evidence from Indian FMCG and consumer durable sector.	Decision Making: Applications in Management and Engineering.	Volume:5 Issue No:2 Page No:140-175 Year:2022, Month:Oct
Chanda, M. M., Banerjee, N., & Bandyopadhyay, G.	Effective Implementation of Knowledge Management Systems (KMS) in Government Schemes/Programs of Selected Sectors Using Soft Computing.	International Journal of Knowledge Management	Volume:18 Issue No:1 Page No:18 Year:2022 Month:
Chanda, M. M., Banerjee, N., & Bandyopadhyay, G.	Using Artificial Neural Networks (ANNs) to Improve Agricultural Knowledge Management System (KMS)	Research Anthology on Artificial Neural Network Applications	Volume: Issue No: Page No:1031-1051 Year:2022 Month:
Biswas, S., Bandyopadhyay, G., Pamucar, D., & Joshi, N.	A Multi-Criteria Based Stock Selection Framework in Emerging Market.	Operational Research in Engineering Sciences: Theory and Applications	Volume:5 Issue No:3 Page No:153-193 Year:2022 Month:
Banerjee, S., Guha, B., Ghosh, A., & Bandyopadhyay, G.	Forecasting the Performance of Efficient Indian Equity Mutual Funds Portfolio using ARIMA	The Seybold Report	Volume:17 Issue No:09 Page No:161- 179 Year:2022 Month:
Banerjee, S., Gupta, S., Ghosh, A., & Bandyopadhyay, G.	Selection of Efficient Equity Mutual Funds Portfolio in Indian market using Optimization Techniques	NEUROQUANTOLOGY	Volume:20 Issue No:11 Page No:2056-2072 Year:2022 Month:
Soumya Banerjee, Sayan Gupta, Amlan Ghosh, G Bandyopadhyay	Selection of Efficient Equity Mutual Funds Portfolio In Indian Market Using Optimization Techniques.	Neuroquantology	Volume:20 Issue No:11 Page No:2056-2072 Year:2022 Month:Nov
Banerjee, S., Gupta, S., Ghosh, A., & Bandyopadhyay, G.	Optimal Portfolio Selection of Equity Mutual Funds using Genetic Algorithm: An Indian Perspective	Mathematical Statistician and Engineering Applications	Volume:71 Issue No:4 Page No:4620- 4631 Year:2022 Month:





# 4.13.15 Journal: Accepted for Publication in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Bijoy Kumar Dey, Gurudas Das, Ujjwal Paul, Tanuj Mathur	How does Human, Financial and Social Capital Affect Firm Performance? Evidence from the Handloom Enterprises in Assam	Global Business Review	Volume:Forthcoming Issue No: Page No: Year:2023 Month:Jan
Bijoy Kumar Dey, Ujjwal Paul	What Drives the Profitability of Indian Handloom Enterprises? An Insight based on the Seemingly Unrelated Regression model	Research Journal of Textile and Apparel	Volume:ahead of print Issue No: Page No: Year:2023 Month:Apr
Bijoy Kumar Dey, Ujjwal Paul, Gurudas Das	Are handloom micro-enterprises in India efficient? Estimation based on DEA and bootstrap truncated regression approach	Research Journal of Textile and Apparel	Volume: Issue No: Page No: Year:2023 Month:Apr
Nayanjyoti Bhattacharjee and Anupam De	Black Swan Event and The Stock Market Volatility Response to Shocks in Developed, Emerging, Frontier and the BRIC Markets: Lessons from the COVID-19 Pandemic	Brazilian Business Review	Volume:https:// doi.org/10.15728/bbr.202 2.19.5.2.en Issue No:NA Page No:NA Year:2022 Month:
Nayanjyoti Bhattacharjee and Anupam De	The Policy Response to COVID-19 Pandemic and its impact on the Equity Market Sentiment: The Indian Experience	Journal of Public Affairs	Volume:https://doi.org/10 .1177/2319714522109968 2 Issue No:NA Page No:NA Year:2022 Month:May
Nayanjyoti Bhattacharjee and Anupam De	Firm Size Effect and the Price and Volume Reaction to Corporate News: Evidence from India	Afro-Asian J. of Finance and Accounting, Inderscience Publishers Ltd	Volume:NA Issue No:NA Page No:NA Year:2022 Month:Jun
Dipanita Deb, Philippe Gillet, and Anupam De	Examining the relationship between Corporate Social Responsibility and Financial Performance of BSE Listed Companies using Data Envelopment Analysis	International Journal of Economics and Business Research	Volume:NA Issue No:NA Page No:NA Year:2022 Month:Dec
Asmita Basu and Anupam De	Management and Economic Valuation of Cultural Heritage: The case of terracotta temples in Birbhum District, West Bengal	Ancient Asia	Volume:NA Issue No:NA Page No:NA Year:2022 Month:Nov
SUBHADIP SARKAR	ABC classification using extended R-model, SVM and Lorenz curve	OPSEARCH	Volume: Issue No: Page No: Year:2023 Month:Apr
SUBHADIP SARKAR	"Identification of Groups Due to Generic Strategies among Private Primary Schools using CFA"	Asian J. of Management Science and Applications	Volume: Issue No: Page No: Year:2023 Month:Apr
Gupta, S., Bandyopadhyay, G., Biswas, S., & Mitra, A.	An integrated framework for classification and selection of stocks for portfolio construction: Evidence from NSE, India.	Decision Making: Applications in Management and Engineering.	Volume: Issue No: Page No: Year:2022 Month:
Arup Mitra, Sayan Gupta, Gautam Bandyopadhyay, A.K. Jalan	Stock Portfolio Performance by Clustering using Correlation: An empirical pretext of "MSCI-96	International Journal of Business Innovation and Research	Volume: Issue No: Page No: Year:2022 Month:

# 4.13.16Conference: Published in 2022-2023 DOI/ISBN

Author(s) Name	Paper Name	Conference Name	Others Info
Vikash Mandal &	The Impact of Green Orientation of	Conference on Performance	DOI/ISBN: ISBN: 979-
Durba Pal.	Human Resource Management on	Management at University of	12-
	Employee Green Performance: The	Rome Tor Vergata (Rome,	210-1921-6 Volume:
	Mediating role of Green	Italy).	Issue No: Page No:13-19
	Organizational Citizenship		Year:2022 Month:Nov
	Behaviour.		Presenter:CO-AUTHOR

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Author(s) Name	Paper Name	Conference Name	Others Info
Durba Pal & Vikash Mandal.	The Impact of Happiness at Work Vis-à-vis Workplace Diversity on Organizational Citizenship Behaviour Towards Environment: An Exploration.'	Diversity, Equity and Inclusion- Making the Invisible Visible, organized by K J Somaiya Institute of Management, Mumbai.	DOI/ISBN: ISBN: 978- 81- 9547782-3-2 Volume: Issue No: Page No:190- 199 Year:2023 Month:Jan Presenter:CO-AUTHOR
Durba Pal & Vikash Mandal.	Unlocking Employees' In-Role and Extra- Role Green Behaviours: Exploring the Role of Green Organizational Culture Vis-à-vis Green Work Engagement (Awarded as best paper-2nd prize).	International Conference on Sustainable Business Management SBM 2023 organized by DoMs, IIT Roorkee.	DOI/ISBN: ISBN: 978- 93- 94086-21-0 Volume: Issue No: Page No:158 Year:2023 Month:Mar Presenter:SELF
Indu Nath Jha, Durba Pal & Subhadip Sarkar.	Achieving a sense of satisfaction with life through Inclusive leadership: Does workgroup inclusion matter? Evidence from the Indian IT sector.'	Diversity, Equity and Inclusion- Making the Invisible Visible, organized by K J Somaiya Institute of Management, Mumbai.	DOI/ISBN: ISBN: 978- 81- 9547782-3-2 Volume: Issue No: Page No:218- 223 Year:2023 Month:Jan Presenter:CO-AUTHOR
Indu Nath Jha, Durba Pal & Subhadip Sarkar	'Promoting Life Satisfaction in It Sector Employees Through Leaders' Inclusiveness.'	20th AIMS International Conference, organized by AIMS and IIM Kozhikode.	DOI/ISBN: ISBN: 978- 1- 943295-20-3 Volume: Issue No: Page No:1266- 1273 Year:2023 Month:Jan Presenter:CO-AUTHOR
Indu Nath Jha, Subhadip Sarkar & Durba Pal.	'A Study on Consequences of Workplace Inclusivity: Empirical Evidence from Indian IT sector.'	International Conference on Sustainable Business Management SBM 2023 organized by DoMs, IIT Roorkee.	DOI/ISBN: ISBN: 978- 93- 94086-21-0 Volume: Issue No: Page No:15 Year:2023 Month:Mar Presenter:CO- AUTHOR
Puja Ghosh, Mousumi Roy	Role of Atma-nirbhar Bharat and New Education Policy for Skill Development	National Conference, Bhairab Ganguly College, Kolkara	DOI/ISBN: 20/1/2023 Volume: Issue No: Page No: Year:2023 Month:Jan Presenter:CO- AUTHOR
Puja Ghosh, Mousumi Roy	Covid-19 and Online Education in Higher Studies- How far sustainable in Rural Areas?	International Conference on Sustainable Development Goals, Tamralipta Mahavidyalaya, W.B.	DOI/ISBN: 4/2/2023 Volume: Issue No: Page No: Year:2023 Month:Feb Presenter:CO-AUTHOR
Aishwarya Mitra, Anupam De & Keshav Kant Prasad	Predicting the Determinants of Employees Well-being: Role of Financial Literacy	20th AIMS International Conference on Management (AIMS-20)	DOI/ISBN: NA Volume: Issue No: Page No:23 Year:2023 Month:Jan Presenter:CO-AUTHOR
Aishwarya Mitra, Anupam De & Keshav Kant Prasad	Empirical Review of Factors Affecting Financial Awareness	International Conference on Shaping the Future of Management Education for Sustainable Emerging Economies (SFME – 2022)	DOI/ISBN: NA Volume: Issue No: Page No:NA Year:2022 Month:Nov Presenter:CO-AUTHOR

4.13.17Conference: Published in Others in 2022-2023

NIL



# 4.13.18Books Authored

<b>Author Name</b>	Co-Author	Title of the Book	Title of the Chapter	Publication Details
Amlan Ghosh		Pension and Informal Sector in India		Publisher: Routledge, Taylor & Francis Group, UK. Publication Date: 2022-08-
				03
Dr.Kaushik	Dr.Sujata	Accepted for publication	A Journey towards	Publisher: Bloomsbury India
Mandal	Banerjee	in edited book 'Resilience	societal	Publication, NewDelhi, India
		and Sustainable	advertisement: An	Publication Date:
		Development'	empirical validation	2023-03-16

# 4.13.19Seminars, Summer/Winter Schools, Short Term Courses Attended

Name of the Programme	Organized By	From Date	To Date	Organizing Country
63rd ISLE conference	Rajiv Gandhi University, Itanagar and ISLE	2022-03-01	2022-03-03	India
OLAB 2022: Optimization, Learning and Analytics in Business	Heritage Institute of Technology, Kolkata	2022-12-15	2022-12-17	India
Shaping the Future of Management Education for Sustainable Emerging Economies (SFME 2022)	DoMS, IITRurkee	2022-11-20	2022-11-22	India
International Conference on Business Management and Social Innovation (ICBMSI-22)	Institute for Scientific and Engineering Research (ISER)	2022-09-10	2022-09-10	India
SFME 2022	IIT Roorkee	2022-11-20	2022-11-22	India
National e-Workshop on "Advanced Research Methodology in Social Sciences". On 19th April 2022, A,K. Visva-Bharati University, A.K.DasGupta Centre for Planning & Development	Visbha-Bharati University, Shantiniketan	2022-04-15	2022-04-25	India
International Conference on Green Energy & Sustainable Environmental Technology (GESET-2022)	KIITs Bhubaneswar	2022-09-15	2022-09-16	India
Shaping the Future of Management Education for Sustainable Emerging Economies (SFME 2022)	IIT Roorkee	2022-11-20	2022-11-22	India
International Conference on Sustainable Business Management SBM 2023	DoMs, IIT Roorkee.	2023-03-23	2023-03-25	India
Decoding the HR Mantra: HR Roadmap & Future of Workforce	Indian Institute of Social Welfare & Business Management (IISWBM), Calcutta.	2023-03-01	2023-03-02	India

# 4.13.20Ph.D. Supervisor

Topic Name	Scholar	Supervisor	Status	Status
				Date
Assessing potential tourist destinations in	Sanmay Mallick	Amlan Ghosh and	ONGOING	-
North Bengal: A tourism revival strategic		D. Mitra (NBU)		
planning				



Topic Name	Scholar	Supervisor	Status	Status Date
Factors Affecting Investment Behaviour In	Soumya Banerjee	Prof. G.	SUBMITTED	2023-
Mutual Fund Industry-An Indian Perspective	2 - 11119 11 - 111119 11	Bandyopadhyay and Amlan Ghosh		02-27
Yet to be registered	Abhisikta Basak	Amlan Ghosh	ONGOING	-
Optimum assets allocation of DC pensions funds in India	Keshav Kant Prasad	Amlan Ghosh	ONGOING	-
Three Essays on eWOM	Ms. Krishna Roy	Ujjwal Paul	ONGOING	-
A Study on the Adoption Intention of Electric Cars in India	Ms. Divya Singh	Ujjwal Paul	ONGOING	-
Industrial Efficiency and its Impact on Firm- Level Performance: A Case Study of Hand loom Micro Enterprises in India	Mr. Bijoy Kumar Dey	Gurudas Das, Ujjwal Paul	SUBMITTED	2023- 05-11
A study on consumer buying decision in the time of pandemic.	P. Sahoo	N.Banerjee& K.Mandal	ONGOING	-
Digital divide in Education sector	Puja Ghosh	M.Roy & T.Chatterjee	ONGOING	-
Sustainable Energy Management strategy towards Net-Zero Economics	Iman Ghosh Dastidar	Prof.M.Roy & Prof.P.Pal	ONGOING	-
Issues of HR development among the Santal tribes of Eastern India	Alok Emanuel Kisku	Prof.M.Roy	ONGOING	-
Sustainable Marketing of Green Products	Kritisha Sharma	Prof.M.Roy	ONGOING	-
Technology Management Strategy for Green Products	Sayantan Ghosh Dastidar	M.Roy& P.Pal	ONGOING	-
A Study on Corporate Social Responsibility and its Impact on the Performance of Indian Corporate Sector	Dipanita Deb	Dr. Anupam De and Prof. Philippe Gillet	SUBMITTED	2022- 11-30
Strategy for Dairy Development in West	Avijit Sarkar	Avijan Dutta	DEGREE	2023-
Bengal, India	NITD/PhD/16/MS/1306		AWARDED	08-14
Investor behavior in Durgapur and Asansol Region	Amrita Bhattacharya NITD/PhD/16/MS/1306	Avijan Dutta	SUBMITTED	2023- 08-14
Essay & Issues on Earning management of Indian firms with special emphasis on family business and the role of corporate governance	Soumen Chatterjee NITD/PhD/16/MS/1501	Avijan Dutta	ONGOING	-
Exploring Antecedents & Consequences Of Workplace Inclusivity Among Employees Of Indian Organisation: An Empirical Study	Indu Jha	Subhadip Sarkar, Durba Pal	ONGOING	-
A Study on Workplace Adaptability: An	Sujata Bose	Dr.Durba Pal.	DEGREE	2022-
Indian Perspective.	TT'11 13 6 11 '	D D 1 D1	AWARDED	05-31
A Study on the Determinants of Sports Leadership of a Group of Physical Educators in the Academic Institutions of West Bengal.	Hillol Mukherjee	Dr.Durba Pal.	ONGOING	-
Exploring Green Organizational Citizenship Behaviour Vis-a-vis its Correlates among the Employees of Indian Organizations: An Empirical Investigation.	Vikash Mandal.	Dr.Durba Pal.	ONGOING	-
Exploring Antecedents and Consequences of Workplace Inclusivity among Employees of Indian Organizations: An Empirical Study.	Indu Nath Jha.	Dr.Subhadip Sarkar; Dr.Durba Pal.	ONGOING	-
Comparative Analysis of Listed Banks using Financial Indicators and Stock Returns in Indian Scenario.	Vinay Kumar Shaw	Prof. Gautam Bandyopadhyay	ONGOING	-
Factors Affecting Investment Behaviour In Mutual Fund Industry-An Indian Perspective	Soumya Banerjee	Prof. Gautam Bandyopadhyay & Dr. Amlan Ghosh	SUBMITTED	2023- 02-13



Topic Name	Scholar	Supervisor	Status	Status Date
A Comprehensive Soft-computing Approach for Construction of Conservative Portfolio in Indian Equity Market	Sayan Gupta	Prof. Gautam Bandyopadhyay	SUBMITTED	2022- 11-16
An Investigation into the applications of Big Data Analysis in Supply Chain management	Sanjib Biswas	Prof. Gautam Bandyopadhyay	SUBMITTED	2022- 11-23
Harnessing The Association Between Inherent Interests Of Employees With Key Leadership Competencies For Organisational Development In Indian Industries.	Mainak Ranjan Chaki	Prof. Gautam Bandyopadhyay	ONGOING	-
Estimation of systemic risk and identification of systemically important firms in India	Subhash Karmakar	Prof. Gautam Bandyopadhyay	SUBMITTED	2022- 12-02
A study on the relationship of promotional mix with sales and profits.	Somroop Siddhanta	Neelotpaul Banerjee	DEGREE AWARDED	2015- 05-11
Determining the attitude of Indian young consumers towards online marketing.	Debasis Ghosh	Neelotpaul Banerjee	DEGREE AWARDED	2018- 02-14
A study of evolution, growth and decline of small brands of apparels in India.	Naveen Arora	Neelotpaul Banerjee	DEGREE AWARDED	2018- 04-19
An empirical study on the impact of social media to facilitate the effectiveness of marketing.	Kaustav Mukherjee	Neelotpaul Banerjee	DEGREE AWARDED	2018- 06-01
An empirical analysis on various facets of celebrity endorsement in Indian context.	Ramendra Pratap Singh	Neelotpaul Banerjee	DEGREE AWARDED	2018- 08-24
A study on various aspect of consumer behavior in context to different products and services – A comparison between consumers in India and USA.	Jyotirmoy Samanta	Neelotpaul Banerjee	DEGREE AWARDED	2021- 02-12
A study on effective management of national economic planning and budgeting using soft computing based techniques.	Mriganka Mohan Chanda	G.Bandyopadhyay & N.Banerjee	DEGREE AWARDED	2021- 09-30
Psychological Contract With Reference To Employment Relationship A Study From Fast- Food Industry	Anitha Thomas	Avijan Dutta	DEGREE AWARDED	2023- 08-14
Developing a Model for Better Utilization of Hospital Resources	S.Bandyopadhyay	Avijan Dutta , G Gandyopadhyay, G Sanyal,	DEGREE AWARDED	2023- 08-14
Stress in Police Personnel: A Study on Occurrences, Consequences within West Bengal Police Service and Coping Strategies	Malini Nandi Majumdar	Avijan Dutta	DEGREE AWARDED	2023- 08-14
A New Approach of Gap Identification in Service Quality of Educational Institutes: An Empirical Study Based on West Bengal, India	Chandan Banerjee	Kaushik Mandal	DEGREE AWARDED	2016- 04-13
Study on Nature of Relationship Between Channel Power and Influence Strategy vis- a- vis Channel Management Practices prevalent in India.	Koushick Roy	Kaushik Mandal	DEGREE AWARDED	2015- 11-09
The Impact of Website formation on various facets of business-An empirical study	MONAMI DASGUPTA(BANERJEE)	Kaushik Mandal	DEGREE AWARDED	2018- 07-27
A Quest for Relationship among CSR, Marketing Activities and Business Performance: A Cross Industry Comparison on Indian Firm	Sujata Banerjee	Kaushik Mandal	DEGREE AWARDED	2018- 09-12
Determinants of the pharmaceutical education service quality: an empirical quest based on eastern India.	Hemant Gupta	Kaushik Mandal	DEGREE AWARDED	2020- 03-13

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Topic Name	Scholar	Supervisor	Status	Status Date
In search of nature of relation between internal marketing and financial performance of the company with reference to hotel, hospital and banks operating in Kolkata	Rituparna Chattopadhyay	Kaushik Mandal	DEGREE AWARDED	2020- 12-29
A Quest For Relationship Among Socio demographic variables and various facets of consumer loyalty	Saswati Roy	Kaushik Mandal	SUBMITTED	2023- 08-17
A Study on Consumer Buying Decision in the time of Pandemic	Pabitra Sahoo	Neelotpaul Banerjee and Kaushik Mandal	ONGOING	-
Impact of Societal marketing on Business Performance of the Organisation-An empirical Study	Shantanu Dutta	Kaushik Mandal	ONGOING	-
Attitude towards Famvertising and its impact on Brand Building: An analysis based on Experimentation and Empirical Survey	Anwesha Mazumder	Kaushik Mandal	ONGOING	-

# 4.13.21Ongoing Sponsored Projects Details

NIL

# 4.13.22Completed Sponsored Projects Details

NIL

# 4.13.23 Reviews of Manuscripts for Publication in Journal

Reviewer	Name of the Journal	Publisher	Date of Final Review
Amlan Ghosh	Int. J. of Globalisation and Small Business	Inderscience Publisher	2023-07-22
Amlan Ghosh	Int. Journal of Social Economics	Emerald Publisher	2023-08-30
Subhadip Sarkar	CAIE	ELSEVIER	2022-08-18
Durba Pal	Asia-Pacific Journal of Management	Sage Journals	2022-11-12
	Research and Innovation	Publication	

## 4.13.24Participation in National Committees/Visits

Name of the Faculty	Name of the Committee	Place of Visit	From Date	To Date
Mousumi Roy	Appointed Member of the Assessment	CSIR_CMERI	2022-07-14	2022-07-15
	Committee for Technical Officers (Gazetted)			
	employees- reg., CSIR_CMERI Durgapur			
Mousumi Roy	Appointed Expert Member for	Jamshedpur	2022-08-18	2022-08-19
	Selection/promotion of Faculty Members, NIT	•		
	Jamshedpur			
Mousumi Roy	Senate Member of NIT Jamshedpur	Jamshedpur	2023-03-10	2023-03-11

# 4.13.25 Invited Examiners/Paper-Setters/Board of Studies

Name of the Faculty	Name of the Examination	University/Institute	From Date	To Date
Amlan Ghosh	of PG Board of Studies in	University of North Bengal	2022-11-03	2022-11-03
	Management			
Mousumi Roy	PhD	MNIT, Allahabad	2023-03-14	2023-03-16
Anupam De	PhD Viva voce examination	Birla Institute of Technology	2022-09-09	2022-09-09
_		(BIT) Mesra		



Mousumi Roy	Technical Gazette, CMERI CSIR_CMERI  Durgapur		2022-07-16	2022-07-17
Mousumi Roy	Humanities, Social Sciences	NIT Jamshedpur	2022-08-18	2022-08-19
Avijan Dutta	Member of the Assessment	CMERI	2022-07-14	2022-07-14
	Committee for assessment of			
	Technical Officers- CMERI			
Gautam	International Conference on	KNU UGC STRIDE Project		_
Bandyopadhyay	Green Supply Chain	Component-I Sponsored by the		
	Management: New Challenges to	University Grants Commission		
	sustain Green Environment	in collaboration with the	2022-11-18	2022-11-19
		Department of Mathematics and		
		the Department of Business		
		Administration, KNU		

### 4.13.27Invited Lectures

Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Amlan Ghosh	Time Series Analysis	Workshop on Research Methodology" Organised by NB St. Xavier's College, Siliguri	Siliguri, West Bengal	2022-06- 10	2022-06- 11
Amlan Ghosh	Chartered Accountants – Contribution to the 5 trillion Economy	CA Day Programme Organised by the Siliguri Branch of EIRC OF ICAI	Siliguri	2022-07- 01	2022-07- 01
Amlan Ghosh	How to Select Journals for Publication	One-day webinar on "Research Paper Writing" organised by Calcutta Business School in collaboration with ORSI Durgapur Chapter	Kolkata (Online)	2022-08-	2022-08-
Ujjwal Kanti Paul	Analysing Business and Professional Case Studies	Faculty Development Program "Professional Communication and Soft Skills"	Online	2022-08- 23	2022-09-
Ujjwal Kanti Paul	Qualitative data analysis	Workshop on Quantitative Techniques in Research	Online	2022-06- 29	2022-07- 03
Mousumi Roy	Developing an Extended theory of Planned behavioral model towards green energy and Sustainable environmental technology development	International Conference on Green Energy & Sustainable Environmental Technology (GESET-2022), KIIT, Bhubaneswar	Bhubaneswar	2022-09-	2022-09- 16
Anupam De	Multiple Regression and ANOVA using MS Excel	Quantitative Techniques in Research	NIT Durgapur	2023-06- 29	2022-07- 03
Anupam De	Case Study Presentation	Orientation Course for the CA students	Durgapur Branch of the ICAI	2022-07- 07	2022-07- 08
Anupam De	Case Study Presentation	Orientation Course for the CA students	Durgapur Branch of the ICAI	2022-12- 07	2022-12- 08
Avijan Dutta	Rejuvenating Alma Mater through Alumni Partaking	Faculty of Dairy Technology, WBUAFS in collaboration with Association of Dairy Alumni (BCKV & WBUAFS) Under the aegis of NAHEP (IG) project	Mohanpur, Nadia(WB)	2022-12-23	2022-12- 24
Gautam Bandyopadhyay	Fundamental Research using Application Software	Organized by Department of Management Studies, Dr. B.C.Roy Engineering College in Collaboration with Operational	Durgapur	2022-06-20	2022-06- 21



Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
1 wearty		Society of India, Durgapur		2	
		Chapter			
Gautam	Qualitative Techniques	Organised by Haldia Institute of	Online	2022-09-	2022-06-
Bandyopadhyay	using Analytical Tools	Management, Haldia, West		24	25
		Bengal			
Gautam	Advanced Research	St. Xavier's University, Kolkata	Online	2023-02-	2023-08-
Bandyopadhyay	Techniques: Structured	organise a workshop on		17	18
	<b>Equation Modelling</b>	Advanced Research Techniques:			
	(SEM)	Structured Equation Modelling			
		(SEM) for the Faculty members			
		and the Ph.D. scholars			
Gautam	ICSSR Sponsored Ten	Organized by the Department of	Alagappa	2022-11-	2022-11-
Bandyopadhyay	Days Research	Commerce Alagappa University	University	02	11
	Methodology Course	Karaikudi	Karaikudi		
Gautam	An overview of the	Organised by EIRC Auditorium,	Kolkata	2022-12-	2022-12-
Bandyopadhyay	application software: R	3rd Floor, CMA Bhawan, 84,		09	09
	Studio and Python	Harish Mukherjee Road, Kolkata			
		- 700025.			
Kaushik	Research Design:	10-day national workshop on	A.K.Dasgupta	2022-04-	2022-04-
Mandal	Quantitative Research	"Advanced Research	Centre,	21	21
		Methodology in Social	Visvabharati		
		Sciences"in online mode			
Kaushik	Questionnaire Design	5 Day Faculty Development	Siliguri	2023-01-	2023-01-
Mandal	with Primary &	Program (FDP) on 'Advances in	Institute of	09	13
	Secondary Scale,	Research Methodology and Data	Technology		
TZ 1 '1	Experiential Design1	Analysis'	G'11' '	2022.01	2022.01
Kaushik	Cluster Analysis	5 Day Faculty Development	Siliguri	2023-01-	2023-01-
Mandal		Program (FDP) on 'Advances in	Institute of	09	13
		Research Methodology and Data	Technology		
		Analysis'			

#### 4.13.28Patents

NIL

### 4.14 Department of Physics

## 4.14.1 Department at a Glance:

This is one of the oldest departments of the institute which has been providing the basic knowledge of physics to all the undergraduate students of this institute who come to become engineers of future. Physics is one of the core subjects along with mathematics that drive engineering and innovation as it teaches us about the laws of nature and its consequences in both microscopic and macroscopic domain. Over the years, the department has also established its identity as an independent knowledge centre for physical science studies and research through two postgraduate programs and PhD. Programs across diverse disciplines of Physical sciences. Currently, the interest of the department of physics spreads over many interdisciplinary areas of science and the boundaries are not rigidly defined. The department encourages and appreciates new ideas in physics that have relevance to technologies useful for the mankind.

The department currently boosts of several state-of the-art research laboratories which provide the infrastructural support for cutting edge multidisciplinary research which is primarily focused on various aspects of synthesis, properties and applications of materials and in particular nanostructured materials. In recognition of the high-quality research in materials science and engineering conducted by its faculty members, the department has been selected by the MHRD, Govt. of India for the prestigious "Centre of Excellence" grant in 2013 (in partnership with the department of MME of this institute). In recent years, department has recruited several new faculty members to add more diversity to the knowledge and expertise. As a consequence, the department is now also very much active in terms of research in areas such as exploration of helium and geothermal power, earthquake precursory studies, environmental radioactivity, Water geochemistry, nonlinear systems and time series analysis, study of chaotic behavior of electronic circuits and systems and application of chaos in cryptography, nanomaterials for optical sensors, solar cells, photocatalyst, standard model and beyond standard model, B meson decays, boson phenomenology, biophysics and biostatistics, artificial intelligence and machine learning in physical and biological phenomena, etc. The research in the above-mentioned areas are conducted in the various laboratories which are described in the Laboratory section.





### 4.14.2 Mission & Vision

#### Mission

To provide quality education to students with sound understanding of the fundamentals and applications of physics for the advancement of science & technology with the following aims:

- To provide high quality teaching and research.
- To improve global visibility of the department through highly qualified and internationally acclaimed faculty and staff.
- To provide the most up to date and purposeful curriculum and the state- of-the-art laboratory facilities in a "student centric" approach to empower them in finding suitable employment.
- To improve employability of our graduates by arranging close interaction with nearby industries, so that our programs and graduates are highly regarded and accepted in their workplace.
- To provide necessary knowledge, experience and ethical values to the students leading them to responsible citizens of the nation

#### Vision

• To impart quality education & focus on research in basic and applied sciences leading to advancement of technology to cater to the need of the country.

## 4.14.3 Faculty

Name	Designation	Email-id
Ajit Kumar Meikap	Professor (HAG)	ajit.meikap@phy.nitdgp.ac.in
Pathik Kumbhakar	Professor (HAG)	patihk.kumbhakar@ phy.nitdgp.ac.in
Amit Kumar Chakraborty	Professor	amit.chakraborty@phy.nitdgp.ac.in
Sukadev Sahoo	Associate Professor	sukadev.sahoo@phy.nitdgp.ac.in
Mrinal Kanti Mandal	Associate Professor	mrinalkanti.mandal@phy.nitdgp.ac.in
Soumen Basu	Associate Professor	soumen.basu@phy.nitdgp.ac.in
Hirok Chaudhuri	Associate Professor	hirok.chaudhuri@phy.nitdgp.ac.in
Aniruddha Mondal	Associate Professor	aniruddha.mondal@phy.nitdgp.ac.in
Soumik Das	Assistant Professor	soumik.das@phy.nitdgp.ac.in
Hemachander Subramanian	Assistant Professor	hemachander.subramanian@phy.nitdgp.ac.in
Sayantari Ghosh	Assistant Professor	sayantari.ghosh@phy.nitdgp.ac.in
Abhijit Ghosh	Assistant Professor	abhijit.ghosh@phy.nitdgp.ac.in

## 4.14.4 Equipments

Sl. No.	Name of the equipment	Date of Purchase	Amount (Lakh Rs.)
1.	LCR meter (IM3536, Hioki)	19.04.2022	4.00
2.	Kithley source measure unit (2450)	27.04.2022	4.00
3.	Digital Storage Oscilloscope	16.06.2022	0.98
4.	Function Generator	20.07.2022	1.33
5.	UV-Vis Spectrophotometer (PerkinElmer, Lambda 365+)	06.09.2022	10.5
6.	Reme Centrifuge	08.09.2022	3.2
7.	Honeycomb Breadboard with rigid support	22.11.2022	2.183
8.	Discriminator with DC/DC converter	15.01.2023	2.08
9.	High temperature-dependent Capacitance and Current	17.01.2023	1.90
	measurement system (Homemade)		
10.	Probe sonicator	20.01.2023	1.49

## 4.14.5 Labs

Sl. No.	Name of Laboratory	Major equipment
1	Electronics Laboratory	Oscilloscope 1GHz, RF Signal generator 3GHz,
		Spectrum Analyzer, Function Generator,

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Sl. No.	Name of Laboratory	Major equipment
		Programmable power supply, Caddo-71 PCB
		Designer.
2	Nanoscience Laboratory	UV-Vis. absorption spectrophotometer,
		Photoluminescence spectrofluorometer.
03	Carbon Nanotechnology Laboratory	Centrifuge, vacuum furnace, hot air oven, rotary
		vacuum evaporator, spin coater, bath sonicator and
		probe sonicator, diamond wheel saw, fume hood, etc.
04	Materials Science Laboratory	DTA-TGA Perkin Elmer, Autolab 302N
		Electrochemical workstation, Agilent LCR meter,
		High temperature electrical measurement setup.
05	Facility for the theoretical study	Two GPU-based HP workstations with different
		computational software
06	Optical Sensor Laboratory	E-Beam evaporation cum GLAD system (), Thermal
		evaporation cum GLAD system, VLS GLAD
		system, PerkinElmer UV-Vis spectrophotometer
		(Model No: LAMDA 365+), Photocurrent
		measurement system, Keithley make source meter
		unit (I-V Meter) (Model no: 2450), LCR Meter
		(Model No: IM3536), Helium Cryostat.
07	Low-Temperature Characterization Laboratory	1 tesla electromagnet, Closed Cycle He-Cryostat,
		Liq. N2 Cryostat, Impedance Analyser (Hz to MHz
		& MHz to GHz) LCR meter, Keithley Electrometer,
		PH Multimeter, High Temp. furnace etc.
08	UG and PG Laboratories	The UG and PG laboratories are equipped with
		standard experimental setup B.Tech and MSc
		Physics student
09	Facility for research on Helium & Geothermal	Rad 7 radon-222 semiconductor detector with aqua
	Exploration, and Earthquake Precursor Study and	kit
	Environmental radioactivity	Alpha Guard ionisation chamber Radon detector
		Soil moisture, soil temperature detector
10	Facility for research on Water geochemistry, and	Photocatalytic reactor, Muffle Furnace, Hot Air
	photocatalyst for organic pollutant removal	Oven, Ultrasonic Bath, Digital Balance, Wastewater
		treatment laboratory set up, Membrane set up for
		wastewater treatment, Multiparameter analyser for
		water

## 4.14.6 PhD degree awarded till 2022-23

Eighty Seven.

## 4.14.7 Any other relevant information

Prof. P. Kumbhakar, Dept. of Physics, NIT Durgapur Delivered an Invited Talk as Eminent Speaker of Bengal Science Lecture (BSL) for 30th National Children's Science Congress (NCSC-2022) held on 26.09.2022, at DAV Model School Durgapur.

## 4.14.8 Specialization

- Condensed Matter Physics
- Physics of Catalysis
- Theoretical High Energy Physics
- High Energy Physics
- Electronics
- Laser Application (Holography)
- Physical vapour deposition technique, Nanotechnology, Glancing Angle Deposition, Photoconductivity, Sensors and semiconductors
- Material Science
- Biophysics
- Theoretical Biology
- Non-equiilibrium Statistical Mechanics
- Experimental Nonlinear Optics, Random Lasers, Energy Harvesting







- engineering of nanomaterials
- Condensed Matter Physics
- Electronics
- Physics of Living Systems
- Physics

### 4.14.9 Proposed Plan for Research

- Density Functional Theory calculations to understand the electronic structure of bulk and nanomaterials and their electrochemical and photochemical behaviors toward the reduction/oxidation of small molecules involved in energy conversion and energy storage processes
- Flexible Energy Storage Device
- Experimental Physics
- Holographic Optical Elements, Photovoltaic Concentrator, Speckle Metrology,
  - RHIC-STAR experimental data taking and data analysis.
  - o To gain a deeper understanding of various non-thermal and experimental background effects on RHIC-STAR cumulant measurements by performing phenomenological and simulation baseline studies.
- Flexible optoelectronics, Arsenic Sensors for water quality determination, Smart coating for window and space applications
- Energy Harvesting Materilas
- Analyze sequence dependence of DNA unzipping, replication and transcription
- Characterizations and study of optical and nonlinear optical properties of semiconducting and metallic nanoparticles, quantum dots and 2D materials.
- Development of random laser for speckle free imaging applications.
- Synthesis of nanomaterial for degradation of organic pollutants in wastewater Synthesis and characterization of nanostructured materials.
- Development of novel electrodes for sodium ion hybrid capacitor and battery, electrocatalysts for hydrogen and oxygen evolution, sensors etc.
- Nonlinear Dynamics, Helium & Geothermal exploration, Water geochemistry, Materials for water treatment
- Chaotic Cryptography and AI based Image Processing.

#### 4.14.10 Area of Research Interest

- Electronic Structure of Materials
- Physics of Photo- and Electro- Chemical Properties of Materials
- Electronic Structure Driven Catalysite Activity
- Z' Boson Phenomenology, B Meson Decays, CP Violation, Higgs Boson, Massive Neutrino, Physics Beyond Standard Model, Gravitation and Cosmology,
- High Energy Physics (Experiment & Phenomenology), Relativistic Heavy Ion Collision.
- Experimental Condensed Matter Physics
- Nuclear and Particle Physics
- Experimental Physics
- Holography, Holographic Optical Elements, Optical Interferometry, Photovoltaic Concentrator, Speckle Metrology, Laser Application
- Thin film and nanotechnology, optoelectronics, Sensors, III-V semiconductors
- Multiferroic Materials, Fuel Cell, Supercapacitor
- DNA information storage, evolutionary advantage, Markov Chain methods
- Nanoscience & Nanotechnology
- · Nanophotonics
- · Nonlinear Optics
- Laser Physics
- Ultrafast Phenomena
- Nano Gas Sensor
- Random Lasers
- Triboelectric Nanogenerator
- Electrochemistry
- metal oxide nanostructures, carbon nanomaterials like graphene, CNT and their composites
- Nonlinear Dynamics, Helium & Geothermal exploration, Water geochemistry, Materials for water treatment
- Synchronous communication systems, Nonlinear dynamics & chaos, Cryptography, Image processing.
- Nonlinearity and stochsticity in living systems, Reaction-Diffusion systems, Pattern formation, Statistical physics in living system dynamics



# 4.14.11Institute Industry Collaboration

Collaborating Institute Organization	Areas of collaboration	Collaboration Activities
Sunkonnect Pte Ltd, Singapore	photo and electrocatalysis	joint research student, joint
		publication and possible patent

#### 4 14 12 Collaboration with Academic and Research Institutions

Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
Rajiv Gandhi Institute of Petroleum Technology, Jais, India	CO2 Reduction	Prof. A. S. K. Sinha	Research
Central Electrochemical Research Insititute, Karaikudi, India	MXenes for Energy Generation	Dr. P. Murugan	Research
University of Oulu, Finland	Electronic structure of 2D materials	Dr. Hannu Pekka Komsa	Research
NIT Raipur	Research	Dr. B. K. Sahoo	Research
B. B. College, Asansol	High energy physics	Dr. A. Biswas	Joint Project, DST-SERB, Govt. of India.
T. D. B. College, Raniganj	Research	Dr. B. Sahoo	Research
KIIT University, Bhubaneswar	Research	Dr. S. K. Sahoo	Research
RHIC-STAR collaboration	STAR collaboration is composed of 74 institutions from 15 countries, with a total aound 450 collaborators. A variety of personnel participate in the collaboration, including students, university faculty and staff, national laboratory staff, and engineers.	Dr. Arghya Chatterjee, Dr. Sukadev Sahoo	The primary scientific objective of STAR is to study the formation and characteristics of the quark—gluon plasma (QGP), a state of matter believed to exist at sufficiently high energy densities. Detecting and understanding the QGP allows physicists to understand better the Universe in the seconds after the Big Bang, when the presently-observed symmetries (and asymmetries) of the Universe were established.
Burdwan University	Research	Prof. S . K. Pradhan	Joint Ph.D. work
Asansol Engineering College	Research	Dr. R Sinha	Joint Ph.D. work
IIT (ISM) Dhanbad	Optics	Prof. A. K. Nirala	Research
Nottingham University, Department of applied physics and astronomy	Research	Prof. Mohamad Henini	Research paper
Queens University Canada, Department of Physics and Chemistry, Canada	Research and Collaborative project	Prof. Nunzi	Project and reserach papper
Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of	Project and Research	Dr. A. Tameev	Project and Research



Collaborating	Areas of collaboration	Faculty	Collaboration Activities
Institute Organization		Members Involved	
Science (IPCE RAS),		Involved	
Moscow, Russia			
Indian Institute of	Research	Prof.	Research paper
Technology Bombay		Subhananda	• •
		Chakrabarti	
NIT Agartala	Research	Dr. Mitra	Research Paper
NIT Nagaland	Reserach	Barun Sarkar DR.	Project and Research
TVII TVUGUIUIIG	Reserven	Chinnamuthu	1 Togett und Research
CSIR-CGCRI	Multiferroic Materials	S Basu	Research & Development
Benaras Hindu	Nanostructured materials	S Basu	Research & Development
University	N. II. O. I. D. I. I.	D 0 D	T : . D
The University of Burdwan	Nonlinear Optics, Random Laser	Prof. P. Kumbhakar (NIT	Joint Research/ publication of paper
		Durgapur) and Prof. U.	
		Chatterjee	
		(BU)	
IIT Kharagpur	Nanotechnology	Prof. P.	Joint Research/Publication of paper
		Kumbhakar	
		(NIT Durgapur) and	
		Durgapur) and Dr. C. S.	
		Tiwary (IIT	
		KGP)	
Jadavpur University	Nanotechnology	Prof. P.	Joint Research/ publication of paper
		Kumbhakar (NIT	
		Durgapur) and	
		Prof. T.	
		Ganguly (JU)	
II : :, C	DI	Prof. P.	I ' (D
University of Hyderabad	Photonics	Kumbhakar (NIT	Joint Research/ publication of paper
Tryderabad		Durgapur) and	
		Prof.	
		Venugopal	
		Rao Soma	
Assam University	Nanotechnology & Photonics	(Hyd. Univ.) Prof. P.	Joint Research/ publication of paper
Assam Oniversity	Nanotechnology & Flowings	Kumbhakar	some research publication of paper
		(NIT	
		Durgapur) and	
		Dr S. K.	
		Ghosh (Assam Univ.)	
University of	Nanotechnology	Prof. P.	Joint Research/ publication of paper
Calcutta	23	Kumbhakar	
		(NIT	
		Durgapur) and Prof. D.	
		Chattopadhyay	
		(CU)	
		Prof. P.	
University of Tokyo	Nonlinear Optics	Kumbhakar	Joint Research/Publication of paper
		(NIT Durgapur) and	
		Prof. T.	
		• •	

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Collaborating Institute Organization	Areas of collaboration	Faculty Members Involved	Collaboration Activities
		(Tokyo Univ.)	
RK University Rajkot	Nanotechnology	Prof. P. Kumbhakar (NIT Durgapur) and Dr. S. Ghosh	Joint Research/ publication of paper
		(R K Univ.)	
Jadavpur University	Sensor	Chakraborty, Amit Kumar	joint research paper
University of Calcutta	sensors	Chakraborty, Amit Kumar	joint research publicaton
National University of Singapore	materials for energy harvesting and storage	Chakraborty, Amit Kumar	Joint research paper, Co-organising International conference
SRM University, Andhra Pradesh	photoelectrocatalysis	Chakraborty, Amit Kumar	joint research paper, student exchange
Indian Institute of Technology Bombay	batteries and supercapacitors, clean water	Chakraborty, Amit Kumar	Joint research project, Joint research paper
VNIT Nagpur	integrated battery management system	Chakraborty, Amit Kumar	Joint research project
Tyumen State University ,Russia	Geothermal Power, Climate Change	Dr. Evgeniya Soldatova, Dr. Kankana Seal, Dr. Pavel Smrionav	Joint Publication, Joint Project Submission
East China University of Technology China	Geothermal Power, Water Geochemistry	Prof. Z Sun	Joint Publication, Joint Conference, Joint Research Project
The University of Burdwan	Research activity	Prof. T. Banerjee	Research work and publication
M.U.C. Women's College, Burdwan	Research activity	Dr. S. K. Garai	Research work, publication and Ph.D. Student supervision
B.B. College, Asansol	Research activity	Dr. K. Mukherjee	Research work, publication and Ph.D. Student supervision
Tomsk Polytechnic University, Tomsk, Russia	Novel material for wastewater treatment	Dr. Natalia Guseva, Tomsk	Joint Publication, Joint Project Submission
Trofimuk Institute of Petroleum Geology and Geophysics, Siberian Branch of Russian Academy of Sciences, Russia	Geothermal Power	·	Joint Project Submission
Far Eastern Federal University, Vladivostok, Russia	Material Science and Engineering	Prof. A. Taskin	Joint Publication
Federal University of Rio De Janeiro, Brazil	Water Pollution	Prof. Otto	Joint Publication, Joint Conference, Joint Research Project
Durban University of Technology, South Africa	Wastewater	Prof. Faizal Bux	Joint Publication, Joint Conference, Joint Research Project
IIT Kharagpur	Image Processing	S Bhattacharya	Publication

# 4.14.13Workshops/Seminars Organized

Name of Key Speaker(s)	Name of the Programme	Date of the	
		Programme	
Prof. S. Duttagupta, Prof. a. Basu, Prof. Bikash	One-day conclave on "Science, Philosophy and	2022-11-04	
Sinha, Dr.	Education		
Martin Chempchen			



Promotion of Green Technology on Rural Road	2022-08-27
Construction	
Physics Talk - "Centenary of the Saha Ionization	2022-09-20
Equation"	
Advanced Photonic Devices	2023-03-14
Emerging Photoconductors: Organic and	2022-12-09
Perovskite Materials	
	Construction  Physics Talk - "Centenary of the Saha Ionization Equation"  Advanced Photonic Devices  Emerging Photoconductors: Organic and

## 4.14.14Journal: Published in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Kumar Gaurav, Saumik Bhattacharya Yatindra Nath Singh and Sayantari Ghosh	To purchase or to pirate: Investigating the role of social influence on digital piracy contagion	Pramana – Journal of Physics	Volume:96 Issue No: Page No: Year:2022 Month:Sep
Santanu Dey, Manas Kumar Mandal, Subhamay Pramanik, Shubhadip Atta, Soumen Basu	Bi2O3-incorporated carbon-supported bismuth-silver (Bi@Ag/C) nanoparticle as an efficient and stable electrocatalyst for glucose electro-oxidation	Ionics	Volume:29 Issue No: Page No:1101- 1113 Year:2023 Month:Mar
S. Biswas, S. Mahata, B. P. Nayak and S. Sahoo	Imprints of new physics in $\Lambda_b \to \Lambda^* l^+$ l^- decay in non-universal Z^' model	International Journal of Modern Physics A	Volume:37 Issue No:09 Page No:2250044 Year:2022 Month:May
P. Maji, S. Mahata, S. Biswas and S. Sahoo	Lepton polarization asymmetry in $B_{-}(s,d)^*$ $\rightarrow \mu^+ \mu^-$ with new Z' couplings	International Journal of Theoretical Physics	Volume:61 Issue No:06 Page No:162 Year:2022 Month:Jun
S. Biswas, S. Mahata, A. Biswas and S. Sahoo	Impact of Non-universal Z^' in the Lepton Flavour Violating B(B_s) $\rightarrow$ K^* ( $\phi$ ) 1_1^- 1_2^+ Decays	European Physical Journal C	Volume:82 Issue No:07 Page No:578 Year:2022 Month:Jul
S. Mahata, S. Biswas and S. Sahoo	Study of B→K_0^* (1430) l^+ l^- decays in non-universal Z^' models and in a model-independent way	European Physical Journal Plus	Volume:137 Issue No: Page No:1220 Year:2022 Month:Nov
Mandal N, Pramanik A, Dey A, Kumbhakar P, Kochat V, Gautam A R S, Glavin N, Roy A K, Ajayan P M, Tiwary C S	Synthesis of atomically thin yellow pearl: An impetus for nonlinear optical effect assisted light scattering application	Optical Materials	Volume:135 Issue No: Page No: 113325 Year:2023 Month:Jan
Pramanik A, Mondal K, Biswas S, Pal S K, Ghosh S K, Ganguly T, Kumbhakar P,	Sticky note paper-based plasmonic random laser for artifact-free imaging	Applied Physics B	Volume:128 Issue No: Page No:167 Year:2022 Month:Aug
M. K. Garai, M. K. Mandal & S. K. Garai	All optical programmable array logic unit using semiconductor optical amplifier-based polarization switch.	Journal of Modern Optics	Volume:69 Issue No: Page No:1171- 1197 Year:2022 Month:Dec
A. Pathak, J. Karmakar, D. Nandi and M. K. Mandal	Feature enhancing image inpainting through adaptive variation of sparse coefficients	Signal, Image and Video Processing	Volume:17 Issue No: Page No:1189- 1197 Year:2022 Month:Aug
Avishek Adhikary; Sandeep Kumar; Supriya Pal; Sudipta Ghosh; Hirok Chaudhuri; and Mrinal Kanti Mandal	Efficacy Evaluation of Silty-Sandy Soil and Chrysopogon zizanioides to Attenuate Doxycycline from Wastewater in a Constructed Wetland System	Journal of Environmental Engineering	Volume:149 Issue No:6 Page No:04023024 (1-12) Year:2023 Month:



Author(s) Name	Paper Name	Journal Name	Others Info
Saroj Khutia, Ankita Dawn, Kankana Seala, Hirok Chaudhuri, Chiranjit Maji, Suvashree Mukherjee	Age-dependent potential health risk assessment due to radioactive radon-222 in the environs of highly populated Durgapur industrial zone and nearby Bakreswar hot spring, India	Environmental Geochemistry and Health	Volume:45 Issue No: Page No:5727 –5759 Year:2023 Month:
Kankana Seal, Hirok Chaudhuri, Sanhita Pal, Raj Ranjan Srivastava, Evgeniya Soldatova	A study on water pollution scenario of the Damodar river basin, India: assessment of potential health risk using long term database (1980-2019) and statistical analysis	Environmental Science and Pollution Research	Volume:29 Issue No:35 Page No:53320- 53352 Year:2022 Month:
Kankana Seal, Hirok Chaudhuria	A novel understanding of morphological anisotropy features of nanorod units in brookite dominated triphase mesoporous TiO2 and its excellent photocatalytic activity in phenol decomposition: The role of synthesis pH and surface hydroxylation	Surfaces and Interfaces	Volume:29 Issue No: Page No:101715 (1-24) Year:2022 Month:
T Chatterjee, P Chatterjee, AK Chakraborty, SK Pradhan, AK Meikap,	Template-free growth of copper-doped hydroxyapatite nanowhiskers and their use as uric acid electrochemical sensor	Materials Today Communications	Volume:33 Issue No: Page No:104870 Year:2022 Month:
A Sahu, P Chatterjee, AK Chakraborty	Non-enzymatic electrochemical sensing of glucose using phyto-extract modified reduced graphene oxide,	MRS Communication s	Volume:12 Issue No: Page No:902-909 Year:2022 Month:
P. Chatterjee, D Mukherjee, A Sarkar, AK Chakraborty,	Mn-doped CeO2-CNT nanohybrid for removal of water soluble organic dyes,	Applied Nanoscience	Volume:12 Issue No: Page No:3031-3043 Year:2022 Month:
Priya Chakraborty, Mohit Kumar Jolly, Ushasi Roy, Sayantari Ghosh	Spatio-temporal pattern formation due to host-circuit interplay in gene expression dynamics	Chaos, Solitons & Fractals	Volume:167 Issue No: Page No: Year:2023 Month:Feb
Srimanta Kundu, Ujjwal Maulik, Rahul Sheshanarayana and Sayantari Ghosh	Vehicle Smoke Synthesis and Attention- Based Deep Approach for Vehicle Smoke Detection	IEEE Transactions on Industry Applications	Volume:59 Issue No: Page No: Year:2023 Month:Jan
S. Atta, M. Halder, T. Chatterjee, R. Karmakar and A. K. Meikap	Influence of Neody-mium doping in Tuning Microstructural, Optical and Magneto- dielectric properties of Nickel Ferrite Nanoparticles	Mater. Chm. Phys.	Volume:285 Issue No:1 Page No:126094(1- 12) Year:2022 Month:Jun
T. Chatterjee, M. Ghosh, M. Maji, M. Ghosh, S. K. Pradhan, A. K. Meikap	Study of Microstructural and Electrical Properties of Silver Substituted Hydroxyapatite for Drug Delivery Applications	Mater. Today Commun.	Volume:31 Issue No:1 Page No:103360(1-14) Year:2022 Month:Jun
	Dielectric and Transport Properties of Cu- Substituted Bi-calcium Phosphate	Mater. Chem. Phys.	Volume:286



Author(s) Name	Paper Name	Journal Name	Others Info
T. Chatterjee, S. Atta, S. K. Pradhan and A. K. Meikap	Nanocom-posites: Its Structural and Microstructural Evaluation		Issue No:1 Page No:126124(1- 12) Year:2022 Month:Jul
R. Karmakar, A. K. Das, S. Atta and A. K. Meikap	The role of bias voltage in charge carrier transport mechanism of organic semiconductor	Mater. Today Commun.	Volume:. 31 Issue No:1 Page No:103775(1- 12) Year:2022 Month:Jun
T. Chatterjee, P. Chatterjee, A. K. Chakraborty, S. K. Pradhan and A. K. Meikap	Template-free growth of copper-doped Hydroxy-apatite nanowhiskers and their use as uric acid electrochemical sensor	Mater. Today Commun.	Volume:33 Issue No:1 Page No:104870(1- 11). Year:2022 Month:Dec
R. Karmakar, A. K. Das, S. Pramanik, P. K. Kuiri and A. K. Meikap	Investigation of negative resistance regions in W-WO3 nanoparticles and UV-B light detection properties of PVA-W-WO3 flexible composite films	Appl. Phys. A	Volume:. 128 Issue No:12 Page No:1102(1-17). Year:2022 Month:Dec
T. Chatterjee, C. K. Raul, S. Mandal, S. K. Pradhan and A. K. Meikap	Effect of Surfactant-assisted Hierarchical Growth of Cupric Oxide-Hydroxyapatite Nanocomposite on the Dielectric and Electrical Transport Behavior	Physica B	Volume:650 Issue No: Page No:414560(1-9) Year:2023 Month:Feb
R. Karmakar, S. Sinha, A. K. Das, B. Dutta, S. Pramanik, P. K. Kuiri and A. K. Meikap	Elucidation of Inter/Intra Molecular H-Bonding Mediated Charge Transportation Mechanism in Water Swelled, Hydrophilic Organic PVA- Co3O4 Nanocomposite Films	Surfaces and Interfaces	Volume:36 Issue No:1 Page No:102567(1-15) Year:2023 Month:Feb
T. Chatterjee, M. Maji, S. Paul, M. Ghosh, S. K. Pradhan, and A. K. Meikap	Microstructural, Electrical and Mechanical Characterizations of Mesoporous Biocompatible Ternary Biphasic Calcium Phosphate Nanocomposites Synthesized by Green Synthesis Route with Morphological Hierarchy	Materials Chemistry and Physics	Volume:296 Issue No:1 Page No:127245(1-15) Year:2023 Month:Feb
S. Atta, M. Halder, S. Dey, C. K. Raul and A. K. Meikap	Magnetic and magnetocaloric effect of flexible PVA-NiNdxFe2-X O4 film and its application in EMI shielding	Current Applied Physics	Volume:47 Issue No:1 Page No:15- 23 Year:2023 Month:Mar
M. S. Abdallah, A. Chatterjee, et al. [STAR Collaboration]	Pion, kaon, and (anti)proton production in U+U collisions at \$\sqrt{s_{NN}} = 193\$ GeV measured with the STAR detector	Phys. Rev. C	Volume:107 Issue No:2 Page No:24901 Year:2023 Month:Feb
M. S. Abdallah,, A. Chatterjee, et al. [STAR Collaboration]	Pattern of global spin alignment of φ and K*0 mesons in heavy-ion collisions	Nature	Volume:614 Issue No: Page No:244– 248 Year:2023 Month:Jan
M. S. Abdallah,, A. Chatterjee, et al. [STAR Collaboration]	Differential measurements of jet substructure and partonic energy loss in Au+Au collisions at sqrt(s_NN) =200 GeV	Phys. Rev. C	Volume:105 Issue No:4 Page No:044906 Year:2022 Month:Apr



Author(s) Name	Paper Name	Journal Name	Others Info
M. S. Abdallah,, A. Chatterjee, et al. [STAR Collaboration]	Higher-order cumulants and correlation functions of proton multiplicity distributions in sNN=3 GeV Au+Au collisions at the RHIC STAR experiment	Phys. Rev. C	Volume:107 Issue No:2 Page No:024908 Year:2023 Month:Feb
AD Paul, S Biswas, A Dalal, A Mondal, R Mahapatra	Impact of Stack Engineering on HfO <sub>x</sub> /Al: HfO <sub>x</sub> -Based Flexible Resistive Memory Devices and Its Synaptic Characteristics	IEEE Transactions on Electron Devices	Volume:69 Issue No:4 Page No:1842-1848 Year:2022 Month:Mar
Avijit Dalal, Madhuri Mishra, Subhananda Chakrabarti, Rajeev Kumar Gupta, Aniruddha Mondal	Characteristics of Mg doped TiO2 thin film based deep UV photodetector	Vacuum	Volume:201 Issue No: Page No:111115 Year:2022 Month:Jul
Prashant B Chouke, Trupti Shrirame, Ajay K Potbhare, Aniruddha Mondal, Ankita R Chaudhary, Sudip Mondal, Sanjay R Thakare, Eugenie Nepovimova, Martin Valis, Kamil Kuca, Rohit Sharma, Ratiram Gomaji Chaudhary	Bioinspired metal/metal oxide nanoparticles: A road map to potential applications	Materials Today Advances	Volume:16 Issue No: Page No:100314 Year:2022 Month:Dec
Avijit Dalal, Dip Prakash Samajdar, Aniruddha Mondal	Hetero-radial MgO capped TiO2 nanowire arrays as a deep UV and self-powered photodetector	Journal of Alloys and Compounds	Volume:928 Issue No: Page No:167120 Year:2022 Month:Dec
Kripasindhu Karmakar, Arka Dey, Subhendu Dhibar, Rajib Sahu, Subham Bhattacharjee, Priya Karmakar, Priyajit Chatterjee, Aniruddha Mondal, Bidyut Saha	A novel supramolecular Zn (II)- metallogel: an efficient microelectronic semiconducting device application	RSC advances	Volume:13 Issue No:4 Page No:2561-2569 Year:2023 Month:Jan
Avijit Dalal, Ankita Bebarta, Argha Deep Paul, Rabindranath Barman, Jean- Michel Nunzi, Alexey Tameev, Rajat Mahapatra, Aniruddha Mondal	Ion-Sensitive Three-Terminal Device as a Universal Hybrid Platform With TiO2 Nanowires on the Channel	IEEE Sensors Journal	Volume:23 Issue No:3 Page No:1917-1924 Year:2023 Month:Feb
Subhendu Dhibar, Arka Dey, Avijit Dalal, Subham Bhattacharjee, Rajib Sahu, Rupam Sahoo, Aniruddha Mondal, Sk Mehebub Rahaman, Sandip Kundu, Bidyut Saha	An organic acid consisted multiresponsive self-healing supramolecular Cu (II)- metallogel: Fabrication and analysis of semiconducting device	Journal of Molecular Liquids	Volume:370 Issue No: Page No:121021 Year:2023 Month:Jan
Ankita Choudhury, Arka Dey, Chiranjib Ghosh, Avijit Dalal, Rajat Mahapatra, Saikat Biswas, Nilanjan Halder, Aniruddha Mondal	Positive temperature coefficient of resistance of Mg-GeO2 nanowire array film	Journal of Applied Physics	Volume:133 Issue No:4 Page No:045302 Year:2023 Month:Jan
Sanjib Mondal, Avijit Dalal, Aniruddha Mondal	Al nanoparticles decorated Er: TiO2 thin film based plasmonic photodetector	Ceramics International	Volume:49 Issue No:4 Page No:6289-6298 Year:2023 Month:Feb
Shadab Saifi, Gargi Dey, J. Karthikeyan, Ravi Kumar, D. Bhattacharyya, A.S.K. Sinha, and Arshad Aijaz	Coupling Single-Ni-Atom with Ni–Co Alloy Nanoparticle for Synergistically Enhanced Oxygen Reduction Reaction	Inorganic Chemistry	Volume:62 Issue No:21 Page No:8200 – 8209 Year:2022 Month:May
Anwesh Kumar, Hannu- Pekka Komsa, Diksha Praveen Pathak,	Origin of Enhanced Photocatalytic Activity in Direct Band Gap g-C3N4 Nanoribbons with Tunable Electronic	The Journal of Physical Chemistry C	Volume:126 Issue No:46 Page No:19627 – 19636



Author(s) Name	Paper Name	Journal Name	Others Info
Balathanigaimani Marriyappan Sivagnanam, A. S. K. Sinha, and J. Karthikeyan	Properties for Water-Splitting Reaction: A First-Principles Study		Year:2022 Month:Nov
Dey, A, Pramanik, A, Biswas, S, Chatterjee U, Kumbhakar P	Tunable and low-threshold random lasing emission in waveguide aided Rhodamine- 6G dye incorporated silica embedded thin films	Journal of Luminescence	Volume:251 Issue No: Page No:119252 Year:2022 Month:Nov
Kumbhakar P, Jana I D, Basu S, Mandal, S, Banerjee, S, Roy, S, Gowda, C C, Chakraborty A, Pramanik A, Lahiri, P, Lahiri B	Utilization of DNA and 2D metal oxide interaction for an optical biosensor	Physical Chemistry Chemical Physics	Volume:25 Issue No:26 Page No:17143-17153 Year:2023 Month:May
A. Adhikari, J. Nath, D. Rana, S. De, M. Chakrabporty, P. Kar, AK Chakraborty, D. Chattopadhyay	Electrochemical sensing of serotonin by silver decorated polypyrrole nanoribbon based electrode synthesized by sodium cholate as soft template	Materials Today Communications	Volume:31 Issue No: Page No:103361 Year:2022 Month:
S. Paramanik, A. Nag and S. Sahoo	Generalized uncertainty principle and delta function potential	Ukrainian Journal of Physics	Volume:67 Issue No:08 Page No:568 – 573 Year:2022 Month:Dec
Ranjita Sinha, Sandip Haldar, Soujanya Sengupta, Monalisa Halder, Piyali Saren, Chandan Kumar Raul, Soumen Basu, Ajit Kumar Meikap	Dielectric and Electric Modulus Study of Y0.85Gd0.15CrO3 Nanoparticles	International Journal of Innovative Research in Physics	Volume:3 Issue No: Page No:1-8 Year:2022 Month:Jul
S. Pal, A. Mahanty, A. Pathak, J. Karmakar, H. Mondal and M. K. Mandal.	A novel image encryption technique with four stage bit-interspersing and a 4D- hyperchaotic system	ECTI Transactions CIT	Volume:17 Issue No: Page No:105- 117 Year:2022 Month:Dec
H. Mondal, A. Pathak, T. Banerjee and M. K. Mandal	Ring oscillators under nonlinear coupling: bifurcation and chaos	ECTI Transactions EEEC	Volume:21 Issue No: Page No:1-8 Year:2023 Month:Feb
Ankita Choudhury, Arka Dey, Aniruddha Mondal	Electrical characteristics of Mg doped GeO2 NWs based device	Materials Today: Proceedings	Volume: Issue No: Page No: Year:2023 Month:Mar
M. Halder, S. Atta, R. Sinha and A. K. Meikap	Observation of Charge Conduction Mechanism of Manganese Ferrite - Poly (Vinyl Alcohol) Nano Composite Film above Room Temperature	J. Mater Sci: Mater Electron.	Volume:33 Issue No:26 Page No:21189-21198 Year:2022 Month:Sep
Taposhree Dutta, Neha Yadav, Yongling Wu, Gary J Cheng, Xiu Liang, Seeram Ramakrishna, Aoussaj Sbai, Rajeev Gupta, Aniruddha Mondal, Zheng Hongyu, Ashish Yadav	Electronic properties of 2D materials and their junctions	Nano Materials Science	Volume: Issue No: Page No: Year:2023 Month:Jun
J. Karmakar, S. Pal and M. K. Mandal	Hyper-chaos-based image encryption and cryptanalysis on a non-RGB channel	Int. J. Computer Applications in Technology	Volume:69 Issue No: Page No:206– 218 Year:2022 Month:Dec
M. Pal, S. Chakraborty, B. Sahoo and S. Sahoo	Theoretical study of the role of symmetry energy as well as its density slope and curvature on neutron star core crust transition density using finite range effective interaction	Physics of Particles and Nuclei Letters	Volume:19 Issue No:02 Page No:97- 107 Year:2022 Month:Apr
A. Adhikari, S Mukherjee, AK Chakraborty, S Biswas, A Basu,	Lac-extract doped polyaniline nano- ribbons as fluorescence sensor and	Journal of Photochemistry	Volume:431 Issue No: Page

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Author(s) Name	Paper Name	Journal Name	Others Info
M. Chakraborty, S.	molecular switch for detection of aqueous	and	No:114000
Chattopadhyay, D. Das, D.	AsO43- and Fe3+ contaminants	Photobiology A:	Year:2022
Chattopadhyay,		Chemistry	Month:
P. Chatterjee, MSK Ambati, AK	Photovoltaic/photo-electrocatalysis	Energy	Volume:261 Issue
Chakraborty, S	integration for green hydrogen: A review	Conversion and	No: Page
Chakrabortty, S Biring,G K		Management	No:1156481
Dalapati,			Year:2022
			Month:
A. Pandey, R. K. Das, A. K.	Nanodefects assisted removal of reactive	Journal of	Volume:362 Issue
Chakraborty, S. Shukla, S.	dyes using biomass derived reduced 3D-	Cleaner	No: Page No:
Saxena	OGFs	Production	132257 Year:2022
			Month:

## 4.14.15 Journal: Accepted for Publication in 2022-2023 SCI/SCOPUS/Web of Science

Author(s) Name	Paper Name	Journal Name	Others Info
Dey A, Pramanik A, Biswas S, Chatterjee U, Kumbhakar P	Emission peak shifted incoherent random laser through the combined effects of coupling of surface plasmons in a triangular shaped silver nanostructure, microbubbles, and the waveguiding mechanism	Journal of the Optical Society of America B	Volume:40 Issue No:5 Page No:1039-1046 Year:2023 Month:Mar
Priya Chakraborty, and Sayantari Ghosh	Quantitative Modelling of Diffusion-driven Pattern Formation in microRNAregulated Gene Expression	The Eur. Phys. J. Plus	Volume: Issue No: Page No: Year:2023 Month:Mar

4.14.16Journal: Published in Others in 2022-2023

NIL

4.14.17 Journal: Accepted in Others in 2022-2023

NIL

# 4.14.18Conference: Published in 2022-2023 DOI/ISBN

Author(s) Name	Paper Name	Conference Name	Others Info
P. Biswas, C. O.	Microstructural and tribo-	3775-3783	DOI/ISBN:
Bapanapalle, A. R.	mechanical investigation of as-		https://doi.org/10.1016/j.matpr.20
Dixit,	cast Ti-Zr binary alloys		22.06.107 Volume: Issue No:
R. R. Sahoo, J. Ghosh			Page No:3775-3783 Year:2022
and A. K. Meikap			Month:Sep Presenter:CO-
			AUTHOR
Khandai S, Biswas S,	Experimental Study of Dielectric	IEEE 6th International	DOI/ISBN:
Prasath R T A R,	and Physical Properties of	Conference on Condition	10.1109/CATCON56237.2022.10
Kumbhakar P, Roy N K	Blended Coconut Oil and	Assessment Techniques	077629
	Mineral Oil with Graphene	in Electrical Systems	Volume: Issue No: Page No:408-
	Oxide Nanomaterial	(CATCON)	411 Year:2022 Month:Dec
			Presenter:CO- AUTHOR
Khandai S, Jasper D,	Investigation of dielectric	AIP Conference	DOI/ISBN:
Adhikari K, Kumbhakar	properties of blended ester oils	Proceedings	https://doi.org/10.1063/5.0117874
P, Kumbhakar P, Roy N	and dielectric fluids used in		Volume: Issue No: Page No:2640
K	transformer at different		Year:2022 Month:Sep
	temperatures		Presenter:CO-AUTHOR
S. Pal, A. Pathak, A.	Color Image Encryption using	4th Int. Conf. on	DOI/ISBN:
Mahanty, H. Mondal	Hybrid Three-Scroll Unified	Communication and	https://doi.org/10.1007/978-981-
and	Chaotic Attractor and 6D	Intelligent Systems	99-2100-3_48 Volume: Issue No:
M. K. Mandal	Hyperchaotic System	(ICCIS 2022)	Page No: Year:2022 Month:Dec
			Presenter:SELF



Author(s) Name	Paper Name	Conference Name	Others Info
Shikhar Mohan, Saumik	Attention W-Net: Improved Skip	International Conference	DOI/ISBN:
Bhattacharya, Sayantari	Connections for Better	of Pattern Recognition	https://doi.org/10.1007/978-3-
Ghosh	Representations		031-37731-0 Volume: Issue No:
			Page No: Year:2022 Month:Aug
			Presenter:CO- AUTHOR
B. Dutta, R. Karmakar,	Observation of constant phase	Proceedings of the 66th	DOI/ISBN: Nil Volume: Issue
S. Sinha and A. K.	zone in Graphene Oxide-PVDF	DAE Solid State Physics	No: Page No:371-374 Year:2022
Meikap	nanocomposite films	Symposium	Month:Dec Presenter:CO-
			AUTHOR
R. Karmakar, A. K.	Tuning electrical transportation	Proceedings of the 66th	DOI/ISBN: Nil Volume: Issue
Das, B. Dutta, S. Sinha	dynamics of PVDF-Hematite	DAE Solid State Physics	No: Page No:395-398 Year:2022
and A. K.	flexible film under biasing	Symposium	Month:Dec Presenter:CO-
Meikap	voltage		AUTHOR
T. Chatterjee, S. Paul,	Mechanical and electrical	Proceedings of the 66th	DOI/ISBN: Nil Volume: Issue
S. K. Pradhan and A. K.	behavior of green- routed silver-	DAE Solid State Physics	No: Page No:399-402 Year:2022
Meikap	biphasic calcium phosphate	Symposium	Month:Dec Presenter:SELF
	nanocomposites		
C. K. Raul, M. Halder,	Development of MWCNT	Proceedings of the 66th	DOI/ISBN: Nil Volume: Issue
S. Dey and A. K.	supported Gold- Cobalt	DAE Solid State Physics	No: Page No:496-499 Year:2022
Meikap	bimetallic anode electrocatalyst	Symposium	Month:Dec Presenter:CO-
	for direct borohydride fuel cell		AUTHOR
Rahul Mandal, Mayukh	Double Aperture Speckle	Conference on Optics,	DOI/ISBN: Volume: Issue No:
Mandal, Abhijit Ghosh	Interferometer using Single	Photonics & Quantum	Page No: Year:2022 Month:Nov
and	Hololens Imaging Configuration	Optics (COPaQ 2022)	Presenter:
A.K. Nirala			

## 4.14.19 Conference: Published in Others in 2022-2023

Author(s) Name	Paper Name	Conference Name	Others Info
S. Dandapathak, A. Pathak, S. Pal, J. Karmakar, H. Mondala and M. K. Mandal	Studies on Multi-Scroll Chaotic Attractors	8th Int. Conf. on Nanoelectronics, Computational Intelligence & Communication Systems (NCCS-2022)	DOI/ISBN: Will be given after publication Volume: Issue No: Page No: Year:2022 Month:Dec Presenter:CO-AUTHOR

## 4.14.20Books Authored

Author Name	Co-Author	Title of the Book	Title of the Chapter	Publication Details
Sudip Mondal, Manjiri S Nagmote, Suraj V Kombe, Barun K Dutta, Trimurti L Lambat, Prashant B Chouke, Aniruddha Mondal		Biogenic Sustainable Nanotechnology	Ecofriendly microorganism assisted fabrication of metal nanoparticles and their applications	Publisher: Elsevier Publication Date: 2022-01- 01
A. K. Chakraborty	G K Dalapati, WKS Terence, S. Kundu, S. Zhuk	Sulfide and Selenide Based Materials for Emerging Applications		Publisher: Elsevier (ISBN: 9780323998604) Publication Date: 2022-06- 16
A. K. chakraborty	A. Sarkar and P. Chatterjee	Sulfide and Selenide Based Materials for Emerging Applications	Sulfides and selenides as electrodes for dye sensitized solar cells	Publisher: Elsevier (ISBN: 9780323998604) Publication Date: 2022-06- 16



Author Name	Co-Author	Title of the Book	Title of the Chapter	Publication Details
A. K. Chakraborty	N. Chakrabarty	Sulfide and Selenide Based Materials for Emerging Applications	Sulfides and selenides as electrodes for supercapacitor	Publisher: Elsevier (ISBN: 9780323998604) Publication Date: 2022-06- 16
A. K. Chakraborty	R. Madhu, G. K. Dalapati, T. K. S. Wong, S. Zhuk, S. Kundu	Sulfide and Selenide Based Materials for Emerging Applications	Energy sustainability and importance of new materials	Publisher: Elsevier (ISBN: 9780323998604) Publication Date: 2022-06- 16
Pathik Kumbhakar	Subrata Biswas	The Science of Nanomaterials: Basics and Applications	Optical Properties of Nanostructured Materials and Their Sensing Applications	Publisher: Apple Academic Press Publication Date: 2022-12- 29

# 4.14.21Seminars, Summer/Winter Schools, Short Term Courses Attended

Name of the Programme	Organized By	From Date	To Date	Organizing Country
Symposium on "Forefront Areas of Research in Astronomy, Astrophysics & Space Science"	Indian Centre for Space Physics, Kolkata	2022-09-18	2022-09-18	India
66th DAE Solid State Physics Symposium (DAE-SSPS-2021)	DAE & BRNS	2022-12-18	2022-12-22	India
Workshop on Signatures of Non- Equilibrium Fluctuations in Life	ICTP	2023-05-15	2023-05-19	ITALY
Invited Seminar	IIT Goa	2023-03-09	2023-08-10	India
Invited Speaker	Central University of South Gaya, Bihar	2023-03-20	2023-03-22	India
"Emerging Trends and Application of Green Technologies for Sustainable Development (Green Tech - 2022)"	Haldia Institute of Technology, West Bengal, India.	2022-11-09	2022-11-10	India
8th Int. Conf. on Nanoelectronics, Computational Intelligence & Communication Systems (NCCS-2022)	BIT Mesra Ranchi	2022-12-17	2022-12-18	India
4th Int. Conf. on Communication and Intelligent Systems (ICCIS 2022)	NIT Delhi	2022-12-19	2022-12-20	India

## 4.14.22Ph.D. Supervisor

Topic Name	Scholar	Supervisor	Status	Status
				Date
Possible Signatures of New Physics in Rare Decays of b Hadrons in the Framework of Non-Universal Z^' Model	SWAGATA BISWAS	Dr. S. SAHOO	DEGREE AWARDED	2023-01-04
Theoretical study of some properties of finite nuclei and core-crust transition density of neutron stars with finite range effective interaction	MAHADEB PAL	Dr. S. SAHOO	DEGREE AWARDED	2023-02-08



Topic Name	Scholar	Supervisor	Status	Status Date
Development and Characterization of Hydroxyapatite and Green Synthesized Noble metal Nanocomposites for Gas sensing Applications	Tuli Chatterjee	A K Meikap & S K Pradhan	DEGREE AWARDED	2023-03-31
Development and Characterization of Polymer-Multiferroic Nanocomposites for Enhance Magneto Dielectric Behavior	Shubhadip Atta	A K Meikap	ONGOING	-
Development of metal-oxide based polymer nanocomposites for opto- electronics application	Riju Karmakar	A K Meikap	ONGOING	-
Development and characterization of functionalized carbon nanotube polymer nanocomposites having enhanced dielectric properties for charge storage device	Chandan Kumar Raul	A K Meikap	ONGOING	-
Development of ferroelectric polymer based Nanocomposites for solid state fractional order capacitors and memory device applications	Bilwadal Dutta	A K Meikap	ONGOING	-
Experimental Condensed Matter Physics	Kripasindhu Kumar	A K Meikap & R Sinha	ONGOING	-
Studies of optoelectronic properties of low dimensional GeO2 and Ga2O3	Ankita Choudhury	Dr. Soumik Das, Dr. Aniruddha Mondal	ONGOING	-
Low-Level Radioactivity Measurement using background suppression technique	Biswajit Saha	Dr. Soumik Das, Dr. Aniruddha Mondal	ONGOING	-
Holographic optical elements	Rahul Mandal	Dr. Abhijit Ghosh	ONGOING	-
Holography	Yashwinder	Dr. Abhijit Ghosh	ONGOING	-
Studies on MgO/TiO2 Heterostucture Nanowires based optoeectronic devices and hybrid materials as ion-sensors	Avijit Dalal	Dr. Aniruddha Mondal	SUBMITTED	2023-06-02
Studies on eco-friendly hybrid perovskites synthesized via physical vapour deposition for optoelectronic applications	Iman Biswas	Dr. Aniruddha Mondal	ONGOING	-
Investigation on climate science data using statistical physics and nonlinear analysis	Miss Debapriya Nandi	Hirok Chaudhuri and Sayantari Ghosh	ONGOING	-
Investigation on bio-physical data using statistical physics and nonlinear analysis	Mr. Premanshu Sekhar Dey	Hirok Chaudhuri	ONGOING	-
Studies on Design and Analysis of All Optical Logic Gates and Processors Utilizing Nonlinear Properties of Semiconductor Optical Amplifiers.	Kajal Maji	Dr. M. K. Mandal & Dr. K. Mukherjee	SUBMITTED	2023-01-09
Studies on some all optical logic processors effective for WDM-based data communication system	Manas Kumar Garai	Dr. M. K. Mandal & Dr. S. K. Garai	ONGOING	-
Studies on Sparse Representation for Data Processing and Applications	Arghya Pathak	Dr. M. K. Mandal	ONGOING	-
Studies on Data Encryption Algorithm based on Hyperchaotic System.	Subhashish Pal	Dr. M. K. Mandal	ONGOING	-
NASICON type electrodes for sodium ion hybrid capacitor	Dr. Sandip De (Post-doc)	Amit K. Chakraborty	DEGREE AWARDED	2023-03-30

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Topic Name	Scholar	Supervisor	Status	Status Date
Resource competition in Biological Systems	Priya Chakraborty	Sayantari Ghosh	ONGOING	-
Social contagions: A Graph-Theoretical Treatment	Dibyajyoti Mallick	Sayantari Ghosh	ONGOING	-
Treatment Planning for Brachytherapy: AI/Ml Approach	Suresh Das	Sayantari Ghosh	ONGOING	-
Studies on Development of Some Luminescent and Scatterer Nanoparticles for Application in Optical Energy Harvesting	Mr. Arindam Dey	P. Kumbhakar	ONGOING	-
Investigations on Syntheses, Optical, Catalytic Properties of Some MoSe2 Based Nanocomposite Materials and Energy Harvesting Applications	Mr. Rashbihari Layek	P. Kumbhakar	ONGOING	-
Radiation Dose Estimation using Radiation Detector	Pijush Kanti Jana	Dr. Soumik das	ONGOING	-

# 4.14.23Ongoing Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Amount(in Rs.)	Starting Year
Some novel phenomenologies of Multi Higgs Doublet Models and higher dimensional operators in the light of Naturalness	Dr. A. Biswas & Dr. S. Sahoo	DST-SERB	1830000.0	2021
Development and characterization of functionalized carbon nanotubes-polymer nanocomposite having enhanced dielectric properties for Charge storage device	Dr. A. K. Meikap	DST&BT-WB	1446000.0	2019
Universal advanced low-cost nano- hybrid platform for air pollution, water, and bio- fluids	Dr. Aniruddha Mondal & Dr. Rabindranath Barman	SPARC (IIT KGP)	5846065.0	2019
Titanium dioxide (TiO2)/VO2 NWs heterostructure as a stable optical switch	Dr. Aniruddha Mondal	DST-SERB	4919992.0	2021
Thermo-Chromic Variable Emittance Coating	Dr. Aniruddha Mondal	ISRO	2178000.0	2021
High Throughput Density Functional Calculations to Develop Electrochemically Active Cluster Compounds for Multifarious Applications.	Dr. Karthikeyan Jeyakumar	Department of Science and Technology, India	3500000.0	2020
Computational quantification of mutagenic potential of palindromic sequences in prokaryotic and eukaryotic genomes	Hemachander Subramanian	SERB	1857900.0	2021
A model for determination of DNA sequence from experimental data of DNA double-strand unzipping kinetics	Hemachander Subramanian	SERB	600000.0	2022
Synthesis of Semiconductor and Metal Nanostructures and the Investigation of Their Role as Active or Passive Scatterer in Random Laser Generation	P. Kumbhakar	WBDSTBT	1450000.0	2019



Title of the Project	Investigator	Sponsor Authority	Amount(in Rs.)	Starting Year
Development of Some 2D Transition Metal Dichalcogenide Semiconductor Nanostructures and Nanocomposites For Photocatalytic Dye Degradation, Light Energy Harvesting and Hydrogen Production	P. Kumbhakar	CSIR, INDIA	1940000.0	2020
Sustainable Technology for smart off-Grid Renewable Energy Transformation and Electrochemical Storage Management	Chakraborty, Amit Kumar	SERB (DST)	13800000	2022
Investigating Cellular Trade-offs and Host- Circuit Interplay in Synthetic Biology	Sayantari Ghosh	DST-INSPIRE	3500000.0	2019

# 4.14.24Completed Sponsored Projects Details

Title of the Project	Investigator	Sponsor Authority	Complete Year
Study of quantum Hall effect, high energy physics	Dr. S. Sahoo	CSIR	2023
phenomena and mechanical properties of graphene	D1. 3. 3anoo	CSIK	

# 4.14.25 Reviews of Manuscripts for Publication in Journal

Reviewer	Name of the Journal	Publisher	Date of Final
			Review
Sukadev Sahoo	International Journal of Modern	World Scientific	2022-05-30
	Physics A		
Ajit Kumar Meikap	Journal of Alloys and Compounds	Elsevier	2023-02-05
Ajit Kumar Meikap	Journal of Alloys and Compounds	Elsevier	2023-03-11
Ajit Kumar Meikap	Ceramic International	Elsevier	2022-08-06
Ajit Kumar Meikap	Ceramic International	Elsevier	2023-01-08
Ajit Kumar Meikap	Chemical Physics Letters	Elsevier	2022-11-13
Ajit Kumar Meikap	Diamond and Relater Materials	Elsevier	2022-09-17
Ajit Kumar Meikap	Journal of Alloys and Compounds	Elsevier	2022-04-13
Ajit Kumar Meikap	Journal of Alloys and Compounds	Elsevier	2022-09-17
Ajit Kumar Meikap	Journal of the Indian Chemical	Elsevier	2022-09-03
	Society		
Ajit Kumar Meikap	Journal of Materials Science:	Spinger	2022-07-24
	Materials in Electronics		
Ajit Kumar Meikap	Journal of Inorganic and	Spinger	2022-06-18
	Organometallic Polymers and		
	Materials		
Ajit Kumar Meikap	Journal of Physics D: Applied	IOP	2022-12-07
	Physics		
Ajit Kumar Meikap	Materials Research Bulletin	Elsevier	2022-07-14
Ajit Kumar Meikap	Materials Research Bulletin	Elsevier	2022-08-19
Ajit Kumar Meikap	Materials Research Bulletin	Elsevier	2023-02-17
Ajit Kumar Meikap	Materials Science & Engineering B	Elsevier	2022-08-06
Ajit Kumar Meikap	Materials Science & Engineering B	Elsevier	2023-01-18
Ajit Kumar Meikap	Physica B	Elsevier	2022-07-07
Ajit Kumar Meikap	Polymer for Advanced Technologies	John Wiley	2022-09-13
Ajit Kumar Meikap	Materials Today Physics	Elsevier	2022-05-04
Ajit Kumar Meikap	Physica Scripta	IOP	2022-05-23
Karthikeyan J	Iranian Journal of Science	Springer	2023-03-04
Pathik Kumbhakar	Dalton Transactions	RSC	2022-04-24

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Reviewer	Name of the Journal	Publisher	Date of Final
			Review
Pathik Kumbhakar	ACS Sustainable Chemistry & Engineering	ACS	2022-04-27
Pathik Kumbhakar	JOSA B	OPTICA	2022-05-10
Pathik Kumbhakar	Dalton Transactions	RSC	2022-06-27
Pathik Kumbhakar	Journal of Luminescence	Elsevier	2022-07-15
Pathik Kumbhakar	Nanotechnology	IOP	2022-07-20
Pathik Kumbhakar	Scientific Report	Nature	2022-07-28
Pathik Kumbhakar	Optical Materials	Elsevier	2022-08-07
Pathik Kumbhakar	Opt Express	OPTICA	2022-08-09
Pathik Kumbhakar	ACS Measurement Science Au	ACS	2022-08-21
Pathik Kumbhakar	Opt Express	OPTICA	2022-09-21
Pathik Kumbhakar	ACS Omega	ACS	2022-10-17
Pathik Kumbhakar	ACS Sustainable Chemistry & Engineering	ACS	2022-10-18
Pathik Kumbhakar	Indian Journal of Physics	Springer	2022-10-26
Pathik Kumbhakar	ACS Omega	ACS	2022-12-20
Pathik Kumbhakar	Optics Continuum	OPTICA	2023-02-22
Sayantari Ghosh	Physical Biology	IOP	2022-07-13
Sayantari Ghosh	Scientific Reports	Nature	2022-08-26
Pathik Kumbhakar	Nature Communications	Nature Portfolio	2022-10-06

## 4.14.26Review of Books

NIL

## 4.14.27 Participation in National Committees/Visits

NIL

## 4.14.28Invited Examiners/Paper-Setters/Board of Studies

Name of the Faculty	Name of the Examination	University/Institute	From	To Date
			Date	
Ajit Kumar Meikap	Comprehensive examination and DAC 2	CMERI, Durgapur	2022-07-	2022-07-21
	meeting		21	
Ajit Kumar Meikap	Project presentation and Grand Viva	Kazi Nazrul University,	2022-08-	2022-08-05
	Examination (2022) of PG 4th semester	Asansol	04	
Ajit Kumar Meikap	Meeting of Board of Research Studies in	Kazi Nazrul University,	2022-11-	2022-11-03
	Physics	Asansol	03	
Ajit Kumar Meikap	Ph.D. Viva-voc examination	Kazi Nazrul University,	2022-09-	2022-09-14
		Asansol	14	
Arghya Chatterjee	MSc Physics 1st Semester Examination	Kazi Nazrul University	2023-02-	2023-03-09
	2023 (Quantum Mechanics- I)		13	
Mrinal Kanti Mandal	JEE Main test items development for	NTA New Delhi	2022-12-	2022-12-04
	2023		01	
Amit Kumar	M.Sc. Project Seminar	Visvabharati University	2022-04-	2023-03-31
Chakraborty			01	
Pathik Kumbhakar	M. Sc. 4 th Semester Examination, 2022	The University of	2022-05-	2022-05-23
	(2020-2022) (CBCS)	Burdwan	23	
Pathik Kumbhakar	PhD thesis	Sidho-Kanho-Birsha	2022-07-	2022-07-12
		University	12	
Pathik Kumbhakar	PhD thesis	UNIVERSITY OF	2022-11-	2022-11-13
		CALCUTTA	13	
Pathik Kumbhakar	PhD Viva-voce	Visvesvaraya	2023-02-	2023-02-15
		Technological	15	



Name of the Faculty	Name of the Examination	University/Institute	From	To Date
			Date	
		University, Karnataka,		
		India		
Pathik Kumbhakar	PhD thesis	Jadavpur University	2022-08-	2022-08-20
		•	20	
Pathik Kumbhakar	PhD thesis review and Oral Examination	Anna University	2022-06-	2022-06-29
		•	29	

# 4.14.29Invited Expert in Selection Committees

Name of the Faculty	Discipline	University/Institute	From Date	To Date
Ajit Kumar Meikap	Recruitment of faculty of the Department of Physics	NIT Jamshedpur	2023-08-16	2023-08-18
Ajit Kumar Meikap	Recruitment of faculty of the Institute	NIT Manipur	2022-09-08	2022-09-12
Ajit Kumar Meikap	Selection of upgradation from JRF to SRF of UGC Scholars	Kazi Nazrul University, Asansol	2022-11-30	2022-11-30
Mrinal Kanti Mandal	Subject Expert for Teacher selection committe	DAV Model School	2023-03-26	2023-03-27
Amit Kumar Chakraborty	JRF selection in Physics	BITS Pilani, Pilani	2022-04-01	2023-03-31
Amit Kumar Chakraborty	Senior scholar selection	JBNSTS, Kolkata	2022-04-01	2023-03-31
Pathik Kumbhakar	Screening Committee for Faculty	NIT Manipur	2022-09-10	2023-09-12

## 4.14.30Invited Lectures

Name of the Faculty	Title of the Lecture	Programme	Place	From Date	To Date
Karthikeyan J	LaTeX FOR SCIENTIFIC WRITING	E-Workshop	Coimbatore (Online mode)	2022-11- 08	2022-11- 09
Pathik Kumbhakar	30th District Level National Science Congress (NCSC- 2022)	Bengal Science Lecture (BSL)	DAV Model School Durgapur	2022-09- 26	2023-09- 26
Pathik Kumbhakar	West Bengal State Science & Technology Congress	West Bengal State Science & Technology Congress	The University of Burdwan	2023-01- 06	2023-01- 06
Mrinal Kanti Mandal	Data Compression, Secure Communication and Storage	Seminar on Solitons and its Applications in Biophysics and Telecommunication	Durgapur Govt. College	2023-01- 28	2023-01- 28
Mrinal Kanti Mandal	Sparse representation: a significant technique of data processing and applications	Webinar lecture series of IETE Burdwan Sub-Centre	IETE Burdwan Sub-centre	2022-12- 12	2022-12- 12
Amit Kumar Chakraborty	Metal oxide nanostructures for Supercapacitors	2nd National Conference on Advanced Nanomaterials and Applications	Central University of South Gaya, Bihar	2023-03- 20	2023-03- 22

# 4.14.31Session Chair/Convenor



Name of the Faculty	Programme	Place	Session	From	To Date
				Date	
Sayantari Ghosh	COMSYS 2022	IIT	Computational	2022-12-	2022-12-21
		Ropar	Biology & Biophysics	19	

#### 4.14.32 Patents

**NIL** 

### Centers

## 5.1 Center for Advanced Research on Energy (CARE)

### 5.1.1 Information regarding Center:

In the wake of environmental concerns and the global uproar about rapidly-declining reserves of fossil fuels the development of alternative fuels is crucial for the sustenance and development of human civilization. Climate change, pollution, and energy insecurity are significant problems, and addressing them requires major changes to energy infrastructures. Renewable energy technologies are essential contributors to the energy supply portfolio, as they contribute to world energy security, reduce dependency on fossil fuels, and provide opportunities for mitigating greenhouse gases. Climate-disrupting fossil fuels are being replaced by clean, climate-stabilizing, non-depletable sources of energy. Today, renewables are seen not only as sources of energy, but also as tools to address many other pressing needs, including: improving energy security; reducing the health and environmental impacts associated with fossil and nuclear energy; mitigating greenhouse gas emissions; improving educational opportunities; creating jobs; reducing poverty; and increasing gender equality. Renewables have entered the mainstream.

Due to the growing environmental concerns and depleting reserves of fossil fuels along with their expensive extraction and processing, more emphasis is being laid on finding alternative fuels which are non-polluting and renewable/abundant. Solar energy, being the most abundant of the renewable energy sources, is being sought after to cater to the increasing global power demand in order to minimise environmental damage. The average solar power received by the earth's surface stands at 173000 terawatts. This enormous amount of energy can act as source of energy if we can successfully convert and store it as electrical energy as per our requirement. One can achieve this by photovoltaic devices which can convert the solar photons into electrons to creative a current or can hydrolyse water (another abundant resource) by the means of a photo-catalyst through photo-electro-chemical water splitting. Both these approaches have enormous potential as alternative and renewable energy technology for the future generation.

In view of the above, and due to rapid urbanisation of Indian economy, the demand for alternative energy has been ever increasing in India. Durgapur being an industrial city, and due to Govt. of India's look east policy, need for developing technologies that can provide energy in a sustainable way for long term economic growth of the eastern India, it is high time that researchers at NIT Durgapur, take proactive role in transforming this growth process within the region. It is with these objectives, that a group of researchers as underlined below from several departments of NIT Durgapur, a premier technological institute, have come together to work jointly to develop technologies that can contribute significantly to the sustainable growth of the eastern region of India.

To establish a **Center for Advanced Research on Energy (CARE)** at NIT Durgapur is to promote multidisciplinary activities focused to various facets of energy technology and systems in the form of research, teaching and consultancy. The research activities in the centre will be in the form of research-based projects funded by various national and international funding agencies. Faculty members from various departments of the institute will be associated with the centre for the promotion of interdisciplinary research for sustainable energy. To support the research work in the projects, the centre will start academic programmes - Doctor of Philosophy (PhD) and M. Tech by Research.



### 5.1.2 Centre at a glance

- To carry out advanced interdisciplinary research activities in the area of energy to the needs of the society.
- To conduct training programmes in the related areas for professional skill development.
- To facilitate incubation of business ideas from students and mentor them to develop as entrepreneurs in relevant areas.
- To introduce post graduate courses in energy with certain specializations that will focus on emerging areas of energy devices Design and Development, sensors, smart materials, etc.
- To provide a platform for interaction between industry fraternity with scientists and management experts from neighbouring institutions interested to work in identified topics by organizing regular seminar series.
- To provide customized/flexible PhD Program to student(s) of any department of the institute on specific problems in energy.
- To enter into collaborative research engagements with Extra-mural funding agencies and Industrial Organizations for better understanding of issues of scientific and technological management between different stakeholders.

## 5.1.3 Faculty & Staff details

Name	Designation	Email id (Institute & other id)
Prof. Parimal Acharjee, EE	Professor	parimal.acharjee@ee.nitdgp.ac.in
Prof. Kaustav Aikat, BT	Professor	
		kaustav.aikat@bt.nitdgp.ac.in
Prof. Atul Kumar Banik, CE	Professor	atul.banik@ce.nitdgp.ac.in
Prof. Tapas Kumar Saha, EE	Professor	tapas.saha@ee.nitdgp.ac.in
Prof. S. N. Mahato, EE	Professor	sankar.mahato@ee.nitdgp.ac.in
Dr. A. Mondal, PH	Associate	aniruddha.mondal@phy.nitdgp.ac.in
	Professor	
Dr. J. Dey, EE	Associate	jayati.dey@ee.nitdgp.ac.in
-	Professor	<del>-</del>
Dr. T. K. Bera	Assistant	tusharkanti.bera@ee.nitdgp.ac.in
	Professor	

## 5.1.4 Papers/Projects/Books/Book Chapters/Patents

Journal	Conference	Projects (for	· 2022-23) (No.)	Book	Books/Edited	Patents
Papers (No.)	Papers (No.)	Ongoing	Completed	Chapters (No.)	Volume (No.)	(No.)
22	27	06	02	05	03	NIL

#### 5.1.5 Workshops/Seminars Organised (2022-23)

NIL.

### 5.1.6 Doctoral Programme (No. Only)

Ongoing	01
Completed	NIL

### 5.1.7 Facilities available

- High speed Internet facility with Wi-Fi connectivity.
- Workshop for any fabrication, model making requirements and design software.
- Simulation software.

- Computers with necessary software
- Solar Simulator
- Water and Electricity for 24 hours
- Hardware and software laboratories
- Library books, journals (Hardcopy), unlimited journals, conference papers download, plagiarism Checking facility.

### 5.1.8 Equipment

Sl. No.	Name of the equipment	Date of Purchase	Amount
1	Solar Simulator I-V System with IPCE	23-03-2022	4803387.06

#### 5.1.9 Future Plans

#### **Future Plans are as follows:**

- ❖ Introduce post graduate courses on energy with certain specializations that will focus on emerging areas of energy devices, design and development, sensors, smart materials, etc.
- Start PhD Program to student(s) on specific problems on energy.
- ❖ Purchase Equipment which will be multi-disciplinary. Experimental set-up for PG course will be developed. Those purchased equipment will be helpful and useful for PG students, PhD scholars to perform multidisciplinary research.
- Conduct workshop, seminar, Conference and training programmes in the related areas for professional skill development.
- \* Collaborative research engagements with Extra-mural funding agencies and Industrial Organizations for better understanding of issues of scientific and technological management between different stakeholders.
- Promote multidisciplinary activities focused to various facets of energy technology and systems in the form of research, teaching and consultancy.

## 5.2 Centre of Biomedical Engineering & Assistive Technology (BEAT)

### 5.2.1 Centre at a glance

The Centre of Biomedical Engineering & Assistive Technology (BEAT) is focused on specific research to solve complex biomedical problems that are crucial to human welfare and society, in general. It invites /aims at multidisciplinary perspective that include engineering sciences, physical sciences mathematical, and biological sciences. This centre is determined to enhance interdisciplinary engineering education & research, training of paramedical and medical skills of personnel in the field /application. The thematic focus areas for research under the BEAT are:

- (i) Biomaterials & Biofabrication,
- (ii) Biomechanics & Biomechanical Engineering,
- (iii) Biomedical Devices, Bio-Instrumentation & Bio-sensors,
- (iv) Assistive Technology & Rehabilitation Engineering.
- (v) At present, the center is having one professional category and one full-time PhD /research scholar supported by Institute fellowship, who are working in the interdisciplinary domain under the guidance of multiple Faculty members from different academic departments.

### 5.2.2 Faculty & Staff details

Name	ne Designation Areas of Research Interest		Email id (Institute & other id)
Monidipa Ghosh	Asso Professor	Molecular Immunology, Biosensor development, Host-pathogen interaction	monidipa.ghosh@bt.nitdgp.ac.in
Supriya Bera	Asso Professor	Phase Transformation, Materials Characterization, Biomaterials,	supriya.bera@mme.nitdgp.ac.in
Manab Mallik	Asstt Professor	Structure property correlation of Biomaterials	manab.mallik@mme.nitdgp.ac.in
Madan M. Ghosh	Asso Professor	Simulation for Designing Structural Materials Nanomaterials - Nanoparticles, Nanocomposites	madanmohan.ghosh@mme.nitdgp.ac.in



Name	Designation	Areas of Research Interest	Email id (Institute & other id)
Tushar K. Bera	Asstt Professor	Biomedical Instrumentation, Sensors and Actuators, Medical Electronics, EIHM	tusharkanti.bera@ee.nitdgp.ac.in
Ashis K. Dhara	Asstt Professor	Computer-aided Diagnosis System, AI & Machine Learning, Deep Learning in Med Image Analysis.	ashis.dhara@ee.nitdgp.ac.in
Suman Halder	Asstt Professor	Biomedical Instrumentation, Biomedical Modeling	suman.halder@ee.nitdgp.ac.in
Chiranjib Koley	Professor	Signal Processing, Pattern Recognition, Soft Computing, Process Control & Instrumentation	chiranjib.koley@ee.nitdgp.ac.in
NB Hui	Professor	Robotics, Soft Computing, Multi Agent Systems, Design Optimization	nirmal.hui@me.nitdgp.ac.in
K Khan	Asso Professor	Composite materials, bimodular composite,Finite element method, Functionally graded materials	kallol.khan@me.nitdgp.ac.in
SS Roy	Professor	Additive Manufacturing & 3D Printing, CAD/CAM, Robotics	shibendu.roy@me.nitdgp.ac.in
RN Barman	Asstt Professor	Computational Fluid Dynamics (CFD), Modeling and Simulation	rn.barman@me.nitdgp.ac.in
Bibhash Sen	Asso Professor	Embedded System & its application in medical science, Assistive Technology	bibhash.sen@cse.nitdgp.ac.in
Mamata Dalui Chakraborty	Asstt Professor	Intelligent Biomedical Devices, Assistive Technology	mamata.dalui@cse.nitdgp.ac.in
Suchismita Roy	Professor	FPGA based Embedded System design	suchismita.roy@cse.nitdgp.ac
Aniruddha Mondal	Asso Professor	Fabrication of 1d metal oxide semiconductor nanostructure, hybrid semiconductor detectors, Bio sensor	aniruddha.mondal@phy.nitdgp.ac.in
Nilanjan Chattaraj	Asstt Professor	Smart materials based devices and Structronic Systems, Electromechanical systems, Flexible-Mechatronics System Engineering	nilanjan.chattaraj@ece.nitdgp.ac.in
Diptesh Das	Asso Professor	Passive, Semi-active and Hybrid Vib Control, AI and Soft Computing Offshore Struct. Engineering	diptesh.das@ce.nitdgp.ac.in
Dakshina Ranjan Kisku	Associate Professor	Biometrics, Machine Learning, Deep Learning, Image Processing, Pattern Classification, Affective Computing	drkisku@cse.nitdgp.ac.in
Debashis Nandi	Professor	Image Processing, Medical Imaging, Communication Security, Chaos and Security, Bio-inspired Optimization, Deep Learning in Computer Vision	debashis@cse.nitdgp.ac.in
Amiya K. Samanta	Professor	Comp. & exp. Mechanics, simulation of composite structures, innovative materials.	amiyak.samanta@ce.nitdgp.ac.in

## 5.2.3 R&D Activities

# 5.2.4 Papers/Projects/Books/Book Chapters/Patents:

Journal	Conference	Projects (for	2022-23) (No.)	Book	Books/Edited	Patents
Papers (No.)	Papers (No.)	Ongoing	Completed	Chapters (No.)	Volume (No.)	(No.)
0		0		0	-	0

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## 5.2.5 Workshops/Seminars Organised (2022-23)

## 5.2.6 Doctoral Programme (Number Only)

Ongoing	02	
Completed	NIL	

#### 5.2.7 Facilities available

### 5.2.8 Equipment

#### 5.2.9 Future Plans

Centre of Biomedical Engineering & Assistive Technology (BEAT) wishes to widen its research perspective in the thematic areas along with the following future plans

- (i) Sponsored R&D project proposal submission.
- (ii) Initiate procurement of equipment and setting up of dedicated laboratory under HEFA proposal as soon as lab area /space in Utkarsh Bhavan is received /handed over.
- (iii) Floating proposal for interdisciplinary MTech programme in BME.

## 5.3 Centre for Research on Environment and Water (CREW)

Ministry of Education, GoI through HEFA has approved the fund of Rs. 4 Crore to set up a Centre for Research on Environment and Water (CREW) at NIT Durgapur. This centre will be equipped with high valued analytical instruments with an aim to develop expertise to assist industries and municipal bodies in developing and implementing evaluation, remediation and management strategies for pollution related issues using sole and/or integrated treatment strategies and develop technologies to convert waste to value added products. As Durgapur is a rapidly developing city with a burgeoning population, increasing use of fossil fuels and generation of municipal wastes are associated with its development. In this localized scenario as well as in the national scenario, a state of the art centre for studies and research on such environmental issues is extremely relevant. As the Centre is interdisciplinary in nature and made by multiple departments like Earth and Environmental Studies, Physics, Chemistry, Mathematics, Chemical Engineering, Biotechnology, Civil Engineering, Mechanical Engineering, Management Studies and Computer Science and Engineering to implement for ensuring total environmental compliance by industrial houses and municipal bodies. Finally, UG, PG students and research scholar are benefitted through such advanced centre for their better understanding with their interdisciplinary curriculum.

### 5.3.1 Centre at a glance

A centre with a multidisciplinary approach towards advanced research on environment and water in an institute of national importance, such as National Institute of Technology Durgapur can play a very effective role in this regard. Such a centre would need precision high value analytical instruments for this activity. The centre would aim to develop the expertise to assist industry and civic administrations in developing and implementing evaluation, remediation or management strategies for contamination issues and develop technologies to convert wastes to value-added products wherever feasible. Hybrid treatment technologies encompassing chemical, biological and physico-chemical treatment schemes would be a viable and practical option to substitute inadequate conventional treatment systems. As the Centre is interdisciplinary in nature and made by multiple departments like Department of Earth and Environmental Studies, Physics, Chemistry, Mathematics, Chemical Engineering, Biotechnology, Civil Engineering, Mechanical Engineering, Management Studies and Computer Science & Engineering to implement for ensuring total environmental compliance by industrial houses and municipal bodies.

### 5.3.2 Faculty & Staff details

Name	Designation	Email id (Institute & other id)
Dr. Rajnarayan Saha	Professor and Coordinator	rajnarayan.saha@ch.nitdgp.ac.in
Dr. Hirok Chaudhuri	Associate Professor and Joint Coordinator	hirok.chaudhuri@phy.nitdgp.ac.in
Dr. Sandip Mondal	Assistant Professor and Joint Coordinator	sandip.mondal@ees.nitdgp.ac.in
Dr. Kalyan Adhikari	Professor	kalyan.adhikari@ees.nitdgp.ac.in



Name	Designation	Email id (Institute & other id)
Dr. Apurba Dey	Professor (HAG)	apurba.dey@bt.nitdgp.ac.in
Dr. Kaustav Aikat	Professor	kaustav.aikat@bt.nitdgp.ac.in
Dr. Dalia Dasgupta Mandal	Professor	dalia.dasgupta@bt.nitdgp.ac.in
Dr. Surabhi Chaudhuri	Professor	surabhi.chaudhuri@bt.nitdgp.ac.in
Dr. Sufia Kazy	Associate Professor	sufia.kazy@bt.nitdgp.ac.in
Dr. Parimal Pal	Professor (HAG)	parimal.pal@che.nitdgp.ac.in
Dr. Tamal Mandal	Professor	tamal.mandal@che.nitdgp.ac.in
Dr. Susmita Dutta	Professor	susmita.dutta@che.nitdgp.ac.in
Dr. Gopinath Halder	Professor	gopinath.halder@che.nitdgp.ac.in
Dr. Mrinal Kanti Mondal	Associate Professor	mrinalkanti.mandal@che.nitdgp.ac.in
Dr. Bimal Das	Assistant Professor	bimal.das@che.nitdgp.ac.in
Dr. Supriya Pal	Associate Professor	supriya.pal@ce.nitdgp.ac.in
Dr. Soumen Basu	Associate Professor	soumen.basu@phy.nitdgp.ac.in
Dr. Sankar Ch. Moi	Professor	sankar.moi@ch.nitdgp.ac.in
Dr. Jitamanyu Chakrabarty	Associate Professor	jitamanyu.chakrabarty@ch.nitdgp.ac.in
Dr. Sujit Sankar Panja	Associate Professor	sujit.panja@ch.nitdgp.ac.in
Dr. Utpal Adhikari	Associate Professor	utpal.adhikari@ch.nitdgp.ac.in
Dr. Tanmoy Kr. Saha	Assistant Professor	tanmoy.saha@ch.nitdgp.ac.in
Dr. Sujoy Saha	Assistant Professor	sujoy.saha@cse.nitdgp.ac.in
Dr. Anita Pal	Associate Professor	anita.pal@maths.nitdgp.ac.in
Dr. Mousumi Roy	Professor	mousumi.roy@dms.nitdgp.ac.in
Dr. Parag Kumar Guhathakurta	Assistant Professor	paragkumar.guhathakurta@cse.nitdgp.ac.ir
Dr. Subhas Rana	Associate Professor	subhas.rana@me.nitdgp.ac.in
Dr. Arup Kumar Mandal	Assistant Professor	arup.mandal@mme.nitdgp.ac.in
Dr. Soumik Das	Assistant Professor	soumik.das@phy.nitdgp.ac.in
Dr. Nilanjan Chattaraj	Assistant Professor	nilanjan.chattaraj@ece.nitdgp.ac.in
Dr. Nibedita Mahata	Assistant Professor	nibedita.mahata@bt.nitdgp.ac.in
Dr. Sudipta Mondal	Assistant Professor	sudipta.mondal@bt.nitdgp.ac.in

# 5.3.3 Papers/Projects/Books/Book Chapters/Patents

Journal Papers (No.)	Conference Papers (No.)	Projects (for	2022-23) (No.)	Book Chapters	Books/Edited Volume (No.)	Patents (No.)
Tupers (1 (o.)	r upers (1 tol)	Ongoing	Completed	(No.)	, oranic (1 (or)	(1 (01)
04	05	NIL	1	2	NIL	NIL

# 5.3.4 Workshops/Seminars Organised

NIL

# 5.3.5 Doctoral Programme (No. Only)

Ongoing	01	
Completed	NIL	

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#### 5.3.6 Facilities available

Centre procured Geotechnical Centrifuge and AlphaGuard Radon Monitor

### 5.3.7 Equipment

Sl. No.	Name of the equipment	Date of Purchase	Amount
1	Geotechnical Centrifuge	20.12.2022	Rs.32,93,290/-

#### 5.3.8 Future Plans

Development of low-cost technological solutions of industrial effluent treatment, particulates and gaseous emission control system and solid waste management system.

Precise assessment of contamination and transport mechanism of contaminants in soil and groundwater system and development of control mechanism.

Development of low cost highly sensitive environmental monitoring equipment, particularly electronic sensors with data logger.

Development of strategies to monitor environmental radioactivity and to provide feasible solutions.

Development of processes for bioremediation of wastes to convert them to harmless/less harmful forms or to yield value-added products

Direct interfacing with industries to solve their specific pollution control problems

## 5.4 IoT and Intelligent Systems (IoTIS)

Centre of Excellence on IoT and Intelligent Systems (IoTIS), funded by Higher Education Financing Agency (HEFA), MoE, Govt. of India.

#### 5.4.1 Centre at a Glance

The proposed 'Centre of Excellence for Advanced Research on IoT and Intelligent Systems' (IoTIS) will focus on advanced interdisciplinary research activities in the area of Internet of Things (IoT) and assistive technologies related to Intelligent Systems to cater to the needs of the society. Another goal of IoTIS is to meet the challenges of the nation by encouraging research and entrepreneurship in interdisciplinary areas, encompassing engineering, sciences, and social sciences. IoTIS also aims to reach out to universities, research institutions and industrial organizations with periodic continuing-education programs for proper utilization of national resources. As far as academic programs are concerned, the centre will be offering Masters, and PhD programs in Advanced Networking and Intelligent Systems. Going forward, the centre seeks collaboration with national and international institutes and partnership with social institutions and industries to realize its goals.

## 5.4.2 Faculty & Staff details

Designation	Email id (Institute & other id)
Asso Prof	pchoudhury@cse.nitdgp.ac.in
Asso Prof	bsen@cse.nitdgp.ac.in
Professor	tpal@cse.nitdgp.ac.in
Professor	snandi@cse.nitdgp.ac.in
Asst prof	ssaha@cse.nitdgp.ac.in
Professor	ckoley@ee.nitdgp.ac.in
Professor	schoudhury@cse.nitdgp.ac.in
Asso Prof	asarkar@cse.nitdgp.ac.in
Asst prof	sbatabyal@cse.nitdgp.ac.in
Asst prof	nchattaraj@ece.nitdgp.ac.in
	Asso Prof Professor Professor Asst prof Professor Professor Asso Prof Asso Prof



Name	Designation	Email id (Institute & other id)
Nilanjan Biswas	Asst prof	nbiswas@ece.nitdgp.ac.in
Aniruddha Bhattachrjya	Asst prof	abhattacharjya@ee.nitdgp.ac.in

### 5.4.3 R&D activities

## 5.4.4 Papers/Projects/Books/Book Chapters/Patents

Journal	Conference	Projects (for	· 2022-23) (No.)	Book	Books/Edited	Patents
Papers (No.)	Papers (No.)	Ongoing	Completed	Chapters (No.)	Volume (No.)	(No.)
06	02	NIL	NIL	NIL	NIL	NIL

## 5.4.5 Workshops/Seminars Organised

**NIL** 

## 5.4.6 Doctoral Programme (No. Only)

Ongoing	NIL
Completed	NIL

#### 5.4.7 Facilities available

At Present, an Eye tracker software is procured which is being utilised in association with EEG for studying cognitive load. Permission for purchase of some other equipments have been obtained and the process is initiated. However, the facilities for IoT test beds require permananet space which is likely to be available with the handover of the HEFA CoE buliding. Currently, faculty members of the team are working on the related problems using the general facilities (including sponsored or RIG related projects) available in the Institute.

#### 5.4.8 Equipments

Sl. No.	Name of the equipment	Date of Purchase	Amount
1	Eye tracker device	05.01.2021	9 lakhs

### 5.4.9 Future Plans

- To create facility and test-bed for carrying out advanced interdisciplinary research activities in the area of Internet of Things (IoT) and related Intelligent Systems (and Smart Systems) to cater to the needs of the industry and society (in general).
- Conducting training programmes and Master degree level courses in the related areas for professional skill development.
- Generating Intellectual Properties (IP) in terms of patents and high quality technical publications.
- Conducting consultancy works for industries covering, but not limited to, transportation, manufacturing, healthcare, agriculture etc.
- Helping and guiding start-ups in relevant areas.
- Using this as a general research facility to take up new research projects from industry and other bodies.



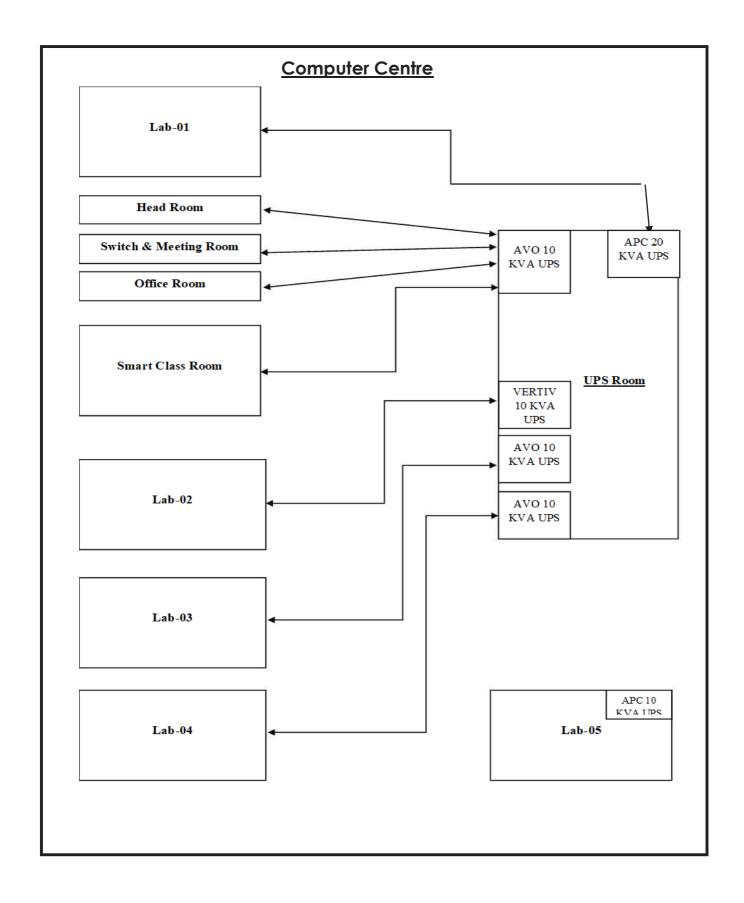
# 6. Centralised Services

# 6.1 Computer Centre

Name of the Lab	Area of the Lab	Number of System	Configuration of the System	Software Used
LAB-01	40X24 sq.ft	Total capacity 68 Nos. system. System present 68 Nos. CCTV 02 Nos. Projector 01 No. APC 20 KVA UPS 01 No. (PC-001 to PC-068)	Acer Veriton - Intel core i5-8500; 3.0 GHz; 1TB HDD; 16 GB RAM 68 Nos.	Windows 10 Pro, Ubuntu, Dev c++, Java, winrar, adobe reader, LibreCAD, Mars, Codeblock, MySql, Xampp, Office365
LAB-02	34X24 sq.ft	Total capacity 44 Nos. system. System present 41 Nos. CCTV 02 Nos.  Projector 01 No.  VERTIV 10 KVA UPS 01 No.	Acer Veriton - Intel core i5-8500; 3.0 GHz; 1TB HDD; 16 GB RAM10 Nos.	Windows 10 Pro, Ubuntu, Dev c++, Java, winrar, adobe reader, LibreCAD,
		(PC-069 to PC-112)	HP Pro TWR 400 G9 - Intel core i5-12500; 3.0 GHz; 1TB HDD, 8 GB RAM 31 Nos.	Codeblock, MySql, Xampp, Office365
LAB-03	34X24 sq.ft	Total capacity 44 Nos. system. System present 44 Nos. CCTV 02 Nos.  Projector 01 No.  APC 10 KVA UPS 01 No.  (PC-113 to PC-156)	HP Pro TWR 400 G9 - Intel core i5-12500; 3.0 GHz; 1TB HDD, 8 GB RAM 44 Nos.	Windows 10 Pro, Ubuntu, Dev c++, Java, winrar, adobe reader, LibreCAD, Codeblock, MySql, Xampp, Office365
LAB-04	34X24 sq.ft	Total capacity 44 Nos. system. System present 34 Nos. CCTV 02 Nos.  Projector 01 No.  AVO 10 KVA UPS - 01 No.  (PC-157 to PC-200)	HP Elite Desk 800G – Intel core i5; 3.5 GHz; 500GB HDD 8 GB RAM 34 Nos.	Windows 10 Pro, Ubuntu, Dev c++, Java, winrar, adobe reader, LibreCAD, Codeblock, MySql, Xampp, Office365
LAB-05	36X15 sq.ft	Total capacity 36 Nos. system. System present 27 Nos. CCTV 01 No. APC 10 KVA UPS - 01 No. (PC-201 to PC-236)	Lenovo Thinkcentre Intel core i5 Vpro, 3.3 GHz; 6GB RAM -04 Nos.  HP Elite Desk 800G – Intel core i5; 3.5 GHz; 500GB HDD 8 GB RAM 23 Nos.	Windows 10 Pro, Ubuntu, Dev c++, Java, winrar, adobe reader, LibreCAD, Codeblock, MySql, Xampp, Office365
LAB-06	23X15			**
	sq.ft		IOTIS Project Lab.	
Smart Class Room	24X23 sq.ft	Total capacity 36 Nos. system. System p No. A	rocurement under process. CCTV VO 10 KVA UPS – 01 No.	· 01 No. Projector 01







## 6.2 Library

#### 6.2.1 About Us

The Central Library is one of the important central facilities of the Institute supports the study, teaching, research, and community to enhance their knowledge and skillsets. It is housed in a separate building having three floors on a plinth area of 1000 sq. mtrs. The library has a collection of 1,92,036 volumes, which includes text-books, reference books & bound volumes of Journals, Standards etc. The library subscribes to about 125 current e-Journals and a few e-Services. Library operations have been automated with the help of an integrated opensource library management software package, KOHA. The book database is accessible through OPAC (Online Public Access Catalogue). It has good collection of reference books for all branches of the Institute. It has a good collection of electronic resources in its Digital Library.

Library has introduced Wi-Fi facility in the reading halls to access e-resources. It has also some Audio-Visual equipment like Direct Projectors, Multimedia Projectors, Studio recording, color copier etc.

The library is an institutional member of DELNET (Developing Library Network), and NPTEL (National Programme on Technology Enhanced Learning). It is also a beneficiary member of eSS (e-SodhSindhu) previously known as INDEST-AICTE (Indian National Digital Library in Engineering, Science & Technology) which provides Desktop Access to high quality e-resources (online journals and databases).

### 6.2.2 Facilities & Teaching and Learning Resources

Central Library extends various facilities to the students, faculties and researchers. The UG/PG students are supported with the Book-Bank, which allows then to borrow 6 (six) books in each semester. Moreover, they can also borrow reference books (limited in numbers). The Research Scholars can borrow more books for their references. Faculties and staff are also avail this facility. Central Library has been subscribing various e-services which include e-Journals and e-Database and e-Services. All the electronic services are licensed on the Institute IP, hence users can access those services seamlessly within the local network. We also provide off-campus access through INFLIBNET portal.

#### 6.2.3 Access to the Resources

Central Library is providing two types of services – the circulation and online service. The circulation includes all print book, reference books and study materials. The students of the institute, faculties and staff can avail the circulation facility. There is a collection of 'children book'. This facility is availed by the employees of the institute.

All online services are available on the Institute local network. There is no user login required. However, some e-Services are login based – iThenticate, Grammarly, etc.

The users can avail the reading room facility during the library hour. The reading room is wifi enable and temperature controlled.

#### 6.2.4 Studio (Lecture Recording System)

Central library has recently developed a studio for learning material development. The studio is equipped with interactive devices like digital board, Wacom, 50 seater student capacity, faculty and student microphones, etc. The studio is also supported with the editorial team. The editorial office is equipped with the required devices and the software to produce the final product. The studio can be used to produce teaching learning contents for the NPTEL and MOOC courses.

### 6.2.5 E-Journals/Databases through e-ShodhSindhu

The following resources are available from the e-ShodhSindhu (2020 onwards)

Sl. No.	Name of Resource	Sl. No.	Name of Resource
1	ACM Digital Library	9	JSTOR
2	American Institute of Physics	10	MathSciNet
3	American Physical Society	11	Oxford University Press
4	ASCE Journals Online	12	Project Muse
5	ASME Journals Online	13	Springer Link 1700 Collection
6	Economic & Political Weekly	14	Nature Journal
7	Institute for Studies in Industrial	15	Web of Science Lease Access
	Development (ISID) Database		
8	JGate Plus (JCCC)	16	Urkund, PDS Software
8	JGate Plus (JCCC)	16	Urkund, PDS Software

Apart from the s-ShoodhSindhu, the Institute subscribes the following journals and resources.



Sl. No.	Name of Resource	Sl. No.	Name of Resource	
1	American Chemical Society (ACS)	8	PNAS Tier – 3	
2	Emerald - 310 Journals Package	9	Royal Society of Chemistry (RSC Gold EA)	
3	IEEE (IEL Online) Level-2	10	Sage iMeCHe - Material Science & Engineering &	
			Management & Org. Studies	
4	ASTM Standards	11	Taylor and Francis (4 Subject Collection)	
5	Elsevier -Science Direct (11 Subject	12	Wiley Online (100 Journals)	
	Collection)			
6	Indian Standards (BIS Code)	13	American Concrete Institute (ACI) journals	
7	SAE Journal	14	Institute of Physics (IOP) journals	
		15	AMS (American Mathematical Society)	

Sl. No.	Name of Database/Tools
1	SCOPUS Database
2	EPWRF Database
3	Scifinder Database
4	iThenticate (Anti-plagiarism/ Similarity measure tool)
5	Grammarly (Writing support tool)
6	IEEE SWEBOK Course Content
7	PROWESS Database (CMIE)

#### 6.2.6 e-Books

Central Library has a rich collection of e-Books and backfiles. All this resources are perpetual licenased.

#### Backfiles of e-journals (From Vol.1 Issue 1 to till date)

- 1. Elsevier Backfiles Collection: Engineering & Technology (164 titles) and Chemical Engineering (36 titles)
- 2. Royal Society of Chemistry (RSC Gold): Archive 1841-2007
- 3. Emerald Backfiles Collection:
- a) Accounting and Economics 1974-2006 (27 Journals)
- b) Marketing -1967-2006 (18 Journals)
- c) HR Learning and Organisational Studies -1952-2006 (28 Journals)
- d) Operational Logistics and Quality 1971-2006 (22 Journals)
- e) Public Policy and Environment -1899-2006 (10 Journals)

#### Library subscribes e-Books from different leading publishers:

Institute library has more than 18000 e-book collection of different publishers. Detail areas below:

- 1. Oxford e-Book collection for Mathematics and Physics
- 2. Springer e-Book Collection, LNCS (Lecture Note in Computer Science) from 1973 to 2022
- 3. Elsevier e-Books
- 4. CRC Press
- 5. Pearson (1st Year Collection), three years' perpetual license

#### **Print Collections**

Central Library has adequate collection of print materials. The details are shown below:

	General Book	1,24,487
	Book Bank	41,261
	Bound Vol. of Journals	7744
	SC/ST	4244
a)- Collection (as on 31 March 2022)	BIS Code	5072
,	Gift	5125
	Misc.	557
	TEQIP Books	3546
	Total Collection	192036

## 6.2.7 Library Hours

- 8:30 A.M to 9:00 P.M. (Weekdays)
- 9:00 AM to 5:00 P.M. (Weekends)
- However, the library timing increases up to midnight during the examination. During vacations 8:30 A.M. to 5:30 P.M. (Institute holidays remain close).

## 6.2.8 In Charge

There is the Professor in Charge of Central Library and the Chairman of Library Committee. The Professor in Charge is Jaydeep Howlader, Department of Computer Science, and the Chairman is Prof. Apurba Dey, Department of Biotechnology.

## 6.3 SRCC

#### 6.3.1 Projects

_	Con	npleted	Ongoing			
Research Projects	No.	Value	No.	Value		
	55	36,36,159	94	5,83,29,573		

### 6.3.2 Consultancy

Consultancy &	Total no. of consultancy and testing	Total value of Consultancy and					
Consultancy &	projects	testing					
<b>Testing Projects</b>	151	Rs. 2,10,43,279.50					

## 6.4 Career Development Center (CDC)

#### 6.4.1 Placement

Career Development Center of the institute provides employment opportunities to the final year students and training to the 3rd year students after 6th semester. 640 UG students have been placed in the session 2022-2023. Apart from that few students have opted for higher studies in various IITs and IISc. 189 companies visited the campus including MICROSOFT, ORACLE, GOLDMAN SACHS, J.P. MORGAN, AMDOCS, IBM, L&T, TCS, CESC, HSBC, PWC, RELIANCE JIO, HERO MOTOCORP, VEDANTA, JOHN DEERE, BPCL, RELIANCE INDUSTRIES. 106 companies visited the campus for M.Tech courses and 139 no of students have been placed in the academic session 2022-2023. Rest of the students have gone for higher studies. 10 companies visited for MBA and 16 students have been placed out of total eligible strength of 17. 18 companies visited for M.SC and 18 students have been placed out of total eligible strength of 90.

## **Training and Allied Activities**

Industrial Training/ Vocational Training is provided to the students of 3rd year after passing 6th semester. Annexure-III provides the list of companies for each individual branch.



Along with training the department organizes seminars entitled from classroom to boardroom by reputed global players such as TCS, Wipro and IBM. Student's development activities such as communication and interpersonal skills by reputed organizers are also conducted. Each year 5 no of students go for Internship in CERN (European Council for Nuclear Research, Switzerland). Foreign universities like ANUS, Singapore also allows NIT students for internship.

The UG & PG statistics for placement respectively are:

#### PLACEMENT RECORDS (Up to 30.06.2023) B.TECH: 2022-23

[0- Considered but not selected, (-) Not considered.]

Sl. No.	COMPANY	NUMBER OF STUDENTS PLACED (BRANCH WISE)  B.Tech								
		BT	CE	СНЕ	CSE	ECE	EE	ME	MME	TOTAL
Shari	ng slot									
1	TCS Ninja	7	6	5	13	8	1	17	19	76
2	Infosys	0	0	0	0	0	0	0	0	0
Bran	ch wise core sector									
1	TCS Digital	0	0	0	3	0	0	2	0	5
2	Trilogy Innovations	0	0	0	0	0	0	0	0	0
3	Microsoft	-	-	-	23	7	5	-	-	35
4	Fanatics	-	-	-	0	-	-	-	-	0
5	Ashok Leyland	-	-	-	-	-	1	1	-	2
6	Mathworks	-	-	-	2	0	0	0	-	2
7	Qualcomm	-	-	-	3	2	0	-	-	5
8	J.P. Morgan	-	-	-	19	6	8	2	-	35
9	Schneider Electric	-	-	-	0	0	0	5	-	5
10	Steradian Semiconductor	-	-	-	-	0	1	-	-	1
11	Wells Fargo	-	-	-	15	2	-	-	-	17
12	PwC	-	-	16	6	3	4	24	-	53
13	Oracle	-	-	-	9	2	2	1	-	14
14	Delhivery	-	3	1	2	-	-	3	2	11
15	Mavenir Systems	-	-	-	0	0	-	-	-	0
16	Byju's	-	-	-	6	1	2	-	-	9
17	Increff	0	1	0	0	0	1	2	0	4
18	Infosys (SP)	-	-	-	0	0	0	-	-	0
19	Brane Enterprise	-	-	-	0	0	0	-	-	0
20	John Deere	-	-	-	4	2	-	0	-	6
21	Uber	-	-	-	1	2	0	-	-	3
22	Cashfree	-	-	-	1	-	-	-	-	1
23	Publicis Sapient	-	-	-	9	4	-	-	-	13



Sl.	COMPANY	NUMBER OF STUDENTS PLACED (BRANCH WISE)								
No.		B.Tech								
		BT	CE	СНЕ	CSE	ECE	EE	ME	MME	TOTAL
24	Signify	-	-	-	3	-	-	-	-	3
25	Natwest Group	-	-	-	5	2	1	0	-	8
26	Carrier Corporation	-	-	-	0	1	-	-	-	1
27	Merilytics	-	0	0	0	1	0	0	-	1
28	Tata Projects	-	1	-	-	0	0	2	-	3
29	Sigmoid Analytics	-	-	-	2	2	0	-	-	4
30	TCS(R&I)	-	-	-	0	0	0	-	-	0
31	Tata Elxsi	-	-	-	0	0	0	-	-	0
32	WTW	-	-	-	1	-	-	-	-	1
33	Futures First	0	0	0	0	0	0	0	0	0
34	Genpact	-	-	-	0	3	3	-	-	6
35	Maq Software	-	-	-	0	-	-	-	-	0
36	Shipsy	-	-	-	0	0	0	-	-	0
37	Accenture	8	1	4	0	2	5	6	7	33
38	IBM	-	-	-	0	3	0	-	-	3
39	Blackbuck	0	0	0	0	0	0	1	0	1
40	ICICI Bank	9	3	5	4	2	3	9	12	47
41	OFSS	-	-	-	0	0	0	4	-	4
42	Bosch Limited	-	-	0	-	0	0	0	-	0
43	Deloitte	-	4	0	3	1	4	6	-	18
44	ITC Limited	-	-	1	-	-	0	1	-	2
45	Visa	-	-	-	0	0	1	-	-	1
46	NRI Fintech	-	-	-	0	1	-	2	-	3
47	HSBC	2	0	0	0	1	0	0	0	3
48	Samsung Semiconductor	-	-	-	3	6	3	-	-	12
49	Axis Bank	0	0	0	5	0	0	0	0	5
50	Comviva	-	-	-	0	0	0	-	-	0
51	PayU	-	-		1	0	0	-	-	1
52	Chqbook	-	-	-	0	-	-	-	-	0
53	Morphle Labs	-	-	-	-	0	0	0	-	0
54	Tartan	-	-	-	0	0	0	1	-	1
55	The Math Company	-	-	-	0	-	-	-	-	0
56	Alstom Transport	-	-	-	1	0	2	5	-	8



Sl. No.	COMPANY	NUMBER OF STUDENTS PLACED (BRANCH WISE)									
		B.Tech									
		BT	CE	CHE	CSE	ECE	EE	ME	MME	TOTAL	
57	GSK	0	-	-	1	0	0	-	-	1	
58	Tech Mahindra	-	-	-	0	0	-	-	-	0	
59	CGI	-	-	-	0	2	3	-	-	5	
60	Talent Recruit	-	-	-	0	0	0	2	-	2	
61	Teradata	-	-	-	0	-	-	-	-	0	
62	Siemens	-	-	-	0	0	1	1	-	2	
63	ABB	-	-	-	0	0	-	-	-	0	
64	EXL Service	1	5	1	0	0	0	2	7	16	
65	Amdocs	-	-	-	3	1	-	-	-	4	
66	Quantiphi	1	2	2	1	0	1	1	2	10	
67	Jio Platform(1)	-	-	-	2	4	-	-	-	6	
68	Arcesium	-	-	-	0	0	0	-	-	0	
69	Media Net	_	_	_	0	0	0	_	-	0	
70	Daimler India		_	_	0	_	2	0	_	2	
71	Discovery		_		0					0	
72	Samsung R&D				0	0				0	
12	(Noida)	_	_	_	U	O	_	_	_	U	
73	Jio Platform(2)	-	-	-	0	0	-	-	-	0	
74	Park+	-	-	-	0	0	0	-	-	0	
75	Reliance Retail	-	4	-	0	0	0	0	-	4	
76	BPCL	-	-	4	2	-	5	5	-	16	
77	Hero MotoCorp	-	-	-	-	-	1	2	-	3	
78	GreyB	1	-	0	0	0	0	2	1	4	
79	ARM Embedded	-	-	-	0	0	-	-	-	0	
80	Net Cracker	-	-	-	0	1	0	-	-	1	
81	Zscaler	0	0	0	0	0	0	1	0	1	
82	EY GDS	-	-	-	0	0	1	-	-	1	
83	TresVista	0	1	0	0	0	0	0	1	2	
84	Spinny	-	-	-	0	0	-	-	-	0	
85	Tide	-	-	-	1	-	-	-	-	1	
86	Saint Gobain	-	0	0	0	0	0	0	-	0	
87	Larsen & Toubro	-	4	5	0	0	2	4	0	15	
88	WSP India	-	-	-	0	0	-	-	-	0	
89	Mirketa	-	-	-	0	0	-	-	-	0	
90	Tata Power	-	0	-	0	0	0	0	-	0	



	COMPANY	NUN	IBER C	F STU	DENTS	PLAC	ED (BR	ANCH V	WISE)	
Sl. No.							B.Te	ech		
110.		BT	CE	CH E	CSE	EC E	EE	ME	MME	TOTAL
91	Fynd	-	-	-	1	0	-	-	-	1
92	Maruti Suzuki	-	-	-	-	0	2	5	-	7
93	Nation with Namo	0	0	0	0	0	0	0	0	0
94	Vesuvius	-	-	0	-	-	-	1	0	1
95	Vikram Solar	-	0	-	-	0	0	0	0	0
96	Piramal Group	-	-	-	0	0	0	-	-	0
97	Tata Metaliks	-	-	-	-	-	0	0	1	1
98	NexTurn	0	0	0	0	0	0	0	0	0
99	Fractal Analytics	1	0	1	0	0	0	1	1	4
100	Thyssenkrupp	-	1	0	-	1	0	3	0	5
101	Reliance Industries	-	-	10	3	-	1	6	5	25
102	Haldia Petrochemicals	-	-	3	-	-	0	1	-	4
103	Strand Life Science	1	-	-	0	-	-	-	-	1
104	Winjit Technologies	-	-	-	0	0	-	-	-	0
105	JSW Group	-	1	2	0	0	0	0	2	5
106	Rapido Bike	-	-	_	0	-	-	-	-	0
107	Edfora Infotech	-	-	-	0	0	0	-	-	0
108	Accolite Digital	-	-	-	0	0	0	-	-	0
109	Kanerika Softwares	-	-	-	0	1	-	-	-	1
110	Aaakash Byju's	1	0	0	0	0	0	0	0	1
111	Aditya Birla	-	-	-	-	-	-	3	4	7
112	Hexaware Technologies	-	-	-	1	0	0	-	-	1
113	Invesco	-	-	-	0	1	-	-	-	1
114	MCPI	-	-	0	0	-	0	0	-	0
115	Berger Paints	-	-	0	-	-	-	-	-	0
116	Tredence Analytics	1	0	1	0	0	0	0	1	3
117	GoKwik	-	-	-	0	-	-	-	-	0
118	Brigosha Technologies	-	-	-	0	0	0	-	-	0
119	SSWL	-	-	-	-	-	-	0	-	0
120	Schlumberger	-	-	-	-	1	-	-	-	1
121	Adani Group	-	2	0	-	0	0	1	2	5
122	M.N. Dastur	-	1	1	-	0	0	0	1	3
123	Ganit Business	0	0	0	0	0	0	0	0	0
124	Hindustan Construction	-	5	-	-	-	-	-	-	5



~-	COMPANY	NUM	BER OF	STUDEN	NTS PLA	CED (BR	ANCH	WISE)		
Sl. No.						B.Tech				
110.		BT	CE	СНЕ	CSE	ECE	EE	ME	MME	TOTAL
91	Fynd	-	-	-	1	0	-	-	-	1
92	Maruti Suzuki	-	-	-	-	0	2	5	-	7
93	Nation with Namo	0	0	0	0	0	0	0	0	0
94	Vesuvius	-	-	0	-	-	-	1	0	1
95	Vikram Solar	-	0	-	-	0	0	0	0	0
96	Piramal Group	-	-	-	0	0	0	-	-	0
97	Tata Metaliks	-	-	-	-	-	0	0	1	1
98	NexTurn	0	0	0	0	0	0	0	0	0
99	Fractal Analytics	1	0	1	0	0	0	1	1	4
100	Thyssenkrupp	-	1	0	-	1	0	3	0	5
101	Reliance Industries	-	-	10	3	-	1	6	5	25
102	Haldia Petrochemicals	-	-	3	-	-	0	1	-	4
103	Strand Life Science	1	-	-	0	-	-	-	-	1
104	Winjit Technologies	-	-	-	0	0	-	-	-	0
105	JSW Group	-	1	2	0	0	0	0	2	5
106	Rapido Bike	-	-	-	0	-	-	-	-	0
107	Edfora Infotech	-	-	-	0	0	0	-	-	0
108	Accolite Digital	-	-	-	0	0	0	-	-	0
109	Kanerika Softwares	-	-	-	0	1	-	-	-	1
110	Aaakash Byju's	1	0	0	0	0	0	0	0	1
111	Aditya Birla	-	-	-	-	-	-	3	4	7
112	Hexaware Technologies	-	-	-	1	0	0	-	-	1
113	Invesco	-	-	-	0	1	-	-	-	1
114	MCPI	-	-	0	0	-	0	0	-	0
115	Berger Paints	-	-	0	-	-	-	-	-	0
116	Tredence Analytics	1	0	1	0	0	0	0	1	3
117	GoKwik	-	-	-	0	-	-	-	-	0
118	Brigosha Technologies	-	-	-	0	0	0	-	-	0
119	SSWL	-	-	-	-	-	-	0	-	0
120	Schlumberger	-	-	-	-	1	-	-	-	1
121	Adani Group	-	2	0	-	0	0	1	2	5
122	M.N. Dastur	-	1	1	-	0	0	0	1	3
123	Ganit Business	0	0	0	0	0	0	0	0	0
124	Hindustan Construction	-	5	-	-	-	-	-	-	5



	COMPANY		NU	MBE	R OF S	TUDEN	TS PLA	CED (B	RANCH V	VISE)
Sl. No.							B.Tech			
110.		BT	C E	CH E	CS E	ECE	EE	ME	MME	TOTAL
125	LatentView Analytics	0	0	0	0	0	0	0	0	0
126	Varroc Group	-	-	-	0	0	0	0	-	0
127	C-DAC	-	-	-	0	0	0	0	0	0
128	Bennett Coleman	-	-	-	-	-	0	0	-	0
129	Just Dial	0	0	0	0	0	0	0	0	0
130	Afcons Infrastructure	-	2	-	-	-	-	-	-	2
131	Physics Wallah	0	2	0	0	0	0	0	0	2
132	Nineleaps	1	0	0	0	0	0	0	0	1
133	Shakambhari Ispat	-	-	-	-	-	0	1	4	5
134	Centuryply	-	-	0	-	-	1	2	-	3
135	Napier Healthcare	-	-	-	0	1	-	-	-	1
136	Bajaj Auto	-	-	-	-	0	-	-	-	0
137	South Indian Bank	0	0	0	0	0	0	0	0	0
138	KEC International	_	4	_	_	_	1	3	_	8
139	Cyfuture	0	0	0	0	0	0	0	0	0
140	IDBI Bank		_	_	2	2	_	_	-	4
141	ITD Cementation	_	2	_	_	_	1	0	_	3
142	Dhurin	-	-	-	0	-	_	-	_	0
143	Indraprastha Gas	-	-	-	-	-	-	4	-	4
144	Cubastion	-	-	-	0	0	-	-	-	0
145	Tata Motors	-	-	-	0	0	0	0	-	0
146	Godrej & Boyce	-	0	-	-	0	0	0	-	0
147	HDFC Bank	-	-	-	0	1	2	-	-	3
148	Suzuki Motors	-	-	-	-	-	1	1	0	2
149	HMEL	-	0	0	-	0	0	1	0	1
150	Super Smelters	-	-	-	-	-	0	0	2	2
151	Tata BlueScope	-	-	-	-	0	0	0	0	0
152	Danieli	-	-	-	-	0	1	-	0	1
153	PRADAN	3	0	0	0	0	0	0	0	3
154	Jindal Stainless	-	-	0	0	0	0	0	2	2
155	Bharat Electronics	-	-	-	6	5	3	3	-	17
156	Hitachi Energy	-	-	-	-	-	1	-	-	1
157	Linde Matin Fautiliaans	-	-	0	0	-	0	0	-	0
158	Matix Fertilisers	-	-	1	-	-	-	-	-	1



Sl. No.	COMPANY	NUMB	ER OF S	TUDEN	TS PL	ACED (	BRANCI	H WISE)		
SI. NO.							Tech			
		BT	CE	CH E	CSE	EC E	EE	ME	MME	TOTAL
159	Tata Power DDL	-	-	-	-	-	0	-	-	0
160	Aakash Institute	0	0	0	0	0	0	0	0	0
161	Chryso	-	0	-	-	-	-	-	-	0
162	AM/NS	-	0	-	-	-	0	0	-	0
163	Mphasis	-	-	-	1	1	0	-	-	2
164	Tata Chemicals	-	0	0	-	-	0	1	-	1
165	SMS India	-	-	-	-	0	0	0	0	0
166	Mahindra & Mahindra	-	-	-	0	0	0	3	-	3
167	Azure Power	-	-	-	-	-	1	-	-	1
168	Gainwell Commosales	-	-	-	-	-	0	0	-	0
169	Deepak Group	-	0	0	0	0	0	1	-	1
170	Rise & Shine	1	0	0	0	0	0	0	1	2
171	Sri Chaitanya Group	0	0	0	0	0	0	0	0	0
172	Essar Oil and Gas	_	_	1	-	-	-	0	_	1
173	Maheshwari Mining	_	_	1	_	_	_		_	1
174	GR Infraprojects	_	0	_	_	_	_	_	_	0
175	Daikin Airconditioning	_	_	_	_	_	_	0	_	0
176	Electrosteel Castings	-	0	-	-	-	0	0	0	0
177	Interra Systems	_	-	-	0	0	-	_	_	0
178	FIITJEE	1	0	0	1	0	0	0	0	2
179	Tata Power SODL	-	-	-	-	-	0	-	-	0
180	Mihup Communications	0	0	1	0	0	0	1	0	2
181	Oceanergy	-	0	-	-	-	-	-	-	0
182	Synapse Design	-	-	-	-	0	0	-	-	0
183	VISA Special Steel	-	-	-	-	-	0	-	0	0
184	S.K. Samanta & Co.	-	2	-	-	-	1	2	-	5
185	Tata Technologies	-	-	-	-	0	-	-	-	0
186	Prodigal SoftTech India	-	-	1	-	-	-	-	-	1
187	Team Computers	0	0	0	0	0	0	0	0	1
	Eligible Students	56	61	66	175	86	87	163	62	756
	Total Placed	38	50	55	150	76	78	137	56	640
	Percentage Placed	67.86	81.97	83.3	85.7 1	88.3 7	89.66	84.05	90.32	84.66
	Double Jobs	2	7	12	19	10	1	21	21	93

# M.TECH: 2022-23 [0- Considered but not selected, (-) not considered]

							N	NUME	BER (	F STU	DENT	ΓS PL	ACE	D (BR	RAN(	CH V	VISE)					
												ch &	MSW ation	•								
S 1 N 0	COMP ANY	B T	C	E	C H E	CSE	E	CE		EE	~Pe		ME		M M E	H SS	P H Y	M A T H	E E S	] <b>D</b> ]	UA L EG EE	T O T A L
•		B T	G E	S E	C H E	CSE	T E L E	V L SI	P E	PS	IC	M D	F M	T E	M M T	M S W	A M S T	O R	E S T	B T	C H E	L
1	TCS Ninja	0	0	2	0	4	0	0	0	1	0	1	0	0	1	0	0	1	0	0	1	11
2	TCS Digital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
3	Trilog y Innova tions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Micros oft	-	-	-	-	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	1
5	Qualc omm	-	-	-	-	1	0	1	0	0	0	-	-	-	-	-	-	-	-	-	-	2
6	Schnei der Electri c	-	-	-	-	0	-	-	0	0	0	0	0	0	-	-	-	-	-	-	-	0
7	Steradi an Semic onduct or	-	-	-	-	-	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	0
8	PwC	-	-	-	-	3	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	3
9	Oracle	-	-	-	-	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	0
1 0	Maven ir Syste ms	-	-	-	-	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	0
1	Increff	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
1 2	Infosy s(SP)	-	-	-	-	0	0	0	0	0	0	-	-	-	-	-	-	0	-	-	-	0
1 3	Caterp illar	-	-	-	-	-	-	-	-	-	-	0	0	-	-	-	-	-	-	-	-	0



1	John	-	-	-	-	0	0	0	-	-	-	1	0	0	-	-	-	-	-	-	-	1
4	Deere																					
1	Uber	-	-	-	-	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	0
5																						
1	Aryak	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
6	a																					
	Netwo																					
	rks																					
1	Cashfr	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
7	ee																					

						ľ	NUM	BER	OF	ST	UD	EN'	ΓS I	PLA	CE	D (Bl	RANC	CH W	ISE)			
									M	I.Te	ch &	& М	SW	(Sr	ecia	ılizat						
Sl.	COMPANY	В	CE		C	C	ECE		EE			ME	•		M	HS	PH	M	EE		JAL	TOT
No.		Т			H E	S E									M E	S	Υ	AT H	S	E	GRE	AL
		В	G	S	C	C	T	V	P	P	I	M	F	Т	M	M	A	0	E	В	С	-
		T	E	$\mathbf{E}$	Н	$\mathbf{S}$	E	L	E	$\mathbf{S}$	C	D	M	E	M		M	R	$\mathbf{S}$	T	H	
					E	E	L E	S I							T	W	S T		T		E	
18	Natwest Group	-	-	-	-	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	1
19	TCS(R&I)	-	-	-	-	0	1	0	0	0	0	-	-	-	-	-	-	-	-	-	-	1
20	TCS(INI)	-	-	-	-	0	0	0	0	0	0	-	-	-	-	-	-	-	1	-	-	1
21	Tata Elxsi	-	-	-	-	8	1	0	5	3	0	-	-	-	-	-	-	-	-	-	-	17
22	Genpact	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
23	Maq Software	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
24	IBM	-	-	-	-	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	0
25	OFSS	-	-	-	-	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	0
26	Deloitte	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
27	Visa	-	-	-	-	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	0
28	NRI Fintech	-	-	-	-	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	0
29	HSBC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0
30	Samsung	-	-	-	-	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	0
	Semiconductor																					
31	Axis Bank	-	-	-	-	0	0	0	0	0	0	0	0	0	0	-	-	-	-	0	0	0
32	PayU	-	-	-	-	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	1
33	Chqbook	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
34	Morphle Labs	-	-	-	-	-	0	0	0	0	0	0	0	0	-	-	0	-	-	-	-	0
35	Alstom Transport	-	-	-	-	0	0	0	0	2	0	2	0	0	-	-	-	-	-	-	-	4
36	Microchip	-	-	-	-	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	0
37	Teradata	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0

						ľ	NUMI	BER	OI	F ST	UD	EN'	ΓS I	PLA	CE	D (B	RANG	CH W	ISE)			
									M	[.Te	ch &	& M	SW	(Sr	ecia	alizat	ion)					
~•	CO. FR. 13777	В	CE		С	С	ECE		EE			ME	:		М	HS	PH	М	EE	DU	IAL	TOT
Sl.	COMPANY	Т			Н	S									М	S	Υ	ΑT	S	DE	GRE	AL
No.					Ε	Ε									Ε			Н		Ε		
		В	G	S	C	С	T	V	P	P	I	M	F	T	M	M	A	0	Е	В	C	_
		T	$\mathbf{E}$	$\mathbf{E}$	Н	$\mathbf{S}$	$\mathbf{E}$	L	$\mathbf{E}$	S	$\mathbf{C}$	D	M	$\mathbf{E}$	M	$\mathbf{S}$	M	R	S	Т	H	
					$\mathbf{E}$	$\mathbf{E}$	L	$\mathbf{S}$							T	$\mathbf{W}$	$\mathbf{S}$		T	_	E	
							$\mathbf{E}$	I									T		•		12	
38	Siemens	-	-	-	-	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	0
39	ABB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0

						NU	MBE	CR OF	ST	UDI	ENT	S PI	ACI	E <b>D</b> (	(BR	ANC	H WI	SE)				
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Sl. N o.	COMPANY	B T	C	E	C H E	C S E	E	CE		EE	эрсс		ME	•	M M E		P H Y	M A T H	E E S	D G	L	T O T A L
		B T	G E	S E	C H E	C S E	T E L E	V L SI	P E	P S	I C	M D	F M	T E	M M T	M S W	A M S T	O R	E S T	B T	C H E	
40	Amdocs	-	-	-	-	4	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	4
41 42	Quantiphi Airoha Technology	-	-	<u>-</u>	-	0	0	0	-	<u>-</u>	<u>-</u>	-	-	<u>-</u>	-	-	-	-	-	-	<u>-</u>	0
43	Media Net	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
44	Daimler India	-	-	-	-	3	-	-	-	-	-	0	0	0	-	-	-	-	-	-	-	3
45	Samsung R&D (Noida)	-	-	-	-	0	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	0
46	Park+	-	-	-	-	1	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	1
47	GreyB	0	-	-	1	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	1
48	ARM Embedded	-	-	-	-	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	0
49	Federal Bank	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
50	Zscaler	-	0	0	-	0	0	0	0	0	0	0	0	0	-	-	-	0	-	-	-	0
51	EY GDS	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
52	Larsen & Toubro	-	0	4	0	-	0	0	0	2	0	0	0	0	-	-	-	-	0	-	-	6
53	VE Commercial	-	-	-	-	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	0
54	WSP India	-	0	1	-	-	0	0	1	0	0	0	0	0	-	-	-	-	0	-	-	2
55	Fynd	-	-	-	-	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	0
56	Nation with Namo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
57	NexTurn	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
58	Fractal Analytics	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	1



					NU	MBE	R OF	ST	U <b>D</b> I	ENT	S PI	ACI	ED (	BRA	ANC	H WI	SE)				
									_		ch &										
Sl. N	COMPANY	В	CE	C H	C S	E	CE		EE	spec		ME	ı	M M	H SS	P H	M A	E E	DU AL		T
0.		1		E	S E									E	33	Y	T	S	DE	C	Ť
																	Н		GR EE	-	A L
		В	$\mathbf{G}$ $\mathbf{S}$	$\mathbf{C}$	$\mathbf{C}$	T	$\mathbf{V}$	P	P	I	M	F	T	M	M	A	O	$\mathbf{E}$	В	$\mathbf{C}$	
		T	$\mathbf{E}$ $\mathbf{E}$	H	$\mathbf{S}$	$\mathbf{E}$	L	$\mathbf{E}$	$\mathbf{S}$	$\mathbf{C}$	D	M	E	M	$\mathbf{S}$	M	R	S	T	Н	
				E	E	L E	SI							T	W	S T		T		E	
59	Winjit Technologies	-		-	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	0

						NUM	BER	OF S	STU	JDE	NTS	S PL	ACE	D (B	RANC	CH W	ISE)					
												h & I aliza		<u>/</u>								
S 1 N 0	COMPANY	B T	C	Е	C H E	C S E	EC	Œ		EE			ME		M M E	H SS	P H Y	M A T H	E E S	D A D G E	L E R	T O T A
		B T	G E	S E	C H E	C S E	T E L E	V L S I	P E	P S	I C	M D	F M	T E	M M T	M S W	A M S T	O R	E S T	B T	C H E	
6 0	Rapido Bike	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
6	Accolite Digital	-	-	-	-	1	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	1
6 2	Aaakash Byju's	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4
6	Berger Paints	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
6	Adani Group	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
6	LatentView Analytics	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	C-DAC	-	-	-	-	2	0	0	0	1	0	-	-	-	0	-	0	-	-	-	-	3
6	AMD	-	-	-	-	0	0	2	0	0	0	-	-	-	-	-	-	-	-	-	-	2
6 8	Eaton Technologies	-	-	-	-	0	-	-	1	0	0	-	-	-	-	-	-	-	-	-	-	1
6	Just Dial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
7 0	Physics Wallah	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7	Siemens Gamesa	-	-	-	-	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	0
7 2	Nineleaps	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
7 3	Bajaj Auto	-	-	-	-	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	0
7 4	Cyfuture	-	-	-	-	0	0	0	-	-	-	-	-	-	-	-	-	0	-	-	-	0
7 5	Dhurin	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	0





						NUM	BER	OF S	STU	DE	NTS	S PL	ACE	D (B	RANC	CH W	ISE)					
C	COMPANY											h & N aliza		<u>/</u>								
S I	COMPANY	В	C	E	C	C	EC	E		EE			ME		M	Н	P		E	D	_	T
N o		T			H E	S E									M E	SS	H Y	A T H	E S	A D G	E R	O T A
•		B	G	S	C	C	T	V	P	P	I	M	F	T	M	M	A	0	E	B	E C	L
		T	E	Е	H E	S E	E L E	L S I	E	S	С	D	M	E	M T	S W	M S T	R	S T	T	H E	
7 6	Tata Motors	-	-	-	-	0	2	0	2	3	0	0	1	2	-	-	-	-	-	-	-	1
7 7	Cummins India	-	-	-	-	1	0	0	1	0	1	0	1	0	-	-	-	-	-	-	-	4
7 8	Danieli	-	-	-	-	-	0	0	0	0	1	-	-	-	0	-	-	-	-	-	-	1
7 9	Pradan	-	0	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	-	-	4
8	Jindal Stainless	-	-	-	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	0

						NU	JMB	ER	OF	ST	UDI	ENTS	S PLA	CEI	) (BF	RAN	CH V	VISE)	)			
													h & N alizat									
SI. No.	COMPANY	B T	CE		C H E	C S E	E(	C	EI	E		ME			M M E	H S S	P H Y	M A T H	E E S		AL GR	T O T A
		B T	G E	S E	C H E	C S E	T E L E	V L S I	P E	P S	I C	M D	F M	T E	M M T	M S W	A M S T	O R	E S T	B T	C H E	L
81	Matix Fertilisers	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
82 83	Aakash Institute Pathfinder	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	- 0	0	0	1 0
84	Galgotias University	0	0	0	-	0	0	0	0	0	0	0	0	0	-	-	0	0	-	-	-	0
85	Azim Premji	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
86	Gandhi Fellowship	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	2
87	Azure Power	-	-	-	-	-	-	-	1	2	1	-	-	-	-	-	-	-	-	-	-	4
88	Rise & Shine	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2
89	Sri Chaitanya Institutions	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	3
90	ARMIET	-	4	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	6
91	Maheshwari Mining	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
92	L&T Infrastructure	-	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
93	GR Infraprojects	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
94	Interra Systems	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0



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SI. No.	COMPANY	B T	C	E	C H E	C S E	E E			EE		Spe	ME	<u>zatio</u>	M M E	H SS	P H Y	M A T H	E E S	D A D G E	L E R	TOTA	<b>A</b> L			
		B T						G E	S E	C H E	C S E	T E L E	V L S I	P P E S	I C	M D	F M	T E	M M T	M S W	A M S T	O R	E S T	B T	C H E	
100	Tata Technologies	-	-	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
101	Bosch Limited	-	-	-	-	-	0	1	0	0	3	2	-	4	-	-	-	-	-	-	-	10				
102	HCL	-	-	-	-	-	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1				
103	Lemon Flip	-	-	-	-	-	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1				
104	MediaTek	-	-	-	-	-	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1				
105	ST Microelectronic s	-	-	-	-	-	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	1				
106	Vikram Solar	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1				
Eligit	ble Students	18	19	1 7	1 3	4	8	2 0	1 7	1 8	6	14	1 1	13	5	6	4	8	1 5	4	2	259				
Total	Placed	3	4	1 2	3	3 5	5	7	1	1 4	6	7	4	6	2	4	0	6	7	1	2	139				
Total	Job Offered	3	4	1 5	3	3 8	5	7	1	1 4	6	8	4	6	2	4	0	7	7	1	2	147				
	le Job	0	0	3	0	3	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	8				
95	Factspan Analytics	-	-	-	1	1	-	-				· 1	C	)	0 -	-	-	1	1	-	-	-				
96	FIITJEE	0	0	0	0	0	(	) (	) (	) (	) (	0	C	)	0 0	0	0	(	)	0	0	0				
97	Mihup Communication s	-	-	-	-	0	(	) (	) (	) (	) (	0	C	)	0 0	-	0	(	)	-	-	-				
98	Oceanergy	-	0	3	-	-	-	-			-	-	-			-	-	-	•	-	-	-				
99	Synapse Design					_			) .																	

# PLACEMENT RECORDS (Up to 30.06.2023) MBA: 2022-23

[0-	Considered	l but	not	selecte	[t

Sl. No.	COMPANY	NUMBER OF STUDENTS PLACED
1	Federal Bank	1
2	VE Commercial	0
3	Nagarro	0
4	ICICI Lombard	6
5	Planet Spark	4
6	Pathfinder	0
7	Vivo	2
8	Axis Bank	2
9	Emami Frank Ross	2
10	IDBI Bank	5
	Eligible Students	17
	Total Placed	16
	Total Job Offered	22

# PLACEMENT RECORDS (Up to 30.06.2023) M.SC: 2022-23

# [0- Considered but not selected]

l. No.	COMPANY	NUMBER OF STUDENTS PLACED
1	HSBC	0
2	Morphle Labs	0
3	Federal Bank	0
4	Aaakash Byju's	3
5	Berger Paints	3
6	LatentView Analytics	0
7	C-DAC	0
8	Physics Wallah	0
9	Dhurin	0
10	Aakash Institute	2
11	Pathfinder	0
12	Azim Premji	2
13	Rise & Shine	0
14	Sri Chaitanya Group of Educational Institutions	1
15	Glenmark Life Sciences	6
16	FIITJEE	1



Sl. No.	COMPANY	NUMBER OF STUDENTS PLACED	
17	Mihup Communications	0	
18	Allen Institute	1	
	Eligible Students	90	
	Total Placed	18	
	Total Job Offered	19	

#### 6.5 Medical Unit

#### 6.5.1 About Us

Institute's Medical Unit takes care of both physical and mental health of all bona fide persons of N.I.T Durgapur community. Medical Unit runs 24×7, provides Emergency Medical services round the clock and Morning and Evening Outdoor services. The prime beneficiaries are all the students (including UG, PG, and PHD), teaching and non-teaching employees with their dependent family members, Pensioners and their spouse and also those who work under service providers.

#### 6.5.2 Facilities Available

- Morning and evening outdoor patient consultation except Sundays and Holidays.
- Round the clock medical emergency services
- Pharmacy
- Minor OT
- Visiting Physicians of different fields on fixed days.
- Male and female wards with observatory beds.
- Isolation wards for the students.
- Nebulization, ECG, Multipara meter monitor.
- Autoclave facility for sterilization.
- 24 hours two ambulance services with five drivers.
- Sample collection center for outsourced pathological laboratory.
- Tie up with various super-specialty hospitals in Durgapur and Kolkata where the patients get referred in case of necessity and treated on credit basis as per CGHS rates.
- Students are covered under insurance and are treated in referral hospitals if necessary.

Counselling Centre	Isolation Unit	Eye Clinic	Dental Clinic	No. of beds	Ramp for PWD	Average No. of patients attended (OPD)/month
Yes Clinical Psychologists- 02 (One on every day of the week) Psychiatrist-01 (visits once weekly)	Yes For Chicken Pox & Measles	Yes Visits weekly once	Yes Visits weekly thrice	06(Six) observatory beds	Not available	Approximately 1700 number of patients attended Outdoor per month.  Approximately 530 number of patients attended Emergency Dept per month.

Ambulance No.	No. of Doctors	No. of Nurse	No. of Assistance
02(Two) round	Total 06 (Six) Medical	Total-01 (one)	Total 06(six)
the clock	Officers	Permanent	Permanent-01(One)
	Permanent-03(Three)		Contractual- 03(Three)
	Contractual_01(One)		

ANNUAL ACCOUNT 2022-2023 373 |

Under Service provider-02 (Two)
Specialist Doctors of different field: 06(Six)
Psychiatrist for Counselling Centre:

Service provider-02(Two)

# 6.5.3 Notable Activities

- The number of visiting days of the Clinical Psychologists is increased to all days of the week.
- Trying for digitalization of the Medical Unit.

01(One)

- Procurement of Multivitamin and Iron tablets were done for the distribution to female students of the Institute.
- Routinely Pulse Polio vaccination is being conducted

# 6.6 Hostels

Host	Boys/	No. of	Actual	Number of			]	Facilities				
els	Girls	Rooms	student Capacity	students accommod ated	Special Toilet for PwD Students	Ramp for PwD Studen ts	Games	Water Purifier	Lift	Wi- Fi	Mess/Can teen	Mi sc
Hall- 1	Boys	148	444	430	Nil	Nil	Yes	Yes	Nil	Yes	Mess	
Hall-	Boys	148	444	414	Nil	Nil	Yes	Yes	Nil	Yes	Mess	
Hall-	Boys	84	252	210	Nil	Nil	yes	Yes	Nil	Yes	Mess at Hall 1	
Hall-	Boys	252	250	233	Nil	Nil	Yes	Yes	Nil	Yes	Mess	
Hall- 5	Boys	380	370	248	Nil	Nil	Yes	Yes	Nil	Yes	Mess	
Hall-	Boys	115	115	60	Nil	Nil	Yes	Yes	Nil	Yes		
Hall-	Girls	72	125				Under rer	novation wor	k by CPV	WD		
Hall-	Girls	125	125	120	Nil	Yes	Nil	Yes	Nil	Yes	Mess	
Hal 1-9	Boys	120	360	234	Nil	Nil	Yes	Yes	Nil	Yes	Mess	
Hal 1-10	Girls	85	255	202	Nil	Nil	Yes	Yes	Yes	Yes	Mess	
Hal 1-11	Boys	240	720	660	Yes	Yes	Yes	Yes	Yes	Yes	Mess	
Hal 1-12	Boys	160	160	115	Nil	Nil	Yes	Yes	Yes	Yes	Canteen	
Hal 1-13	Girls	250	750	690	Yes	Yes	Yes	Yes	Yes	Yes	Mess	
Hal l-14	Boys	447	1250	692	Yes	Yes	Yes	Yes	Yes	Yes	Mess	



#### 6.7 SAC

The Student Activity Centre is one of the Central facilities of the Institute organized students choice based Co-Curricular Activities in Physical Education, Yoga, Martial Art (Taekwondo), NCC & NSS as compulsory subjects to all first year B-Tech, B-Tech/M-Tech (Dual Degree) and integrated MSc students with one credit point in each semester.

Beside academic activities the Centre lays emphasis on promotion of Games & Sports of the Institute. The Centre has been sincerely guiding both UG/PG, PhD students and employees of the Institute in different areas of Games & Sports activities. The Centre organized various sporting events throughout the year, be Intra NIT or Inter NIT Tournaments. Regular practice in every major games is carried out under the guidance and supervision of the Centre. Institute teams are picked, trained and exposed to various level of tournaments.

#### 6.8 Workshop

The Department of Workshop of the institute consists of seven different shops, namely (1) Machine shop, (2) Fitting Shop, (3) Electrical Shop, (4) Carpentry shop & Darpetre shop, (5) Black smithy shop, (6) Welding shop and (7) Foundry shop. In this Department, there are several equipment such as Conventional Lathe, Conventional Milling, Shaper Machine, Cylindrical Surface Grinding Machine, Radial Drilling Machine, Electro Chemical Machine (Non-conventional machining done), CNC Milling Machine (Capable of cutting any profile with high accuracy), Sheet Shearing Machine, Electric Resistance Furnace for melting non-ferrous metals & Days, Sand Mixing Muller, Sand Testing Equipment, Manual Metal Arc Welding Machine, Power Saw, Spring loaded Power Hammer, Roller Bender, Band Saw, Wood Working Lathe etc. Workshop is befitting place for teaching and training UG students for sessional classes. Apart from teaching to UG students in sessional class as per UG curriculum, the trained Workshop staff helps the students of all the departments to complete their Project works in Under Graduate and Post Graduate level using the above-mentioned Workshop facilities. They also help to manufacture the Experimental Set Ups of Research Scholars of various Departments. Some experimental set ups for UG Laboratory such as 'Viscometer to determine absolute Viscosity of any fluid' in Hydraulics and Fluid Mechanics Laboratory and a Set up for 'Determination of Young modulus and poison ratio of a given metal by using strain gauge' in Metrology Laboratory in Mechanical Engineering Department are manufactured and assembled in Workshop. At present the Workshop is capable of doing any kind of Engineering work starting from pattern making, moulding, casting, forging, machining (both conventional and non-conventional), high surface finishing, welding and finally to fitting and assembling to produce the final product.

#### 6.9 **Estate**

# 6.9.1 About Us

Estate Office plays an instrumental role in the management of assets of the Institute. The Estate Office is entrusted with the work of Estate Management and Civic amenities. The Estate Section of the Institute mainly looks after all the infrastructure related works, security services, cleaning services, water & electricity supply, garden maintenance, horticulture and landscaping, allotment of quarters, transport services, service on lease and others allied works.

#### 6.9.2 Notable activities with Photographs

## Construction of Vertical Extension of Thermal Engineering Lab:

To facilitate adequate space to the students "construction of vertical extension of Thermal Engineering Lab" is in progress (completed 45%). Estimated cost of the project is Rs. 0.46 crore.



#### Construction of vertical extension of the IT building (previous Administrative Building):

Construction of vertical extension of the IT building" is in progress (completed 58%). Estimated cost of the project is Rs. 1.53 crore.



#### Mechanization of Kitchen & Modernization of Dining Halls with Furniture:

The work for mechanization of Kitchen & modernization of dining halls with furniture in all the hostels are in progress and likely to be completed very soon.

#### Expansion & refurbishing of laboratories, academic departments & classrooms:

Expansion & refurbishing work of laboratories, academic departments & classrooms are in progress (completed 40%).



#### 6.9.3 In charge

• Ajit Kumar Bhagat, Asst. Registrar (Estate & Security)

#### 6.10 Scholarship/Assistance

The UG and PG students of the Institute are eligible to apply to various scholarship schemes being administered by the various Central Government Ministries/Departments/PSUs and State Governments. The students can also apply for various scholarship/reward schemes being offered by several private companies/organizations/trusts. The MTech students who have qualified GATE are eligible for monthly fellowships which at present is Rs. 12,400/= per month. The Dual Degree students of the Department of Chemical Engineering and Department of Biotechnology, who have either scored a minimum of 8.0 CGPA or have qualified GATE are eligible to receive monthly fellowships which at present is Rs. 12,400/= per month for the duration of their 9th and 10th semesters. The Institute Research Scholars are eligible to receive monthly fellowships which at present is Rs. 31,000/= per month for JRF and Rs. 35,000/= per month for SRF. The CSIR and UGC PhD scholars who have registered with the Institute are eligible to receive monthly fellowships which at present is Rs. 31,000/= per month for JRF and Rs. 35,000/= per month for SRF, from their respective funding agencies i.e. CSIR and UGC.



# 7. Student Activities

#### 7.1 NCC

A unit of National Cadet Corps (NCC) Army wing (open vacancy) among UG students (Boys & Girls) under the supervision of 10 Bengal Bn, NCC Asansol. The cadets have participated regular training programme including attend camps, appearing 'B' 'C' Certificate Examination and actively involved in several extension activities through-out the year. This unit also observed and participated various important days like environment day, Voters day, organized rallies, Swachchta programme, tree plantation etc.

#### **Achievements:**

- Enrolment of 'B' Certificate courses, total 14 cadets out of which SD-08 Cadets and SW 06 Cadets..
- NCC 'B' Certificate awarded 09 SD Cadet with all 'A' Grade.
- NCC 'B' Certificate awarded 04 SW Cadets with all 'A' Grade.



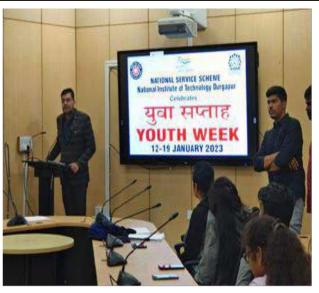
NATIONAL CADETS CORPS National Institute of Technology Durgapur Unit

#### 7.2 NSS

NSS NIT DGP is the National Institute of Technology Durgapur chapter of the National Service Scheme, institutionalized under the Ministry of Youth Affairs & Sports Govt. of India. The Motto of NSS, "Not MeBut You", reflects the essence of democratic living and upholds the need for self-less service. NSS provides an excellent platform for students to work for the betterment of society. While gaining practical experience and developing interpersonal skills. NSS helps the students' development & appreciation to other person's point of view and also show consideration towards other living beings. Volunteering for various tasks underNSS activities allows students to become confident, develop leader ship skills, and learn about different People from different walks of life.

During academic year 2022-23 NSS, NIT Durgapur observed Vigilance Awareness week during October 31-November 6, 2022, National Education Day on November 11, 2022, Youth Day & Youth Week between 12 and 19 January 2023 and organsised Swachhata rally, Survey and Awareness camp at UBA adopted village Banagram during 21-22 January 2023. The volunteers participated in parade during Republic day celebration on 26 January 2023 and celebrated Matribhasha Diwas on February 21, 2023 with full fervour and enthusiasm.









# 7.3 Games & Sports Facilities:

The Student Activity Centre has adequate infrastructure facilities for both outdoor and indoor games. The Centre has one central air condition Gymnasium equipped with sufficient number of equipment's. Different slots are provided to all the users as students (Male & Female), Employees and their spouses. The Institute play grounds (Oval & Lords) always bubble with outdoor activities like football, cricket, handball, athletics, hockey etc. Turf and concrete courts with flood light facilities are also available in volleyball, basketball tennis, badminton etc. Student Activity Centre has air condition indoor auditorium, which accommodated 500 seating capacity multi activity auditorium includes Badminton synthetic court, Table Tennis boards and Chess facilities. Beside central sports facilities, most of the halls of residence equipped with Volleyball and concrete Badminton courts. Indoor games like Table Tennis, Carom boards & Chess are also available.

#### 7.3.1 Games & Sports Participation

- In the year 2022-23 Institute participated in the following All India Inter NIT & other Games & Sports Tournaments:
  - All India Inter NIT Lawn Tennis, Basketball & Athletics (Men & Women) tournaments organized by NIT Jaipur during November 17-20, 2022.
  - All India Inter NIT Chess, Table Tennis & Badminton (Men & Women) tournaments organized by NIT Silchar during November 18-20, 2022.
  - 3. All India Inter NIT Badminton & Chess (Faculty & Staff) tournament organized by NIT Hamirpur during December 17-19,2022
  - 4. All India Inter NIT Hockey (Men) tournament organized by NIT Calicut during January 06-08, 2023.
  - 5. All India Inter NIT Volleyball, Kabaddi & Yoga (Men & Women) tournaments organized by NIT Surathkal during January 20-22, 2023.
  - 6. All India Inter NIT Football & Kh0-Kho (Men) tournaments organized by NIT Rourkela during February 10-12, 2023.
  - 7. All India Inter NIT Power sports & Cricket (Men) tournaments organized by NIT Surat during February 16-19, 2023.



- Achievement in 2022-2023:
  - 1. Best Athlete (Men) in All India Inter NIT Track & Field Meet at NIT Jaipur
  - 02 Gold Medals in All India Inter NIT Track & Field Meet at NIT Jaipur











# 7.4 Clubs/Body/Centres

#### Name of the Club/Body/Centre: Centre for Cognitive Activities (CCA)

**About us:** CCA, Centre for Cognitive Activities, is the focal point where convergence of all technical and scientific endeavours of the students materialises. As the largest and oldest technical club of the institute, bulk of the extracurricular activities held in the college all the year round are organised by the CCA, which includes techno-managerial domains like robotics, entrepreneurship, web design, etc.

robotics, entrepreneurship, web design, etc.

Additionally, CCA also focuses over working for social causes by organising various CSR events throughout the year. Altogether, the club works with a vision towards bringing opportunities and providing platform for students to grow and showcase their skills.

Name of the Faculty Advisor(s) or equivalent post	Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information
Dr. Joydeep Banerjee Dr. Oindrilla Mukherjee Dr. Aniruddha Bhattacharya	Akshay Kumar Singh	Souvik Sharma	Link: https://www.ccanitd.in/

#### Three Notable Activities

Sl No.	Name of the Activities, Date And its Details	Corresponding Photograph
1.	Youth Parliament: - 15/01/2023  CCA conducted Youth Parliament, giving the perfect platform to participants to discuss real-world issues, resolute solutions, interact with like-minded individuals, and gain a deeper understanding of the legislative process.	Anacusy.
2.	Robozido: - 27/01/2023  CCA organized an autonomous robotics workshop called Robozido which witnessed an immense participation of 300 students in and out of NIT Durgapur. The workshop covered various aspects, including creating a Wi-Fi bot, an obstacle-avoiding bot, a line-following bot, and even a robotic arm attached to the bot for picking objects.	
3.	Blood Donation Camp: -4/02/2023 A blood donation camp was held on college premises wherein three hospitals collaborated with CCA for the social event. A total of 200 donors were given donor cards for the noble cause.	ficace pures title British

For Other Activities: https://www.ccanitd.in/



#### Name of the Club/Body/Centre:: Dance Club

About us: Dance Club, NIT Durgapur is the official dance club of NIT Durgapur which actively takes part in all the activities including festivals, Independence Day, Republic Day, Global Alumni Meet, fests and also, conduct our own events which are totally executed by us. We also go to different colleges like IIT Kharagpur, IIM Calcutta, ISM Dhanbad, etc. to participate in different competitions organized by them for dance during their fests and bring laurels to our college by winning.

Name of the Faculty Advisor(s) or equivalent post	Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information
Mousumi Saha	S Akshaya	Jami Krishna	Link:
Arindam Modak	Reddy	Sameera	https://www.facebook.com/DanceClubNITD/

#### Three Notable Activities

Sl No.

2.

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And its Details	
Independence Day Performance (15/08/2022)	DANCE C

On this occasion, we perform in front of everyone and the performance is based on the theme: "Naram Dal & Garam Dal movement." 1.

Name of the Activities, Date



**Corresponding Photograph** 

# **Spring Fest 2023** (29/01/2023)

We participated in Spring Fest'23 at IIT-KHARAGPUR- Dance competition 'Centrifuge' after 3 long years on the theme - 'Famous TV Shows'.



# Step It Up 2.O (04/02/2023 – 05/02/2023)

This is an independent event organized by the club which is focused on bringing out the dance talents from our college. This event has been solely created and conducted by us.



For Other Activities: Provide the Link (Institute home page link of each club)

https://www.facebook.com/DanceClubNITD/



#### Name of the Club/Body/Centre: Darpan

**About us:** Darpan represents the Hindi society of NIT Durgapur, actively engaged in the service of "Hindi", the official language of India. Darpan provides a valuable platform to the students, in which various offline and online events are organized throughout the year in order to promote 'Rajbhasa Hindi' language.

Name of the	Name of the	Name of Vice	Further Information
Faculty	President or	President or	
Advisor(s) or	equivalent post	equivalent post	
equivalent post			
Manoj Kumar	Shivendra Singh	Ashlesha Upadhyay	Link: https://www.instagram.com/darpan_nitdgp/
Ozha			

#### Three Notable Activities

SI No.

2.

3.

# Darpan Club's 'Arj Kiya Hai' event, held on Instagram, concluded with great success. Participants showcased their talent with heartfelt poems and compositions. The event's creative essence left a lasting impact, inspiring and touching many. This documentation captures the memorable event for others to appreciate and enjoy.

Name of the Activities, Date And its Details

#### Corresponding Photograph



#### Chai pe Charcha:

Chai Pe Charcha, a captivating debate event hosted by the Hindi Student Association, gathered teams for passionate discussions on current Indian topics.

Amidst cups of tea provided by the event management, participants fostered unity, exchanged enlightening perspectives, and formed lasting connections, creating a vibrant and memorable evening of intellectual camaraderie.



#### Prahelika 2.0:

The 'Hindi Trivia Extravaganza' hosted by 'Darpan Parivar' was a delightful affair celebrating the richness of the Hindi language. Three rounds of engaging and fun-filled questions tested participants' knowledge of Hindi. The event inspired a deep sense of appreciation for the language while fostering a spirit of camaraderie among the participants. It proved to be an enjoyable and memorable experience, strengthening the bond with Hindi.



For Other Activities: Provide the Link (Institute home page link of each club)



# Name of the Club/Body/Centre: The Debating Society

**About us:** The Debating Society, NIT Durgapur is committed to providing a platform for riveting discourse and dynamic debates. We have stood out in global contests, elevating public speaking, and nurturing constructive dialogues. Our passion for improving the quality of discussion motivates us to continue organizing and taking part actively in such events.

Name of the Faculty	Name of the President or	Name of Vice President	Further Information
Advisor(s) or equivalent post	equivalent post	or equivalent post	
Dr. Shri Krishan Rai	Kumkum Ray	Venu Choudhary	Link: Visit website

Three N	Notable Activities	
Sl No.	Name of the Activities, Date And its Details	Corresponding Photograph
1.	Vistaar, conducted by the Debating Society, NIT Durgapur was the first-of-its-kind debating festival conducted in Eastern India. The events conducted during the festival attracted various participants from multiple colleges all over India, including NLUs, IITs, IIITs and other NITs.  Participation: 500+ participants Date: 23rd – 26th March 2023  Visit Vistaar website Visit Instagram profile	Vistaax Constitution of the Constitution of th
2.	Take DeBait: A murder mystery event where, by analyzing clues, participants identified the elusive killer within their midst. The team with the most accurate deduction secured victory.  Participation: 100+ participants  Date: 3 <sup>rd</sup> September 2022	TARE DECIN
3.	Reverberate & What If: NIT Durgapur's largest public speaking workshop, empowering students with the skills to charm and captivate any audience. This was followed by What If, a practice event to apply learned techniques from Reverberate.  Participation: 120+ participants  Date: 14th January 2023	THE DURAL HAVE STOCKET TO

For Other Activities: Provide the Link (Institute home page link of each club) Visit Website

### Name of the Club/Body/Centre: Entrepreneurship Development Cell (EDC)

**About us:** The Entrepreneurship Development Cell at NIT Durgapur is the official student body dedicated to promoting entrepreneurship and fostering innovation. Through various initiatives, we strive to create a sustainable and diverse entrepreneurial ecosystem, uniting the young and the elderly in making entrepreneurship a common reality in India. Our startups, including Kenakata, Calcutta Delights, Printex, Just Hashtags, Pedals Go, and Style Swap are a testament to our unwavering commitment to realizing this dream. Together, we work independently to encourage and nurture innovation throughout the year, envisioning a future where entrepreneurship thrives and drives positive change in the country.

Name of the Faculty Advisor(s) or equivalent post	Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information
Chief Faculty Adviser: Prof. Sandip Kumar Lahiri Co Faculty Advisers: Prof. Arjyajyoti Goswami Prof. Sayantari Ghosh Prof. Nilanjan Chattaraj Prof. Aniruddha B.	Ritesh Raj Sharma (President)	Purvi Binani (Vice President) Mehul Menon (Vice President)	Link: https://www.edcnitd.co.in/

Thron	Notable	Activities
I nree	Notable	Activities

1.

2.

3.

SI Name of the Activities, Date

No.	And its Details	activity)
	E-summit 2023: 1st to 3rd March 2023	

The Entrepreneurial Met Gala – an oasis of revolutionary ideas. Embrace innovation, challenge conventions, through 10+ events, enlightening talks, cultural nights. The Entrepreneurship Development Cell sparks inspiration, nurturing tomorrow's entrepreneurs, forging a realm of limitless opportunities and groundbreaking ventures.



Corresponding Photograph (one for each

# Bizcup: 12th to 15th January 2023

An exclusive journey tailored for freshers: corporate quizzes, startup planning, and deep insights into the corporate realm. Bizcup offers it all – from basics to indepth analysis. Through three rounds of creative challenges, it pushes your boundaries, providing a glimpse into the entrepreneurial sphere.



#### Luminous: 21st October 2022

Team EDC annually exudes Diwali's elegance, celebrating with flair and fun through Luminous. This year, we embraced joy's essence and collaborated with BMEP, painting diyas with little ones and brightening their smiles. Students contributed meaningfully, designing startup logos with diyas, vying for vibrant prizes, making festivities even more delightful.



For Other Activities: https://www.edcnitd.co.in



# Name of the Club/Body/Centre: Enteract

About us: Enteract produces a wide variety of performances ranging from street plays and stage plays to Monoacts and mimes, arguably with professional competency. Moreover, the club participates in various cultural fests across the country

Name of the Faculty Advisor(s) or equivalent post  Name of the President or equivalent post		Name of Vice President or equivalent post	Further Information	
Subhrab	rata Choudhury	Anmol Sharma	Aditi Singh	Link:
Th 1	Makabla A aktoriki a			
Sl No.	Notable Activities  Name of the	e Activities, Date,	Corresponding	Photograph
51110.		its Details	Corresponding	g i notograph
1.	Date - 28t We performed our N	oring Fest, IIT Kharagpur. h January 2023. ukkad on Cybersecurity in t, IIT Kharagpur.		
2.	Date - 2nd We performed our I	: Srijan, ISM Dhanbad. I February 2023. Nukkad on in Srijan, ISM hanbad.	Sirot on One Plus	
3.	Durgapur Polic Date - 28tl We performed our N	eness Campaign (Asansol- ce Commissionerate) n February 2023. lukkad on Cybersecurity in Mall, Durgapur.	Arga-fra   1320	DEVICE A
For Oth	ner Activities:			



#### Name of the Club/Body/Centre: GNU/Linux Users' Group

About us: The GNU/Linux Users' Group, NIT Durgapur, is a community of GNU/Linux Users that promote the use of Free and Open Source Software. To uphold the banner of Open Source, we are a group of designers, contributors and developers that believe in learning and sharing as a unit through spreading awareness and tapping into the power of open source. We strive to elevate the technical culture in our college and believe that this can only be achieved through giving people digital resources and knowledge in all realms from hardware to software, from data to design.

Name of the Faculty Advisor(s) or equivalent post	Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information
Dr. Subrata Nandi Dr. Animesh Dutta	Shashank Shekhar	Mohammad Rafivulla (General Secretary)	Link: Website

#### Three Notable Activities

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110.		
	Foobar CTF Date: 11the March-12th March, 2023	

A Capture The Flag event, to explore various domains of cybersecurity and master the true art of hacking via various exploitation techniques like pwn, reverse engineering, cryptography and many more. Foobar CTF was a huge success with over 500+ participants worldwide including 100+ foreign participation.

Name of the Activities, Date And its Details



Corresponding Photograph

# **Open Source Starter Pack**

Date: 12th & 13th January, 2023

A two-day long workshop hosted for the freshers to provide them a more resourceful experience of the open-source and kickstart their journey into this realm. It consists of Linux Bootcamp, where we demonstrate how to set up Linux on a system and explore all its utilities in true flavor, customizing it with one's creativity, and a Git/Github Workshop, we will teach how to effectively use Git and Github to manage and collaborate on various projects in a robust fashion. The offline event saw an overwhelming participation of more than 300 students.



# Ten Days of Code (TDoC) and DevTalks

Date: 12th December - 21st December 2022 One of our flagship events, where students within and beyond our institute, learn from a myriad of 6 standard projects on various domains - Blockchain, ML/AI, Python, C++ and Java, and build it from scratch, following our documentation and mentoring sessions. We also conduct the DevTalks during these 10 days wherein renowned personalities from the field of open source and technology (from India and outside), are invited as guest speakers to address the students and share their insights, Last year, TDoC saw a participation of around 300 students from our institute and across the country.



#### For Other Activities:



# Name of the Club/Body/Centre: IEEE SB NITDGP

About us: The IEEE Student Branch at NIT Durgapur is dedicated to promoting technical skills and fostering innovations through multiple workshops and exciting events. We empower students to excel in engineering. We emphasize collaboration, knowledge sharing, and hands-on learning. Join us as we collectively shape the future through education, creativity, and unwavering dedication to the technical domain. Let's learn, create, and innovate together for a brighter tomorrow!

Name of the Faculty Advisor(s) or equivalent post	Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information
Aniruddha Chandra Chiranjib Koley Nirmal Kumar Roy	Naveen SG	Manjari Jha	https://edu.ieee.org/in- nitdgp/

	Allu its Details
1.	
	HACKHUSTLE: It was a two-day event,
	which included workshops on NLP and
	CyberSecurity and it was followed by a
	Hacakathon on LLM applications. It was held
	on 25th to 27th March.

Name of the Activities, Date

And its Details

Three Notable Activities

SI No.

2.

3.

# **Corresponding Photograph**



**SDV:** This event was organized to teach the principles of self driving vehicles in an interactive and practical way by making line follower and object avoidance bot and cruise control bot with arduino. It was held on 14th and 15th January.



**PCB Decoded:** It was a PCB Designing workshop organized on 10th and 11th september where participants were taught to design their own STM32 based microcontroller in KiCad software. which was followed by a small PCB designing competition.



For Other Activities: https://edu.ieee.org/in-nitdgp/



#### Name of the Club/Body/Centre: Indian Institute of Metal Students' Chapter Durgapur

**About us:** The Indian Institute of Metals Durgapur Chapter is a prominent organization affiliated with the Indian Institute of Metals. The society serves as a vital platform for metallurgical professionals, researchers, and students to come together and promote the advancement of metallurgy and materials science in the region. It is committed to fostering knowledge exchange, professional development, and industry-academia collaboration. Through a myriad of activities, such as seminars, conferences, and plant visits, the society aims to disseminate the latest developments, best practices, and cutting-edge research in the field of metallurgy.

Name of the Faculty Advisor(s) or equivalent post		Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information		
	up Kumar Mandal & f. Satadal Ghorai	Rohan Pal	Arya Kumari	Link:		
110	Saturdar Griotar					
Three 1	Notable Activities					
Sl No.		e Activities, Date its Details	Corresponding	g Photograph		
1.	Limited, Jamuria I 06/03/2023. This visi faculty advisor Prof. highlight of the visi guided tour of the Participants were divensure a more persor	l visit to Super Smelters had been organized on t was also accompanied by Arup Kumar Mandal. The it was the comprehensive ne manufacturing plant. ided into smaller groups to nalized experience. During sed the intricate processes duction.				
2.	organized on 07/03/ faculty advisor Prof. addressed by HOD ( Engg.) Prof. Supr. objective of Meta-W and understanding students. The qui participants with tho	z event (Meta-Wiz) was (2023, in the presence of Arup Kumar Mandal and Metallurgical & Materials itya Bera. The primary itz was to promote interest of metallurgy among z aimed to challenge tught-provoking questions, aspects of metallurgical	THE ROBERT OF THE PARTY OF THE	ANSTITUTO OF ANTILES		
E 04	A 42.24 1.44 //		ah an kar			
For Oth	For Other Activities: https://nitdgp.ac.in/p/iim-student-chapter					

> 388 ANNUAL ACCOUNT 2022-2023



#### Name of the Club/Body/Centre: ISTE Students' Chapter NIT Durgapur

About us: The Indian Society for Technical Education (ISTE) is the leading National Professional non-profit making Society for the Technical Education System in our country with the motto of Career Development of Teachers and Personality Development of Students and overall development of our Technical Education System operating in association with All India Council for Technical Education (AICTE) and other International Projects. ISTE Students' Chapter NIT Durgapur took birth on the auspicious occasion of Saraswati Puja way back in 1995 and is the Oldest Student Chapter of Eastern India. We work with an aim to provide an appropriate platform presenting, meaningful and thought-provoking future aspects of the technical education system supported with meaningful suggestions for solutions, refinement and innovation.

Name of the Faculty Advisor(s) or equivalent post	Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information
Dr. Anita Pal Dr. Rowdra Ghatak	Harshit Surana	Ritabrata Ganguly	Link: istenitdgp.com

#### SI No. Name of the Activities, Date And its Details (within 30 words)

# **Corresponding Photograph (one for each activity)**

## **Runtime Terror 3.0**

Three Notable Activities

(September 15, 2022 - September 19, 2022)

two round programming competition comprising Math, Aptitude, Programming, Data 1. Structures, and Algorithm to test the logical and coding skills of the participants.



#### CIT 6.0 - Cognitive Intelligence Test (January 18, 2023 - January 22, 2023)

A two round test consisting of interesting and mind-boggling questions on the subjects like basic mathematical aptitude, verbal and logical reasoning, and data interpretation.



#### Webcraft

2.

3.

(January 28, 2023 - January 29, 2023)

A 2-day interactive web development workshop filled with code, covering everything from HTML, CSS to JavaScript and responsive design.



For Other Activities: https://www.istenitdgp.com/events



#### Name of the Club/Body/Centre: Literary Circle

About us: The Literary Circle is one of the active student bodies of NIT Durgapur, dedicated towards encouraging creativity and free thought. Through events like NITMUN, or Verve, which is East India's largest youth cum literary festival, and Literati (Annual creative writing competition), it helps students to engage in healthy debate and bring out their creative side. It also co-organizes TEDxNITDurgapur, which resonates with TED's mission of discovering "ideas worth spreading". It also publishes The Yearbook, presented to the batch passing out, which is a condensation of their time spent in the college. It also hosts StarTalk during Recstacy.

Name of the Faculty Advisor(s) or equivalent post	Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information
Dr. Joydeep Banerjee	Kaushal Baid	Pushpal Ghodaskar	Link: https://lcnitd.co.in/
Dr. Arjyajyoti Goswami		_	_
Dr. Sutanuka Banerjee			

#### Three Notable Activities

SI No.

1.

2.

And its Details	
NITMUN XI	0

#### Date: 20th- 22nd January 2023

The eleventh edition of NITMUN, the annual Model United Nations of NIT Durgapur hosted 150+ delegates from the campus and beyond. All committees saw overwhelming rounds of debate and discussion.

Name of the Activities, Date



**Corresponding Photograph** 

# **TEDxNITDurgapur**

#### Date: 5th February 2023

TEDxNITDurgapur was co-organized by the Literary Circle with the theme "Untrodden Path" and hosted notable speakers, namely Aanchal Thakur, Tapan Mishra, Kanthi Dutt, Pratik Gauri and Kenidra Woods.



#### Yearbook 2023

The Yearbook is annual memorabilia. The photography session of Yearbook 2023 has been completed.

3.



For Other Activities: https://lcnitd.co.in/



# Name of the Club/Body/Centre: Maths N Tech Club (MNTC)

About us: We, Maths N Tech Club are the official knowledge club of NIT Durgapur. Back in 2004, when the Regional Engineering College Durgapur got the status of an Institute of National Importance and was renamed as the National Institute of Technology Durgapur, Maths N Tech Club was formed.

Our club was set up with the aim of creating a platform that helps in stimulating passion for mathematics and interest in the technology of today's world. At MNTC, we understand the importance of analytical reasoning and rational thinking. Hence, we organize a plethora of events throughout the year that aims at reinvigorating the seemingly dormant passion for mathematics and the thirst for knowledge about today's technology.

Name of the Faculty Advisor(s) or equivalent post	Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information
Dr. Anita Pal Dr. Seema Sarkar (Mondal) Dr. Sarit Maitra	Kabita Harijan	Devansh Singh Patel	Link: mntenitdgp.co.in

Dr. Seema Sarkar (Mondal) Dr. Sarit Maitra		Kabita Harijan Devansh Singh Patel		evansh Singh Patel	mntcnitdgp.co.in
Sl No.		the Activities, Date		Correspond	ing Photograph
1.	It was the first edition of participants were a part of on a company's loophole	Illiance (16.16.2022)  f an online case study event worf an alliance which aimed to s. The event saw participations across India.	work	Strates	essure round aspire
2.	It was an offline two-day well acquainted with the lof the ideas of graphic do insights in various design	n Workshop (07.01.2023)  y workshop where participant basics and practical implement esign. Participants were given using tools like Adobe Illustrate Photoshop.	tation deep	GRAPHI DESIGN DESIGN DESIGN 22 AND 23 JANUARY	C S S S S S S S S S S S S S S S S S S S
3.	It was a collaboration wit Vikramaditya (aka Strive session. The session was and received a massiv session which drew away com software engineer's	th Striver (15.01.2023)  th CDC, NIT Durgapur to bring for a live and exciting interest organized in the New Auditory crowd. It was an eye-opening unnecessary thoughts from a brain and paved a definite identification.	active orium ng coder	H JANUARY	VIKRAMADITYA

For Other Activities: <a href="https://mntcnitdgp.co.in">https://mntcnitdgp.co.in</a>



#### Name of the Club/Body/Centre: Music Club

Three Notable Activities

1.

About us: We are the official Music Club of NIT Durgapur. We bring the love we have for music to everyone in this college through live performances and the people outside the collegethrough our page and YouTube channel. We perform both Eastern and Western genres of music.

Name of the Faculty Advisor(s) or equivalent post	Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information
Dr. Suvrojit Das	Subhadeep Biswas	Aheli Chakrabarti	https://drive.google.com/file/d/1oRPVibW0bIBdC9vfe8OHpM4ZgcBvK1n/view?usp=sharing

#### Sl No. Name of the Activities, Date **Corresponding Photograph** And its Details COVER UP (30th December, 2022 to 30th **January**, 2023)

Cover Up was an online event hosted in Facebook. The students submitted their entries and the top performers were rewarded.



Nescafe Jam 2nd February, 2023 2.

E-Summit 4th March, 2023 3.



For Other Activities: Facebook: https://www.facebook.com/MuC.NITD/

Instagram: <a href="https://www.instagram.com/musicclub">https://www.instagram.com/musicclub</a> nitd/ YouTube: <a href="https://www.youtube.com/c/MuCNITD/">https://www.youtube.com/c/MuCNITD/</a>



#### Name of the Club/Body/Centre: Prakriti (The Environmental Club)

About us (within 100 words): Prakriti, the techno-environmental club of NIT DGP, aims to inspire prospective engineers to be GreenEngineers, caring for the environment. With our motto of awareness and action, we promote sustainability and pollution control in technology. Rooted in the values of perseverance, sustenance, and progress, Team Prakriti has surpassed milestones since its inception. Through year-round events, we awaken minds to the significance of environmental preservation. Together, we strive to create a sustainable and harmonious world for all living beings.

Advis	ne of the Faculty or(s) or equivalent post	Name of the President or equivalent post			Further Information
	alyan Adhikari nankar Roybarman	Niharika Yellanki	7	Vishal Singh	
Sl No.	Name	Notable e of the Activities, Date	Activities	Correspon	nding Photograph
51110.	1 (ani)	e of the Activities, Date		Correspon	nuing i notograph
·	nature and the earth's this marathon which	RUNIT: on run promoting the cause of pre resources. Athletes and non-athle h is conducted during mid-Februa to make it a successful event.	tes join		
	PLANTATION:  One of the most inspirational events of Prakriti, on the event day we plant 100 trees around the campus with our Director, Dean and participants. This ends up with encouragement, awareness and enjoyment.		rector,		
	An Event to get all out family back at home. I We arrange creative r fun activities with ou promote togethern	GHT THE NIGHT: t of the mournous feeling of missi The whole event is described by it rangoli making, diyas lighting and ar enthusiastic participants. This was, no crackers and endless fun surprises on diwali.	d some		

#### Name of the Club/Body/Centre: QuizInc

**About us:** We, QuizInc, are the official quizzing club of NIT Durgapur. We provide an incredible interactive platform for all those who are endlessly curious and love exchanging ideas and knowledge. We are indeed the "Knowledge Club" of NIT Durgapur. QuizInc was started by two students Harsh Mohan and Anup Nair in 2003. We are a community of dedicated quizzers who promote the culture of quizzing in our campus. A club which remains active throughout the year, QuizInc hosts a variety of quizzes every month. From collaborating with other NITs, to holding interesting events, to witnessing participants from reputed colleges all over Kolkata and Durgapur, QuizInc does it all.

Name of the Faculty Advisor(s) or equivalent post	Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information
Dr. Joydeep Banerjee Dr. Arjyajyoti Goswami	Durbar Chakraborty	Kaushal Baid	Link: https://quizinc.co.in

# **Notable Activities** SI No. Name of the Activities, Date And its Details **Corresponding Photograph** QUIZING Rendezvous 04.06.2022 Our online Gaming Quiz was a massive hit, attracting gamers from different colleges of the country. Participants enjoyed 1. the interactive experience and tested their gaming knowledge to the fullest. RENDEZVOUS Kick Off 06.12.2022 An online quiz event on FIFA World Cup 2022. Participants cheered, showcased, and celebrated their passion for football, 2. making it a memorable and thrilling experience for all. The Last Lap 02.04.2023 THE LAST LAG It was the World Cup Quiz presented by QuizInc in association with Students Gymkhana at Recstcy 2023. 3.

For Other Activities: www.quizinc.co.in

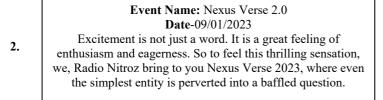


# Name of the Club/Body/Centre: RADIO NITROZ

About us: We, the People of Radio NITroz of NIT Durgapur, strive to make a difference in the hectic life of college by bringing fun events and help people learn better with a calm mind because "Life is to live". Radio NITroz was formed in the year 2006 by our brilliant seniors and it is the 3rd successful LAN/Internet based Radio among all IITs and NITs. It is a matter of proud for us. We work on the motto to make life a bit easy and fun. We have been very popular for our Podcasts and the Live Dedication. There was a time when everyone used to tune into Radio NITroz using VLC and tell us whom they want to dedicate songs and messages if any. It was amazing to be loved by everyone. For this, we carry out different events throughout the year, enthralling people with Joie de vivre.

Name of the Faculty Advisor(s) or equivalent post	Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information
Dr. T.K.Bera	Dhiraj Kumar	Akshay.A.Baiju	Link: https://radionitroz- nitdgp-update-github- io.vercel.app/

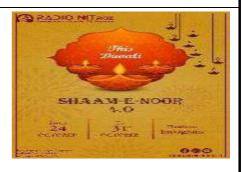
# Three Notable Activities Sl No. Name of the Activities, Date Corresponding Photograph **And its Details** SATIN DIEME **EVENT NAME:** TalentX Date-26/01/2023 We, the **Radio Nitroz** team, are here to bring all of your 1. talent under one roof with TalentX, unveiling your talent in singing, dancing, poetry, we are coming with TalentX, breaking your boredom and bringing you stardom for your exciting talent. GRADIO NITAO





Event Name: Shaam-E-Noor 4.0 Date-21/10/2022
With the gleam of diyas and the echo of the chants, we the
<b>RADIO NITROZ</b> team is no less excited to share the festival
of lights with you.Let us join hands and share the night of light
with our Radio Nitroz family.
•

3.



For Other Activities: https://radionitroz-nitdgp-update-github-io.vercel.app/



#### Name of the Club/Body/Centre: RECursion

**About us:** RECursion is the official programming community of NIT Durgapur which focuses on improving coding culture institute wide by conducting regular lectures from beginner to advanced topics of programming. Our goal is to increase student participation in inter-collegiate contests like ICPC and help them get better.

Name of the Faculty Advisor(s) or equivalent post	Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information
Debasis Mitra, Bibhash Sen	Akshay A Baiju	D.Mahamood Sameer	Link:
			https://www.recursionnit
			d.in/

#### Three Notable Activities

SI No.

1.		
	<b>RECursion classes</b> : RECursion	
	organises weekly classes for the first and	
	second year students of our college on various	
	programming topics from basics to an	
	advanced level. Classes are generally taken	
	twice a week. Some dates of our past classes:	
	(20/03/23, 23/03/23, 27/03/23, 30/03/23)	

Name of the Activities, Date

And its Details

### **Corresponding Photograph**



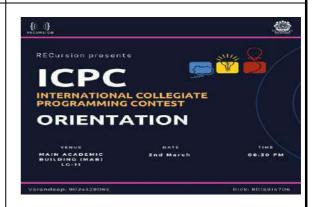
RECode: RECode is a monthly coding contest mainly based on the topics that have been taught in the class till then. The RECodes can be only for our college or can also be open to all where global participants are allowed. We conduct rated for all RECodes too. Some dates of our past RECodes: 29/08/22, 14/10/22, 30/01/23, 12/02/23





3.

<u>ICPC Orientation</u>: The session provides insight about ICPC to the students of the institute and provide details and resources to prepare for the inter-collegiate contest and represent out college in the regionals.



For Other Activities: Provide the Link (Institute home page link of each club) RECursion official website: https://www.recursionnitd.in/



# Name of the Club/Body/Centre: Society of Automotive Engineers (SAE)

For Other Activities:

About us: SAE India collegiate chapter of NIT Durgapur was conceived in 2007 with an idea to integrate the students of the college into automobile engineering. Presently 200 students are enjoying the benefits of SAE India membership. We organize a number of innovative events, webinars, workshops round the year and a competitive place where the sharpest minds battle in the quest to achieve distinction.

Name of the Faculty Advisor(s) or equivalent post	Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information
Prof.(Dr.) Apurba layek	Rahul kashyap	Asif khan	Link:
Prof.(Dr) Nilotpal banerjee		Sharvani redddy	https:www.saenitdgp.co
Prof(Dr.) Tapas kumar saha		-	m/events

Sl No.	Name of the Activities, Date And its Details	Corresponding Photograph
1.	DRAG AND DRIFT, 27th August, 2022 SAE hosts a thrilling event 'Drag&Drift' which includes various maze designs with obstacles and avoiding the pesky obstacles subsequently knowing the underlying working of the car.	
2.	SDV, 14-15th January, 2023(SELF DRIVING VEHICLE WORKSHOP) SAE conducts SDV, a self driving vehicle workshop wherein the self driving prototype is developed along with the fundamentals of autonomous driving, robotics and algorithm designs is discussed.	
3.	TedX NITDurgapur, 5th February 2023 SAE also conducts TEDxNITDurgapur a part of TED along with Literary Circle, a worldwide, grassroots initiative, that aims to provide a platform for a symphony of voices.	TED X NITDurgapur x=independently organized TED event

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#### Name of the Club/Body/Centre: SPICMACAY NIT Durgapur Chapter

About us: SPICMACAY NIT Durgapur Chapter is the largest cultural society of NIT Durgapur. It aims to foster an appreciation for Indian classical music and traditional arts among students. Through diverse events and activities, SPICMACAY NIT Durgapur Chapter promotes India's rich cultural heritage, encouraging the youth to embrace and celebrate their roots. Our club serves as a platform for artists to showcase their talents and provides an immersive experience in Indian culture. By engaging in music, dance, and art workshops, students gain insights into the country's diverse traditions, promoting a deeper understanding and respect for their cultural legacy.

Name of the Faculty Advisor(s) or equivalent post	Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information	
Dr. Nilanjan Chattaraj	Saikat Sarkar	Hridikalpa Das	Link: Newsletter	
Dr. Jitamanyu Chakrabarty		_		
Dr. Aritro Dey				

	And its Details (within 30 words)	
	And its Details (within 30 words)  Virasat 15-19th, A five-day cultural extravaganza where classical maestros showcased their mastery through insightful workshops and performances. It was amazing to see young minds showing their charm through the aura of Bharatnatyam and their	
1.	creativity through the flair of chhau mask-making. Cultural performances by other eminent artists staged during the evenings were also mesmerizing. These presentations glorified us as we immersed	
	ourselves in the richness of our culture and the	

magnificence of these evocative ethnic expositions.

Name of the Activities, Date

Three Notable Activities

SI No.



Corresponding Photograph (one for each activity)

Anubhav, 12th November: SPIC MACAY NIT Durgapur Chapter conducted a day long Art & Craft workshop for the underprivileged children in collaboration with BMEP. 2.



Uttarayan, 14th January. SPIC MACAY NIT Durgapur Chapter organized Uttarayan, a kite flying festival inspired by the spirit of Makar Sankranti which brought everyone together in a playful extravaganza of dancing colors.



For Other Activities:

3.



#### Name of the Club/Body/Centre: STROKES

About us: STROKES is the official art and photography club of NIT DURGAPUR, a place for practicing artists to hone their skills, develop their techniques and portfolios, collaborate with other artists, create bonds with others through arts, and learn how to work together through group projects that will beautify the community. We at Strokes organize various art exhibitions and photo walks attracting a multitude each and every year to spread the culture of art and photography in the college.

Name of the Faculty Advisor(s) or equivalent post		Name of the President or equivalent post	Name of Vice President or equivalent post	Further Information
Dr. Suva	moy Changder	Ramyanil Raha	Sankhadeep Ghosh	Link:
Sl No.		e Activities, Date its Details	Correspondin	g Photograph
1.	(Strokes' <b>Kalakriti</b> & photo exhibit at students, faculty &	n (9th-10th March, 2023) Edition 9, a captivating art Aarohan's tech fest, drew visitors. Vibrant creations g a mesmerizing sculpture in hues.)	KAL	AKRITI
2.	Recstacy's cultural f	est. A buzzing booth for 3 ces with diverse art and	Contact:  • inyana: \$1,39089497 Ner 9	Parting ainting
3.	fest captured hearts,	oth' at Recstacy's cultural offering handmade props graphers. Three days of	Resident Control of the Control of t	PHOTO 1260

#### 7.5 Gymkhana

The Students' Gymkhana at NIT Durgapur holds a pivotal position in addressing the various issues that students encounter on a daily basis. This apolitical student body dedicates its efforts to understanding and resolving the challenges faced by the student community. Through an executive council, the Gymkhana remains actively engaged throughout the year, focusing on domains that directly impact students' lives. Acting as a crucial bridge between the administration and the students, the Gymkhana ensures that student voices are heard and considered in decision-making processes. It advocates for student rights, well-being, and academic concerns, making it an instrumental platform for communication and collaboration.

While the Gymkhana is known for organizing the grand annual cultural festival, Recstacy, its primary focus lies in addressing student issues. It takes a proactive approach to create a conducive learning environment, enhancing facilities, and implementing student-friendly policies. From academic matters to extracurricular activities and amenities, the Gymkhana tirelessly works to enrich the college experience for every student.

Last year's introduction of the food festival, Recrave, was yet another initiative that aimed to foster a sense of community and cater to student preferences. However, it is the Gymkhana's unwavering dedication to addressing student issues that truly sets it apart and makes it an invaluable asset for the entire student body at NIT Durgapur.

National Institute of Technology Durgapur Students' Gymkhana, colloquially known Gymkhana is the only representative body of the students of National Institute of Technology, elected by all the regular students of UG and PG courses of the Institute.

The Gymkhana at NIT Durgapur is a non-sectarian, non-communal and non-political body that indulge in normal functioning of the Institute including academic activities and strive for a peaceful ecosystem which supports the growth and advancement of students individually and as a body. It upholds liberty of thought and freedom of expression, equality of status and of opportunity, fostering and developing all co-curricular activities, and creation of a sound and healthy Student-Administration relationship.

#### 8. Annual Accounts

#### 8.1 Information Related to Annual Accounts:

#### 8.1.1 Analysis of Plan and Non-Plan Grants (2022-23)

Plan (General Component) Grants	2191.00 [Rs. In Lakh]
Non-Plan Grants	15860.64 [Rs. In Lakh]

#### 8.1.2 Sources of Grants

Till Financial Year 2002-03	From Financial Year 2003-04 Onward
Govt. of India & Govt. of WB	MoE, GoI

#### 8.1.3 Expenditure Position for Last 5 Years

Plan head Expenditure		Non-Plan h	ead Expenditure
2018-19	Rs. 1403.84	2018-19	Rs. 14814.37
2019-20	Rs. 3286.51	2019-20	Rs. 15130.18
2020-21	Rs. 1801.55	2020-21	Rs. 13417.44
2021-22	Rs. 2317.63	2021-22	Rs. 15323.96
2022-23	Rs. 3272.44	2022-23	Rs. 14982.31

#### 8.1.4 Details of Annual Accounts and Separate Audit Report (SAR)

Detail Annual Accounts and SAR are provided as an addendum for the ready reference. Detail Annual Accounts consists of 71 pages and SAR consists of 7 pages.





## 63<sup>rd</sup>

# Annual Accounts 2022-23

(April 01, 2022 – March 31, 2023) [Page No.: 01 – 70]

NATIONAL INSTITUTE OF	TECHNOLOGY [	DURGAPUR:: INDIA				
BALANCE SHEET AS ON 31.3.2023 (Amount in Rupees)						
SOURCES OF FUNDS	Schedule	Current Year	Previous Year			
UNRESTRICTED FUNDS						
CORPUS/CAPITAL FUND	1	6,94,32,51,139.39	6,50,61,15,885.18			
DESIGNATED/EARMARKED/ENDOWMENT FUNDS	2	2,00,35,33,380.51	1,80,72,31,616.01			
CURRENT LIABILITIES AND PROVISIONS	3	33,30,00,991.81	1,16,12,21,806.70			
TOTAL		9,27,97,85,511.71	9,47,45,69,307.89			
APPLICATION OF FUNDS						
FIXED ASSETS	4					
TANGIBLE ASSETS		3,68,94,48,594.14	3,61,66,70,770.42			
INTANGIBLE ASSETS		5,62,88,210.00	3,50,57,841.52			
CAPITAL WORK-IN-PROGRESS		69,85,58,321.00	66,09,69,973.00			
INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS	5					
LONG TERM		-	-			
SHORT TERM		-	-			
INVESTMENTS-OTHERS	6	1,94,55,64,960.00	2,47,16,45,809.00			
CURRENT ASSETS	7	2,61,96,78,898.79	2,44,75,86,456.55			
LOANS, ADVANCES & DEPOSITS	8	27,02,46,527.78	24,26,38,457.40			
TOTAL		9,27,97,85,511.71	9,47,45,69,307.89			

SIGNIFICANT ACCOUNTING
POLICIES 23
CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS 24

Joint Registrar (F&A) Registrar Director



## NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31.3.2023

(Amount in Rupees)

Particulars	Schedule	Current Year					Previous year
		Unrestric	Unrestricted Funds		Restricted Fund	Total	Total
		Corpus	Designated fund	General fund			
INCOME							
Academic Receipts	9	39,39,74,847.71				39,39,74,847.71	34,83,90,024.70
Grants / Subsidies	10	1,58,60,64,622.00				1,58,60,64,622.00	1,26,09,38,354.00
Income from Investments	11	6,79,33,246.00				6,79,33,246.00	6,41,31,539.00
Interest earned	12	6,18,68,501.00				6,18,68,501.00	6,10,47,456.00
Other Incomes	13	1,33,91,140.80				1,33,91,140.80	1,49,67,194.52
Prior Period Income	14	-				-	-
TOTAL (A)		2,12,32,32,357.51				2,12,32,32,357.51	1,74,94,74,568.22
EXPENDITURE		_, -, -, -, -, -, -, -, -, -, -, -, -, -,				_,-,-,-,-	-,,,,
Staff Payments & Benefits (Establishment Expenses)	15	1,11,33,72,376.00				1,11,33,72,376.00	1,09,80,33,571.00
Academic Expenses	16	1,61,32,628.82				1,61,32,628.82	59,21,819.00
Administrative and General Expenses	17	32,17,77,397.83				32,17,77,397.83	22,41,80,453.64
Transportation Expenses	18	36,61,973.00				36,61,973.00	18,08,890.00
Repairs & Maintenance	19	3,90,22,468.15				3,90,22,468.15	3,00,34,187.00
Finance Costs	20	42,64,622.00				42,64,622.00	13,81,706.00
Depreciation	4	19,56,48,023.81				19,56,48,023.81	16,98,38,012.92
Other Expenses	21	0.00				0.00	0.00
Prior Period Expenses	22	0.00				0.00	11,97,575.00
TOTAL (B)		1,69,38,79,489.61				1,69,38,79,489.61	1,53,23,96,214.56
Balance being excess of Income over Expenditure (A-B)		42,93,52,867.91				42,93,52,867.91	21,70,78,353.66
Transfer to/from Designated fund Building fund Others (specify)		0.00				0.00	0.00
Balance Being Surplus (Deficit) Carried to General Fund		42,93,52,867.91				42,93,52,867.91	21,70,78,353.66

SIGNIFICANT ACCOUNTING POLICILIES 23 CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS 24

Joint Registrar (F&A) Registrar Director



#### NATIONAL INSTITUTE OF TECHNOLOGY, DURGAPUR :: INDIA

#### RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31.03.2023

		T	Γ	T	(Amount in Rupees)
RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
I. Opening Balances			I. Expenses		
a) Cash Balances	-	-	a) Establishment Expenses	1,13,29,04,174.00	99,86,18,453.00
b) Bank Balances			b) Academic Expenses	4,06,24,146.82	3,09,54,385.00
i. In Current Account	2,02,04,37,083.28	1,94,91,53,530.78	c) Administrative Expenses	30,62,07,786.83	21,45,84,080.64
ii. In Deposit Account	8,687.82	98,67,963.07	d) Transportation Expenses	38,20,670.00	21,22,724.00
iii. In Savings Account	7,52,79,273.04	29,18,11,338.24	e) Repairs & Maintenances	3,86,00,763.15	2,63,27,733.00
			f) Prior period expenses	-	-
			II. Payments against		
II. Grants Received			Earmarked/ Endowment Funds	-	-
a) From Government of India	1,80,51,64,622.00	1,53,24,91,354.00			
b) From State Government	-	-			
c) From other sources (details)	-	-			
			III. Payments against Sponsored		
III. Academic Receipts	41,76,95,509.71	37,28,71,784.70	Projects/ Schemes	89,40,883.00	1,92,26,638.00
IV. Receipts against Earmarked/			IV. Payments against sponsored		
Endowment Funds	2,00,000.00	-	Fellowships and Scholarships	12,96,05,097.00	14,96,72,812.00
V. Receipts against Sponsored	54.00.444.00	0.54.75.004.00	V. Investments and Deposits		
Projects/ Schemes	54,03,144.00	2,51,75,824.00	made a) Out of		
			Earmarked/Endowments Funds b) Out of own funds	3,68,324.00	-
			(Investment- Others)	28,67,33,137.00	25,87,89,263.00
VI. Receipts against sponsored			VI. Term Deposits with		
Fellowships and Scholarships	1,97,93,853.50	1,63,40,280.00	Scheduled Banks	17,25,738.00	6,26,859.00
			VII. Expenditure on Fixed Assets		
VII. Income on Investments from:	4 00 00 4 00		and Capital Works-in-Progress		
a) Earmarked/ Endowment Funds	1,68,324.00	-	a) Fixed Assets	26,95,68,451.00	29,82,70,614.00
b) Other Investments	20,13,19,815.00	4,87,71,780.00	b) Capital Works-in-Progress	-	-
VIII Intercet received on			VIII. Other Payments including	17 70 75 040 00	12.09.20.221.00
VIII. Interest received on	47.00.404.00	40.05.474.00	statutory payments	17,72,75,942.00	12,08,39,231.00
a) Bank Deposits     b) Loans and advances	17,32,191.00	48,25,471.00			
c) Saving Bank accounts	6,03,04,850.00	5,79,13,819.00			
o, saving bank accounts	0,00,04,000.00	0,19,10,019.00			
IX. Investments encashed	4,02,239.00	5,14,803.00	IX. Refunds of grants	-	-
			-		
X. Term Deposits with Scheduled banks encashed	-	-	X. Deposits and Advances	1,43,73,758.00	1,33,76,239.00
W. Otherstoner. # 1 " - "					
XI. Other Income (including Prior Period Income)	99,66,861.80	1,18,19,342.52	XI. Other Payments	27,69,11,980.00	16,90,62,652.00
XII. Deposits and Advances	1,06,72,392.74	1,11,24,156.00	XII. Closing Balances		
			a) Cash Balances	-	_



			b) Bank Balances		
			i. In Current Account	2,19,72,77,769.46	2,02,04,37,083.28
			ii. In Deposit Account	8,687.82	38,97,517.07
			iii. In Savings Account	5,60,48,395.48	20,15,26,808.20
XIII. Miscellaneous Receipts including Statutory Receipts	52,56,973.67	40,62,908.88			
XIV. Any other Receipts	30,71,89,883.00	19,15,88,737.00			
	4,94,09,95,703.56	4,52,83,33,092.19		4,94,09,95,703.56	4,52,83,33,092.19

Joint Registrar (F&A) Registrar Director

SCHEDULE TO BALANCE SHEET AS ON 31.03.2023						
		(Amount in Rupees)				
SCHEDULE 1 - CORPUS	Current Year	Previous year				
Balance at beginning of the year	6,50,61,15,885.18	6,17,73,88,142.70				
Add: Contribution towards Corpus /Capital Fund	1,89,48,542.25	11,84,87,988.72				
Add: Grants from UGC, Government of India and State Government to the extent utilized for Capital Expenditure	-	-				
Add: Assets Purchased out of Earmarked Funds	-	-				
Add: Assets Purchased out of Sponsored Projects , Where ownership vests in the institution	-	-				
Add: Assets Donated/Gifts Received	-	-				
Add: Others Additions	-	-				
Less: Balance amount transferred to General Provident Fund Account	1,11,66,155.95	68,38,599.90				
Total	6,51,38,98,271.48	6,28,90,37,531.52				
Add: Surplus Transferred from Income & Expenditure Accounts	42,93,52,867.91	21,70,78,353.66				

**BALANCE AS AT THE YEAR END** 

NATIONAL INSTITUTE OF TECHNOLOGY :: DURGAPUR-713209 :: INDIA

6,50,61,15,885.18

6,94,32,51,139.39



#### SCHEDULE - 2

DESIGNATED/EARMARKED FUNDS	1					(Amount in Rupees)
	FUND WISE BREAK UP				тот	AL
	Donation Fund		Others	Endowment Fund	Current Year	Previous Year
a) Opening Balance of the Fund	30,03,438.50	-	20,79,59,062.53	1,56,72,10,082.48	1,77,81,72,583.51	1,57,43,46,558.01
b) Addition to the Funds						
i. Donation/grant ii. Income from Investment made of the funds iii. Accrued interest on investments of the funds	- 3,83,185.00 -	-	- 1,54,73,166.00 -	21,91,00,000.00	- 23,49,56,351.00 -	- 24,15,83,677.00 -
iv. Other additions (specify nature)	-	-	-		<u> </u>	<u>-</u>
TOTAL (a+b)	33,86,623.50	-	22,34,32,228.53	1,78,63,10,082.48	2,01,31,28,934.51	1,81,59,30,235.01
c) Utilisation/Expenditure towards objectives of funds						
i. Capital Expenditure						
- Fixed Assets	-	-	-	<del>-</del>		-
- Others	36,367.00		95,59,187.00	-	95,95,554.00	86,98,619.00
TOTAL	36,367.00	-	95,59,187.00	-	95,95,554.00	86,98,619.00
ii. Revenue Expenditure - Salaries, Wages and Allowances etc.	-	_	-		-	-
- Rent	-	-	-		-	
- Other Administrative expenses	-	-	_		-	-
TOTAL	-	-	-			-
TOTAL (c)	36,367.00	_	95,59,187.00	-	95,95,554.00	86,98,619.00
CLOSING BALANCE AS AT THE YEAR END (a+b-c)	33,50,256.50	_	21,38,73,041.53	1,78,63,10,082.48	2,00,35,33,380.51	1,80,72,31,616.01

SECURED LOAN			(Amount in Rupees)
	Current Year		Previous Year
Central Government	-		-
2. State Government (Specify)	-		-
3. Financial Institutions			
a) Term Loans	-		-
b) Interest accrued and due	-		-
4. Banks:			
a) Term Loans			
- Interest accrued and due	-		-
b) Other Loans (Specify)			
- Interest accrued and due 5. Other Institutions and Agencies 6. Debentures and Bonds 7. Others (Specify)	-		- - -
TOTAL	-		-
Note: Amounts due within one year	NIL		NIL



**UNSECURED LOANS** (Amount in Rupees) **Current Year** Previous Year 1. Central Government 2. State Government (Specify) 3. Financial Institutions 4. Banks: a) Term Loans b) Other Loans (Specify) 5. Other Institutions and Agencies 6. Debentures and Bonds 7. Fixed Deposits 8. Others (Specify) TOTAL Note: Amounts due within one year

SCHEDULE 3- CURRENT LIABILITIES & PROVISIONS		(Amount in Rupees)
A. CURRENT LIABILITIES	Current Year	Previous Year
Deposits from Staff	8,54,674.51	21,80,044.51
2. Deposits from Students	-	-
3. Sundry Creditors		
a) For Goods & Services	2,22,82,659.16	2,15,80,890.42
b) Others	-	_
4. Advances Received	-	_
5. Interest accrued but not due on:		
a) Secured Loans /borrowings	-	_
b) Unsecured Loans /borrowings	-	_
6. Statutory Liabilities(GPF, TDS, WC TAX, CPF, GIS, NPS):		
a) Overdue	-	-
b) Others	1,66,105.00	1,66,895.00
7. Other Current liabilities		
a) Salaries	5,55,05,183.62	9,61,64,746.62
b) Receipts against sponsored projects	1,16,76,709.03	59,49,186.00
c) Receipts against sponsored fellowships & scholarships	1,48,03,396.93	92,38,000.43
d) Unutilised Grants	-	-
e) Grants in advance	-	-
f) Other funds	22,09,55,172.56	1,01,92,00,311.72
g) Loan and borrowing from GOI( Secured Loan)	58,23,172.00	58,23,172.00
h) Other Liabilities	9,33,919.00	9,18,560.00
TOTAL (A)	33,30,00,991.81	1,16,12,21,806.70
B. PROVISIONS		
1. For Taxation	-	-
Gratuity     Super Annuation/Pension	-	- -
Accumulated leave Encashment	-	-
5. Expenses payable 6. Trade Warranties/Claims	-	<del>-</del>
7. Others (Specify)	_	- -
TOTAL (B)	-	
TOTAL (A+B)	33,30,00,991.81	1,16,12,21,806.70

## SCHEDULE 5- INVESTMENTS FROM EARMARKED/ ENDOWMENT FUNDS

(Amount in Rupees)

	Current Year	Previous Year
1. In Central Government Securities	-	-
2. In State Government Securities	-	-
3. Other Approved Securities	-	-
4. Shares	-	-
5. Debentures and Bonds	-	-
6. Others (to be specified)	-	-
TOTAL	-	-

#### **SCHEDULE 6- INVESTMENTS - OTHERS**

(Amount in Rupees)

		I
	Current Year	Previous Year
1. In Central Government Securities	-	-
2. In State Government Securities	-	-
3. Other Approved Securities	-	-
4. Shares	-	-
5. Debentures and Bonds	-	-
6. Others (to be specified)	1,94,55,64,960.00	2,47,16,45,809.00
TOTAL	1,94,55,64,960.00	2,47,16,45,809.00

## SCHEDULE 7- CURRENT ASSETS

(Amount in Rupees)

	Current Year	Previous Year
1. Stock:		
a. Stores & Spares	-	-
b. Loose Tools	-	-
c. Publications	-	-
2.Sundry Debtors: a) Debts outstanding for a period exceeding six months	-	-
b) Others		
i) HEFA Principal Loan	35,71,11,690.00	22,17,25,048.00
3. Cash Balance in hand (Incl. cheques draft and imprest)	-	-
Bank Balances: (to be further classified as pertaining to earmarked fund or otherwise)		
a) With Schedule Banks-	2,26,25,67,208.79	2,22,58,61,408.55
- In current accounts	-	-
- In term deposit accounts	-	-
- In savings accounts	-	-
b) With non-schedule Banks		
- In current accounts	-	-
- In term deposit accounts	-	-
- In savings accounts	-	-
4. Post-Office Savings A/C		
TOTAL	2,61,96,78,898.79	2,44,75,86,456.55



SCHEDULE 8 - LOANS, ADVANCES & DEPOSITS				(Amount in Rupees)
	Current Y	ear	Previo	us Year
Advances to employees: (Non- interest pearing)			_	
	33 58 363 00		25,81,127.09	
a) Salary	33,58,262.09			
b) Festival	2,39,719.39		2,39,719.39	
c) LTC	(600.00)		(600.00)	
d) Medical Advance	-		-	
e) Others (to be specified)	28,19,050.77	64,16,432.25	16,04,019.77	44,24,266.25
2. Long Term Advances to employees: (Interest bearing)				
a) Vehicle Loan				
b) Home Loan			-	
c) Others (to be specified)	2,54,990.00	2,54,990.00	3,63,472.00	3,63,472.00
Advances and other amounts recoverable in cash or in kind or for value to be received				
a) On Capital account	-		-	
b) To suppliers	-		-	
c) Others	19,47,77,836.61	19,47,77,836.61	15,92,23,958.23	15,92,23,958.23
4. Prepaid expenses				
a) Insurance			_	
b) Other expenses		_	_	_
of Other expenses		-		
5. Deposits				
a) Telephone	-		<u>-</u>	
b) Lease Rent	_		_	
c) Electricity	_		_	
			_	
d) AICTE, if applicable	-		-	
e) MCI, if applicable	-		-	
f) Others (to be specified)	-	-	-	-
6. Income Accrued a) On Investment from earmarked/				
endowment fund	6.02.27.050.00		- E 04 EG 444 00	
o) On investment-others	6,03,37,650.00		5,91,56,441.00	
c) On loans and advances d) Others (includes income due unrealized	-		-	
(Ś)	<u>-</u>	6,03,37,650.00	-	5,91,56,441.00
. Other receivables				
a) Debit balances in Sponsored Projects b) Debit balances in Fellowship &	-		-	
Scholarship	-		-	
c) Grants Recoverable	-		-	
d) Other receivable	84,59,618.92	84,59,618.92	1,94,70,319.92	1,94,70,319.92
3. Claims Receivable				
TOTAL		27,02,46,527.78		24,26,38,457.40



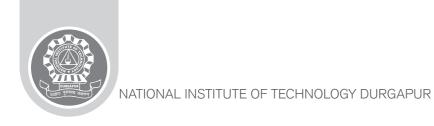
				NOITAN	NATIONAL INSTITUTE OF TECHNOLOGY DILBGABILE	HNOI OGY DITRGAPI	<u>~</u>				
SCHEDULE 4- FIXED ASSETS				SCHEDUI	SCHEDULE OF DEPRECIATION FOR THE YEAR 2022-23	FOR THE YEAR 202	2-23				(Amount in Rupees)
DESCRIPTION	•	<u> </u>	GROSS BLOCK	LOCK			DEPRECIATION	VIION			NET BLOCK
	Opening Cost as on	Cost as on	Addition during	Deductions	Total cost	Opening	On Additions	On Deductions	Total up to the	As at the	As at the
Tangible Assets	01.04.2022	01.04.2022 (After Adjustment)	the year	during the year	as on 31.03.2023	Depreciation as on 01.04.2022	during the year	during the year	year end	current year end	previous year end
l. Land:											
a) Freehold b) Leasehold	10305688.62	1,03,05,688.62		1	1,03,05,688.62	,		1		1,03,05,688.62	1,03,05,688.62
II. Buildings:											
a) On Freehold Land	3834023868	3,83,40,23,868.44	4,87,24,171.00		3,88,27,48,039.44	79,85,59,325.79	6,86,57,668.00		86,72,16,993.79	3,01,55,31,045.65	3,03,54,64,542.65
b) On Leasehold Land											
c) Ownership Flats/ Premises d) Superstructures on Land not belonging to educational institutions											
III. Plant, Machineries & Equip.	37,27,59,636.22	37,27,59,636.22	4,97,41,980.00		42,25,01,616.22	24,81,00,026.50	1,06,97,151.10		25,87,97,177.60	16,37,04,438.62	12,46,59,609.72
IV. Vehicles	17,49,958.22	17,49,958.22			17,49,958.22	17,49,957.22			17,49,957.22	1.00	1.00
V. Furniture & Fixture	25,29,27,946.28	25,29,27,946.28	4,44,51,938.00		29,73,79,884.28	13,01,03,343.33	1,72,42,797.58		14,73,46,140.91	15,00,33,743.37	12,28,24,602.95
VI. Office Equipment	11,31,705.95	11,31,705.95			11,31,705.95	9,35,847.28	26,708.00		9,62,555.28	1,69,150.68	1,95,858.68
VII. Computer / Peripherals	15,38,43,320.42	15,38,43,320.42	4,46,88,409.00		19,85,31,729.42	12,14,08,650.95	1,86,06,490.71		14,00,15,141.66	5,85,16,587.76	3,24,34,669.47
VIII. Electrical Installations	7,70,71,505.91	7,70,71,505.91			7,70,71,505.91	4,79,08,294.78	22,33,549.00		5,01,41,843.78	2,69,29,662.13	2,91,63,211.13
IX. Library Books	21,37,37,694.75	21,37,37,694.75	1,93,49,577.00		23,30,87,271.75	13,71,04,751.53	1,67,13,886.90		15,38,18,638.43	7,92,68,633.32	7,66,32,943.21
X. Tube wells & water supply		1					,				
XI. Other Fixed Assets							1				
A. Total of Current Year	4,91,75,51,324.81	4,91,75,51,324.81	20,69,56,075.00		5,12,45,07,399.81	1,48,58,70,197.38	13,41,78,251.29		1,62,00,48,448.66	3,50,44,58,951.15	3,43,16,81,127.42





XII. Capital Work-in - progress		66,09,69,973.00	11,23,37,283.00	7,47,48,935.00 69,85,58,321.00	69,85,58,321.00					
Transfer to Assets										
B. Net Work in Progress					69,85,58,321.00					
TOTAL (A+B)		5,57,85,21,297.81	31,92,93,358.00	7,47,48,935.00	5,82,30,65,720.81	1,48,58,70,197.38	13,41,78,251.29	1,62,00,48,448.66	3,50,44,58,951.15	3,43,16,81,127.42
C. TEQIP Assets	ı									
Building (TEQIP-I)	98,97,307.00	98,97,307.00			98,97,307.00	,		,	98,97,307.00	98,97,307.00
Equipment TEQIP-I	15,50,65,026.00	15,50,65,026.00			15,50,65,026.00	,		,	15,50,65,026.00	15,50,65,026.00
Vehicle(TEQIP-I)	5,15,937.00	5,15,937.00			5,15,937.00		1	,	5,15,937.00	5,15,937.00
Furniture (TEQIP-I)	79,98,127.00	79,98,127.00			79,98,127.00		1		79,98,127.00	79,98,127.00
Library Books (TEQIP-I)	1,15,13,246.00	1,15,13,246.00			1,15,13,246.00			-	1,15,13,246.00	1,15,13,246.00
TOTAL (C)	18,49,89,643.00	18,49,89,643.00			18,49,89,643.00		•		18,49,89,643.00	18,49,89,643.00
									•	
TOTAL (A+B+C)	TOTAL (A+B+C) 5,10,25,40,967.81	5,10,25,40,967.81	20,69,56,075.00		6,00,80,55,363.81	1,48,58,70,197.38   13,41,78,251.29		- 1,62,00,48,448.66	3,68,94,48,594.14	3,61,66,70,770.42

8. Capital Work In Progress					(Amount in Rupees)
Particulars	Op.bal as	Addition during	Addition during	<b>Deletion during</b>	Balance as on
	on 01.04.2022	Apr-Sep	Oct-Mar	the year	31.03.2023
Const of Boys Hostel 1250 Seated		•		•	
Renovation of Work Shop	1				•
Contn.main gate & guard office	1	•	•		•
CPWD Projects	39,31,69,973.00	8,36,75,283.00	1,50,62,000.00	7,47,48,935.00	41,71,58,321.00
Construction of VIP Guest House					•
Construction of hostel annx exist hostel	1				•
Construction of Auditorium	26,78,00,000.00	•	1,36,00,000.00		28,14,00,000.00
Renovation of Academic Building	1	•	•		•
500 Seated Girls Hostel	1		•		
TOTAL	66,09,69,973.00	8,36,75,283.00	2,86,62,000.00	7,47,48,935.00	69,85,58,321.00



Assets Head		GROSS	GROSS BLOCK			DEPRE	DEPRECIATION		NET	NET BLOCK
	Cost as on	Cost as on Addition during	Deductions	Total cost	Opening	On Additions	On Deductions	Total up to the	As at the	As at the
Intangible Assets	01.04.2022	the year	during the	as on 31.03.2023	Depreciation as	during the	during the	year end	current	previous
			year		on 01.04.2022	year	year		year end	year end
Computer Software		-	_		-	-	-	-	-	-
F. Inimals	18 57 99 600 52 8 27 00 141 00	8 27 00 141 00		26 84 99 741 52	15 07 41 759 00 6 14 69 772 52	6 14 69 772 52		21 22 11 531 52 562 88 210 00 3 50 57 841 52	00 016 88 69 5	3 50 57 841 52
Patents	70.000 001 10101	00:11		10.1.1.10.10.10.10.10.10.10.10.10.10.10.		10.1		10.100,11,121,13	2,00,20,00,00	5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5
TOTAL	18,57,99,600.52 8,27,00,141.00	8,27,00,141.00		26,84,99,741.52	15,07,41,759.00 6,14,69,772.52	6,14,69,772.52		21,22,11,531.52 5,62,88,210.00 3,50,57,841.52	5,62,88,210.00	3,50,57,841.52

SCHEDULE 4A- PIAN											
SCHEDULE 4- FIXED ASSETS	ETS										
DESCRIPTION			GROSS BLOCK	3LOCK			DEPRE	DEPRECIATION		NE	NET BLOCK
	Cost as on	Cost as on	Addition during	Deductions	Total cost	Opening	On Additions	On Deductions	Total up to the	As at the	As at the
Tangible Assets	01.04.2022	01.04.2022	the year	during the	as on 31.03.2023	Depreciation as	during the	during the	yearend	current	previous
		( Arter Adjustment)		year		on 01.04.2022	year	year		year end	year end
I. Land:											
a) Freehold	1,03,05,688.62	1,03,05,688.62		,	1,03,05,688.62			,		1,03,05,688.62	1,03,05,688.62
b) Leasehold											
II. Buildings:											
a) On Freehold Land	3,83,40,23,868.44	3,83,40,23,868.44	4,87,24,171.00		3,88,27,48,039.44	79,85,59,325.79	6,86,57,668.00		86,72,16,993.79	3,01,55,31,045.65	3,03,54,64,542.65
b) On Leasehold Land				,		·					ı
c) Ownership Flats/ Premises			,			·					ı
d) Superstructures on Land											
not belonging to educational institutions											
III. Plant, Machineries & Equip.	37,27,59,636.22	37,27,59,636.22	4,97,41,980.00		42,25,01,616.22	24,81,00,026.50	1,06,97,151.10		25,87,97,177.60	16,37,04,438.62	12,46,59,609.72
IV. Vehicles	17,49,958.22	17,49,958.22			17,49,958.22	17,49,957.22			17,49,957.22	1.00	1.00
V. Furniture & Fixture	25,29,27,946.28	25,29,27,946.28	4,44,51,938.00		29,73,79,884.28	13,01,03,343.33	1,72,42,797.58		14,73,46,140.91	15,00,33,743.37	12,28,24,602.95
VI. Office Equipment	11,31,705.95	11,31,705.95			11,31,705.95	9,35,847.28	26,708.00		9,62,555.28	1,69,150.68	1,95,858.68
VII. Computer / Peripherals	15,38,43,320.42	15,38,43,320.42	4,46,88,409.00		19,85,31,729.42	12,14,08,650.95	1,86,06,490.71		14,00,15,141.66	5,85,16,587.76	3,24,34,669.47
VIII. Electrical Installations	7,70,71,505.91	7,70,71,505.91			7,70,71,505.91	4,79,08,294.78	22,33,549.00		5,01,41,843.78	2,69,29,662.13	2,91,63,211.13
IX. Library Books	21,37,37,694.75	21,37,37,694.75	1,93,49,577.00		23,30,87,271.75	13,71,04,751.53	1,67,13,886.90		15,38,18,638.43	7,92,68,633.32	7,66,32,943.21





X. Tube wells & water supply			1	ı		1	_	1		
XI. Other Fixed Assets				1	1					
A. Total of Current Year	4,91,75,51,324.81	4,91,75,51,324.81	20,69,56,075.00	5,12,45,07,399.81	1,48,58,70,197.38	13,41,78,251.29		1,62,00,48,448.66	3,50,44,58,951.149	3,43,16,81,127.42

C. TEQIP Assets									
Building (TEQIP-I)	98,97,307.00	98,97,307.00		 98,97,307.00				98,97,307.00	98,97,307.00
Equipment TEQIP-I	15,50,65,026.00	15,50,65,026.00		 15,50,65,026.00				15,50,65,026.00	15,50,65,026.00
Vehicle(TEQIP-I)	5,15,937.00	5,15,937.00		5,15,937.00				5,15,937.00	5,15,937.00
Fumiture (TEQIP-I)	79,98,127.00	79,98,127.00		 79,98,127.00				79,98,127.00	79,98,127.00
Library Books (TEQIP-I) 1,15,13,246.00	1,15,13,246.00	1,15,13,246.00		 1,15,13,246.00			,	1,15,13,246.00	1,15,13,246.00
TOTAL (C)	TOTAL (C) 18,49,89,643.00	18,49,89,643.00		 18,49,89,643.00				18,49,89,643.00	18,49,89,643.00
TOTAL (A+B+C)	5,10,25,40,967.81	TOTAL (A+B+C) 5,10,25,40,967.81 5,10,25,40,967.81 20,69,56,075.00	20,69,56,075.00	5,30,94,97,042.81	5,30,94,97,042.81 1,48,58,70,197.38 13,41,78,251.29	13,41,78,251.29	1,62,00,48	1,62,00,48,448.66 3,68,94,48,594.15 3,61,66,70,770.42	3,61,66,70,770.42

8. Capital Work In Progress					(Amount in Rupees)
Particulars	Op.bal as	Addition during	Addition during	Deletion during	Balance as on
	on 01.04.2022	Apr-Sep	Oct-Mar	the year	31.03.2023
Const of Boys Hostel 1250 Seated		•		•	•
Renovation of Work Shop		•		ı	•
Contn.main gate & guard office	•			ı	•
CPWD Projects	39,31,69,973.00	8,36,75,283.00	1,50,62,000.00	7,47,48,935.00	41,71,58,321.00
Construction of VIP Guest House				ı	•
Construction of hostel annx exist hostel		•		ı	•
Construction of Auditorium	26,78,00,000.00		1,36,00,000.00		28,14,00,000.00
Renovation of Academic Building		•	ı	ı	•
500 Seated Girls Hostel	•	•	•		•
TOTAL	66,09,69,973.00	8,36,75,283.00	2,86,62,000.00	7,47,48,935.00	69,85,58,321.00



		GROSS BLOCK	BLOCK			DEPRE	DEPRECIATION			NET BLOCK
Cc Intangible Assets 01	Cost as on 01.04.2022	Addition during Deductions the year vear	Deductions during the	Total cost as on 31.03.2023	Opening Depreciation as on 01.04.2022		On Additions On Deductions Total up to the during the during the year ovear	Total up to the year end	As at the current vear end	As at the previous vear end
Computer Software -										
E- Journals (18,57,	18,57,99,600.52	8,27,00,141.00	-	26,84,99,741.52	15,07,41,759.00 6,14,69,772.52	6,14,69,772.52	-	21,22,11,531.52 5,62,88,210.00	5,62,88,210.00	3,50,57,841.52
Patents -										
<b>TOTAL</b> 18,57,99,600.52		8,27,00,141.00	-	26,84,99,741.52	15,07,41,759.00 6,14,69,772.52	6,14,69,772.52		21,22,11,531.52 5,62,88,210.00	5,62,88,210.00	3,50,57,841.52

3 2 1 2 8			Gross Block	Block	_		Depreciation for t	he Year2022-23		Net Block	ock
3 2 1	Assets Heads	Op. Balance 01.04.22	Additions	Deductions	Cl. Balance	Dep. Opening Balance	Dep. for the Deduction/ Year Adjustment	Deduction/ Adjustment	Total Depreciation	31-03-2023	31-03-2022
3 3	Land										
3	Site Development										
	Buildings										
4	Roads & Bridges										
2	Tubewells & Water Supply										
9	Sewerage & Drainage										
7	Electrical Installation and equipment										
8	Plant & Machinery										
6	Scientific & Laboratory Equipment										
10	Office Equipment		-								
11	Audio Visual Equipment				_						
12	Computers & Peripherals										
13	Furniture, Fixtures & Fittings										
14	Vehicles										
15	Lib. Books & Scientific Jouranls										
16	Small Value Assets										
	Total (A)										
17	Capital Work in Progress (B)										



s Š	Assets Heads	Op. Balance 01.04.18	Additions	Deductions	Cl. Balance	Dep. Opening Dep. for the Balance Year	Dep. for the Year	Deduction/ Adjustment	Total Depreciation	31-03-2023	31-03-2022
18	18 Computer Software										
19	E-Jounals										
20	Patents										
	Total (C)										
	Grand Total ( A+B+C)										

SCHEDULE 4C-IN	SCHEDULE 4C-INTANGIBLE ASSETS									
Assets Head		GROSS	GROSS BLOCK			DEPRECIATION	ATION		NET BLOCK	OCK
	Cost as on	Addition during	Deductions	Total cost	Opening	On Additions	On Additions On Deductions	Total up to the	As at the	As at the
Intangible Assets	01.04.2022	the year	during the	as on 31.03.2022	Depreciation as	during the	during the	yearend	current	previous
			year		on 01.04.2022	year	year		year end	year end
Computer Software		,			1	-	-	-		1
E- Journals		ı			,			,		
Patents										
TOTAL	-	,	,						-	1

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SCHEDULE 4C (i)- PATENTS AND COPYRIGHTS							
Particulars	Op. Balance	Addition	Gross	Amortization	Net Block 2023	Net Block	2022
A. Patents Granted 1 Balance as on 31.03.14 of Patents obtained in 2008-09							
(Orginal Value- Rs/-)  2 Balance as on 31.03.14 of Patents obtained in 2010-11							
( Orginal Value- Rs/-) 3 Balance as on 31.03.14 of Patents obtained in 2012-13				NIL			
( Orginal Value- Rs/-)							
4 Patents granded during the Current Year Total							
Particulars	Op. Balance	Addition	Gross	Patents Granted/Rejected	Net Block 2022-23	Net Block	2021-22
A. Patents Pending in respect of Patents applied for							
1 Expenditure incurred during 2009-10 to 2011-12							
2 Expenditure incurred during 2012-13							
2 Expenditure incurred during 2013-14							
Total							
Grand Total (A+B)							



## NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR, DURGAPUR-713209, INDIA Schedule to Income & Expenditure Account for the year ended 31.3.2023

SCHEDULE 9- ACADEMIC RECEIPTS (Amount in Rupees)

SCHEDULE 9- ACADEMIC RECEIPTS	<u> </u>	(Amount in Rupees)
	Current Year	Previous Year
FEE FROM STUDENTS		
Academic		
1. Tuition fee	29,61,76,571.00	29,50,83,296.10
2. Admission fee		-
3. Enrolment fee	-	-
4. Library Admission fee	-	-
5. Computer fee	-	-
6. Art & Craft fee	-	-
7. Registration fee	-	-
8. Syllabus fee	-	<u> </u>
TOTAL (A)	29,61,76,571.00	29,50,83,296.10
Examinations		
1. Admission test fee	-	-
2. Annual Examination fee	-	-
3. Mark sheet, certificate fee	-	-
TOTAL (B)	-	-
Other fees		
1. Identity card fee	_	_
2. Fine/Miscellaneous fee	-	_
3. Medical fee	-	_
4. Transportation fee	-	_
5. Hostel fee	2,54,23,907.00	2,23,02,374.00
6. Institute fee	6,65,80,543.71	3,07,44,854.60
7. Insurance & Migration charges	-	-
8. Provisional certificate fee	1,000.00	
9. Seat rent & Electricity charges from Student hall	, -	_
10. Students Activity fees	-	-
11. Transcription fees	2,000.00	7,000.00
12. Training & Placement fees	-	-
13. Education Verification	2,77,626.00	2,52,500.00
14. Miigration Fees	5,500.00	-
15. Examination Fees	-	-
16. Library Charges	55,07,700.00	-
TOTAL (C)	9,77,98,276.71	5,33,06,728.60
Sale of syllabus and Question Paper, etc.	_	-
Sale of Prospectus including admission forms	_	<u>-</u>
TOTAL (D)	_	-
TOTAL (D)		
GRAND TOTAL (A+B+C+D)	39,39,74,847.71	34,83,90,024.70
CICARD TOTAL (ATBIOLD)	33,33,17,071.11	34,03,30,024.70

#### SCHEDULE 10 - GRANTS & DONATIONS (Irrevocable Grants & Subsidies Received)

(	(Amount In Rupees)

	Plar	1		Total	Non Plan	Current Year	Previous Year
Particulars			UGC	Plan	UGC	Total	Total
	Govt of India	Plan	Specific Schemes				
Balance B/F							
Add: Receipts during the Year	1,58,60,64,622.00					1,58,60,64,622.00	1,26,09,38,354.00
Total							
Less; Refund to UGC							
Balance							
Less: Utilised for Capital Expenditure (A)							
Balance							
Less: Utilised for Revenue Expenditure (B)	1,58,60,64,622.00					1,58,60,64,622.00	1,26,09,38,354.00
Balance C/F (C)	-					-	-

#### SCHEDULE 11 - INCOME FROM INVESTMENTS

## (Amount in Rupees)

	Current Year	Previous Year
Investment from Earmarked/Endowment Fund		
1) Interest		
a) On Govt. Securities	-	- ,
b) Other Bonds/Debentures	-	-
2) Income received		
a) Each Fund separately	-	-
3) Income Accrued		
a) General Fund	6,79,33,246.00	6,41,31,539.00
4) Others (specify)	-	-
TOTAL	6,79,33,246.00	6,41,31,539.00
TRANSFERRED TO EARMARKED/ ENDOWMENT FUNDS	-	-

#### SCHEDULE 12 - INTEREST EARNED

### (Amount in Rupees)

SCHEDULE 12 - INTEREST EARNED			Rupees)
		Current Year	Previous Year
1) On Saving Accounts with Scheduled Banks			
		6,18,68,501.00	6,10,47,456.00
2) On Loans			
a) Employees/Staff		-	-
b) Others		-	-
3) On Debtors and Others Receivables		-	-
тс	OTAL	6,18,68,501.00	6,10,47,456.00
		-	-



SCHEDULE 13- OTHER INCOME	Current Year	Previous Year
A. Income from Land & Building		77077040 704
Hostel room rent		
	-	
2. License fee	11,16,418.00	11,42,898.00
Hire charges of Auditorium/Play ground/ Convention Centre, etc.		
4. Electricity & water charges	23,05,873.41	22,50,396.00
TOTAL (A	34,22,291.41	33,93,294.00
B. Sale of Institute's publications		-
TOTAL (E	3)	
C. Income from holding events	<del>2_</del>	
Gross receipts from annual function/ sports carnival	_	
Less: Direct expenditure incurred on the annual function/sports carnival	_	
Gross receipts from fetes	_	
Less: Direct expenditure incurred on the fetes	_	
Gross receipts from educational tours	_	
Less: Direct expenditure incurred on the tours	_	
4. Others(to be specified and separately disclosed)	-	
TOTAL (C	-	
·	7	
D. Interest on Term Deposits		
a) with scheduled banks	-	-
b) with non-scheduled banks	-	-
c) with institutions	-	-
d) others	-	-
TOTAL (D	-	-
E. Interest on Debtors and Other Receivables	-	-
F. Others		
Electric charges & Collection of room rent	39,06,236.39	43,85,819.52
Garage rent	840.00	585.00
Guest house income	15,37,774.00	8,84,354.00
Misc Charges	2,98,493.00	5,66,775.00
Liquidated Damages	46,090.00	46,969.00
Other Receipts	37,56,196.00	18,85,120.00
Overhead Charges of Projects	-	2,43,000.00
Registration Fees for Ph.D	32,300.00	5,72,000.00
Sale Of Application , Tender form	34,120.00	11,23,050.00
Income from Testing & Consultancy	3,56,800.00	17,62,748.00
Conference and seminar received	-	1,03,480.00
TOTAL (F	99,68,849.39	1,15,73,900.52
GRAND TOTAL (A+B+C+D+E+F		1,49,67,194.52
· · · · · · · · · · · · · · · · · · ·	1,33,31,140.00	1,43,07,134.32
SCHEDULE 14- PRIOR PERIOD INCOME		
		(Amount in Rupees)
	Current Year	Previous Year
1.Academic Receipts	-	-
2. Income From Investments	-	-
3. Interest Earned	_	_
or micross Euritou	<del>-</del>	1
4. Other Incomes		



SCHEDULE 15 - STAFF PAYMENTS & BENEFITS

(Amount in Rupees)

		Current Year	Previous Year
a) Salaries and Wages		73,15,34,340.00	68,74,99,369.00
b) Allowances and Bonus		-	-
c) Contribution to Provident Fund		-	-
d) Contribution to Other Fund(specify)		-	-
e) Pension & Gratuity charges		22,14,88,798.00	20,79,13,853.00
f) Staff Amenities		2,75,000.00	86,880.00
g) Retirement and Terminal Benefits		-	-
h) LTC facility		66,88,728.00	11,01,027.00
i) Medical facility		1,59,72,778.00	1,34,23,274.00
j) Children Education Allowance		59,51,847.00	65,21,682.00
k) TA/DA expenses		56,98,026.00	11,32,306.00
I) Others (specify)			
i) New Pensioner Scheme Employer Contribution		-	2,63,37,061.00
ii) Scholarship to Institute Research Scholar		8,12,18,343.00	8,80,23,275.00
iii) Scholarship (M.Tech)		4,45,44,516.00	6,59,94,844.00
	TOTAL	1,11,33,72,376.00	1,09,80,33,571.00

SCHEDULE 16 - ACADEMIC EXPENSES

(Amount in Rupees)

	Current Year	Previous Year
a) Laboratory expenses	-	-
b) Field work/Participation	-	-
c) Seminar/Workshop	-	-
d) Payment to visiting faculty	-	-
e) Examination	70,76,062.82	33,00,912.00
f) Student Welfare Expenses	-	-
g) Admission expenses	-	3,55,300.00
h) Convocation expenses/college week	26,67,472.00	19,07,230.00
i) Publications	-	-
j) Stipend/means-cum-merit scholarship	-	-
k) Subscription expenses	-	-
I) Library Journal	13,869.00	6,335.00
m)Republic Day & Independence Day expenses	1,75,940.00	1,01,265.00
n) Registration Fees	47,17,875.00	2,35,777.00
o) CCB-Counselling (CSAB)	-	15,000.00
p) Conference and seminar	3,95,825.00	-
q) Inter NIT meet	5,67,756.00	-
r) Student Amenities	5,17,829.00	-
Т	OTAL 1,61,32,628.82	59,21,819.00



SCHEDULE 17 - ADMINISTRATIVE AND GENERAL EXPENSES		(Amount in Rupees)
	Current Year	Previous Year
a) Electricity expenses	6,24,31,793.00	2,43,53,332.00
b) Water Charges	3,48,025.00	17,79,049.00
c) Insurance	28,41,264.00	23,20,877.00
d) Rent, Rates and Taxes(including property tax)	-	-
e) Postage & Telegram	1,80,110.00	1,68,777.00
f) Telephone & Internet charges	8,71,891.00	8,54,539.00
g) Printing and Stationary	11,17,045.00	5,78,542.00
h) Travelling & Conveyance expenses( visiting Lecturers)	24,38,171.00	32,72,515.00
i) Expenses on Seminar/Workshops	-	
j) Medical Expenses for Students	-	
k) Auditors Remuneration	13,32,255.00	5,21,440.00
I) Professional charges		
m) Advertisement & Publicity	2,41,503.00	2,10,810.00
n) Magazines & Journals	_	
o) Others(specify)	_	
i) Ambulance Charges	18,01,038.00	16,16,422.00
ii)Bank Charges	1,45,350.83	23,047.64
iii)Bank charges of Pension A/c	_	
iv)Campus interview	_	
v)Consultancy Works	6,64,435.00	1,59,720.00
vi)Contingencies to Institute Research Scholar	1,36,55,937.00	56,68,007.00
vii)Computer Network & Bandwidth	62,71,936.00	48,42,873.00
viii)Departmental Operating Cost	62,29,769.00	35,68,670.00
ix)Drug & Medicine for hospital	23,79,081.00	2,06,976.00
x)Extra-curricular activities	84,94,593.00	8,92,693.00
•		
xi)Upgradation of Inst. Automation Software	27,02,374.00	4,88,340.00
xii)Faculty Amenities	99,249.00	1,24,833.00
xiii)Faculty Professional Development	80,58,377.00	38,85,006.00
xiv)Fuel for DG Set	6,83,760.00	5,41,008.00
xv)General Store Materials	11,28,648.00	23,15,006.00
xvi)Hostel Employees Welfare Account	18,36,474.00	(8,30,713.00)
xvii)Law and Legal Expenses	53,44,518.00	8,73,950.00
xviii)Meeting Expenses	4,73,512.00	1,62,308.00
xix)Miscellaneous Expenses	12,02,495.00	7,04,440.00
xx)Extra-curricular activities	-	
xxi)Office Expenses	6,06,550.00	1,42,242.00
xxii)Outsourcing	17,25,69,481.00	14,87,36,809.00
xxiii)Rent for Cell at New Delhi	7,00,000.00	
xiv)Remuneration to specialist (Physician)	48,95,405.00	49,66,200.00
xxv)Testing and consultancy expenditure	1,92,781.00	
xxvi)Accreditation of Engineering Courses	13,10,004.00	
xxvii)Consumable Charges	38,24,512.00	20,00,496.00
xxviii)Expenses for college Guest		
xxix) Guest House Expenditure	29,70,253.00	14,05,467.00
xxx) Training & Upgradation of Staff	66,687.00	1,34,796.00
xxxi) Membership of professional socities	45,630.00	1,02,630.00



xxxii) New Pension/Pension Subscription		-	36,93,904.00
xxxiii)Library Charges		-	-
xxxiv) Sale Of Application , Tender form		1,06,000.00	-
xxxv)Garbage Bin Expenses		-	2,36,250.00
xxxvi)COVID-19 Expenses		12,750.00	15,22,593.00
xxxvii) TA and Remuneration to Expert/Board member		14,39,144.00	19,36,599.00
xxxviii) TA to staff for Medical Purpose`		64,597.00	-
	TOTAL	32,17,77,397.83	22,41,80,453.64

SCHEDULE 18 - TRANSPORTATION EXPENSES		(Amount in Rupees)
	Current Year	Previous Year
Vehicles (owned by educational institution)		
a) Running expenses	-	-
b) Repairs & Maintenance	-	-
c) Insurance expenses	-	-
2. Vehicles taken on rent/lease		
a) Rent/Lease expenses	36,61,973.00	18,08,890.00
TOTAL	36,61,973.00	18,08,890.00

SCHEDULE 19 - REPAIRS & MAINTENANCE			(Amount in Rupees)
		Current Year	Previous Year
a) Building		1,33,30,284.15	86,35,327.00
b) Furniture & fixtures		2,07,075.00	7,61,138.00
c) Plant & Machinery		-	-
d) Office Equipments		1,53,52,559.00	1,16,38,980.00
e) Cleaning materials & services		2,92,500.00	36,54,508.00
f) Others(specify)			
Contingencies: Medical		2,19,192.00	2,38,314.00
Maintenance of Electrical Installation		90,51,114.00	49,59,892.00
Maintenance of College Computer		2,69,961.00	1,08,192.00
Contingencies: Maintenance		2,05,286.00	37,836.00
Contingencies for M.Tech Scholar		70,012.00	-
Consultancy for various Infra Dev works		24,485.00	-
Main. Of Road Drains, & Internal telephone system.			
	TOTAL	3,90,22,468.15	3,00,34,187.00

SCHEDULE 20-FINANCE COSTS			(Amount in Rupees)
		Current Year	Previous Year
a) Interest on fixed loans		-	-
b) Interest on other loans-HEFA		42,64,622.00	13,81,352.00
c) Bank charges		-	354.00
d) Others (specify)		-	-
	TOTAL	42,64,622.00	13,81,706.00







**SCHEDULE 21- OTHER EXPENSES** 

(Amount in Rupees)

	Current Year	Previous Year
a)Provision for Bad and Doubtful Debts/Advances	-	-
b) Irrecoverable Balances Written-off	-	-
c) others(specify) CCMT-NIMCET	-	-
TOTAL	-	-

SCHEDULE 22- PRIOR PERIOD EXPENSES		(Amount in Rupees)
	Current Year	Previous Year
a)Prior Period Expense c) others(specify)	-	11,97,575.00
TOTAL	-	11,97,575.00

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	<b>ENDOWMENT FUNDS</b>										Rupees)
Sr No.		Opening Balance	3alance	Additions during the Year	y the Year	TOTAL		Expenditure on the object during the year	Closing Balance	alance	TOTAL
	Endowment	Endowment	Accumulated interest	Endowment	Interest	Endowment	Accumulated interest		Endowment	Accumulated interest	
Ì	1 GRANT FROM GOI	1,54,80,64,508.27		21,91,00,000.00		1,76,71,64,508.27			1,76,71,64,508.27	,	1,76,71,64,508.27
. 1	2 IT FUND	7003661.63				70,03,661.63			70,03,661.63	'	70,03,661.63
.,	3 OTHER SCHOLARSHIP	12141912.58				1,21,41,912.58			1,21,41,912.58		1,21,41,912.58
7	4 DONATION FUND	3003438.50		383185.00		33,86,623.50		36367.00	33,50,256.50	'	33,50,256.50
/	5 OTHERS	207959062.53		15473166		22,34,32,228.53		9559187.00	21,38,73,041.53		21,38,73,041.53
	TOTAL	1,77,81,72,583.51		23,49,56,351.00		2,01,31,28,934.51			- 2,00,35,33,380.51	•	2,00,35,33,380.51



## SCHEDULE - 3C UNUTILISED GRANTS FROM UGC, GOVERNMENT OF INDIA AND STATE GOVERNMENT

Amount in Rupees **Current Year** Previous Year A. Plan Grants Government of India Balance B/F 2,37,00,000.00 Add: Receipt during the year 21,91,00,000.00 27,15,53,000.00 Total(a) 21,91,00,000.00 29,52,53,000.00 Less: Refund Less: Utilized for Revenue Expenditure Less: Utilized for Capital Expenditure 21,90,99,648.00 23,17,63,174.00 21,90,99,648.00 23,17,63,174.00 Total(b) Unutilized carried forward (a-b) B. UGC Grant : Plan Balance B/F Add: Receipt during the year Total(c) Less: Refund Less: Utilized for Revenue Expenditure Less: Utilized for Capital Expenditure Total(d) Unutilized carried forward (c-d) C. UGC Grant : Non Plan Balance B/F Add: Receipt during the year Total(e) Less: Refund Less: Utilized for Revenue Expenditure Less: Utilized for Capital Expenditure Total(f) Unutilized carried forward (e-f) D. Grant from State Govt. Balance B/F Add: Receipt during the year Total(g) Less: Utilized for Revenue Expenditure Less: Utilized for Capital Expenditure Total(h) Unutilized carried forward (g-h) Grand Total (A+B+C+D)

## NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR :: INDIA ANNEXURE TO THE BALANCE SHEET AS ON 31.03.2023

	_				(Amount in Rupees)
1. CORPUS FUND		Opening Balance	Add: During the yr.	Less: During the yr	Closing Balance
A.Corpus Fund		62,81,35,424.14	22,50,811.25	1,11,66,155.95	61,92,20,079.44
	TOTAL	62,81,35,424.14	22,50,811.25	1,11,66,155.95	61,92,20,079.44

B. GENERAL FUND				(Amount in Rupees
	Opening Balance	Add: During the yr.	Less: During the yr	Closing Balance
1. Capital Reserve				
Grant for establishment of Book Bank	1,02,380.00	-	-	1,02,380.00
Grant from UNESCO, Equip and Furniture	31,71,384.19	-	-	31,71,384.19
Repayment of loan capitalised	38,85,828.00	-	-	38,85,828.00
2.General Reserve				
Interest on investment of Corpus Fund	3,52,73,785.00	1,53,44,115.00		5,06,17,900.00
Interest on investment of General Fund	-	-		-
Interest on investment Misc Fund	1,20,35,793.00	13,24,313.00		1,33,60,106.00
Interest on investment Maint. Fund	-	-		-
Interest on Saving A/c Corpus Fund	31,296.00	4,938.00		36,234.00
Interest on Saving A/c Dep Fund	59,442.00	8,497.00		67,939.00
Interest on savings A/c Maint. Fund	35,837.00	5,767.00		41,604.00
Interest on savings A/c Staff Dev Fund	50,233.00	10,101.00		60,334.00
Revenue fund capitalised	1,00,80,598.91	-		1,00,80,598.91
Interest on investment of Donation	-	-		-
3.Special Reserve				
Collection of rent upto 1983-84	8,00,513.44	-		8,00,513.44
Opening Grant in Aid, GOI, Non-recurring/ Plan	4,92,08,67,248.50			4,92,08,67,248.50
	4,98,63,94,339.04	1,66,97,731.00		



2.DESIGNATED/EARMARKED/ENDOWMENT FUN	DS			(Amount in Rupees)
A. RESTRICTED FUND	Opening Balance	Add: During the yr.	Less: During the yr	Closing Balance
Grant from GOI				
Grant from GOI for Architect fee	1,00,000.00	-	-	1,00,000.00
Grant-in-aid GOI Centre of Excellence	3,09,52,123.00	-	-	3,09,52,123.00
Grant-in-aid GOI Computer Centre	1,37,48,000.00	-	_	1,37,48,000.00
Grant-in-aid GOI CSE	1,37,74,000.00	-	_	1,37,74,000.00
Grant-in-aid GOI Different Sources	42,33,000.00	-	-	42,33,000.00
Grant-in-aid GOI Electric Degree Course	90,11,000.00	-	-	90,11,000.00
Grant -in-aid GOI Env,Eng.	10,00,000.00	-	-	10,00,000.00
Grant -in-aid GOI, Equipment and Furniture	2,86,15,710.63	-	_	2,86,15,710.63
Grant-in-aid GOI, Inds.Instt. Interaction	7,30,426.04	-	_	7,30,426.04
Grant-in-aid GOI, Institutional Work	38,00,000.00	_	_	38,00,000.00
Grant-in-aid GOI, Mod.Lab	2,91,58,000.00	_	_	2,91,58,000.00
Grant-in-aid GOI, Renovation	2,54,87,000.00	_	_	2,54,87,000.00
Grant-in-aid GOI, Renovation  Grant-in-aid,GOO,VSATwith ERNET	13,00,000.00	-	-	13,00,000.00
		-	-	
Grant-in-aid,GOI & WB,Motor Vehicle	5,71,944.42	-	-	5,71,944.42
Grant-in-aid,GOWB,Land & Dev.	1,10,49,042.35	-	-	1,10,49,042.35
Grant-in-aid, GOI, Over Sight Comm. Non-Plan	32,17,25,000.00	-	-	32,17,25,000.00
Grant-in-aid, GOI, Over Sight Comm. Plan	64,64,00,000.00	-	-	64,64,00,000.00
Grant-in-aid, GOI, TEQIP-I (Net Bal. adjusting Rev Exp.)	18,51,54,978.00	-	-	18,51,54,978.00
Grant-in-aid,AICTE Research (Others)	5,20,000.00	-	-	5,20,000.00
Grant-in-aid,GOI,Research Grant	62,26,783.83	-	_	62,26,783.83
Grant-in-aid,GOI,Plan TSA-35	21,43,28,000.00	21,91,00,000.00		43,34,28,000.00
Grant-in-aid,UGC,Sanskrit Language	1,00,000.00		<u>-</u>	1,00,000.00
Grant-in-aid, AICTE (QIP Policy)	79,500.00	_	_	79,500.00
Information Technology Fund	18,25,134.25	_	_	18,25,134.25
MCA Course Fund	38,10,974.45	_	_	38,10,974.45
M.Tech, Corrosion Science	13,67,552.93	_	_	13,67,552.93
Other Scholarship (Provision)	1,21,41,912.58	-	-	1,21,41,912.58
Other Scholarship (Provision)	1,21,41,912.30	<u>-</u>	<u> </u>	1,21,41,912.56
TOTAL	. 1,56,72,10,082.48	21,91,00,000.00	-	1,78,63,10,082.48
				1
B. EARMARKED/ENDOWMENT FUND	Opening Balance	Add: During the yr.	Less: During the yr	(Amount in Rupees) Closing Balance
Demostra Fund	Opening Balance	Add. During the yr.	Less. During the yr	Closing Balance
Donation Fund Donation -AM Das	1,15,508.90	15,986.00	5,180.00	1,26,314.90
Donation- DM Sen	8,89,850.60	1,00,799.00	21,406.00	9,69,243.60
Donation - DV Sitabai	1,50,000.00	-	-	1,50,000.00
Donation-SN Banerjee (Kalyanshewari Mer)	28,238.00	-	-	28,238.00
Donation-S Pal Chowdhury	1,46,220.00	-	-	1,46,220.00
Donation-S Saha	61,873.00	3,632.00	-	65,505.00
Donation-Prof. D K Pal	2,74,739.00	15,499.00	-	2,90,238.00
Donation-Prof. M S Sinha	3,00,000.00	-	-	3,00,000.00
Donation-Prof. T K Sinha	1,50,000.00	-	-	1,50,000.00
Donation - Parpatidevi Chnadumal Memo	1,62,500.00	-	-	1,62,500.00
Donation - S.N.Roy	48,000.00	47.260.00	9,781.00	48,000.00 7,13,997.00
Donation - Anirhan Mondal				
Donation - Anirban Mondal  Donation - SM Chanda Endowment Fund	6,76,509.00	47,269.00 2,00,000.00	9,761.00	2,00,000.00



Others				
Depreciation Fund	6,28,14,184.00	52,48,603.00	29,91,122.00	6,50,71,665.00
Hostel Employee Welfare Fund	7,00,643.99	-		7,00,643.99
Maintenance Fund	6,75,15,852.00	37,52,509.00	32,00,069.00	6,80,68,292.00
NIMSET Fund	25,06,128.00	13,113.00	-	25,19,241.00
Student aid fund	57,03,192.54	3,87,626.00	1,24,948.00	59,65,870.54
Staff Dev. Fund	6,80,38,989.00	60,71,315.00	32,43,048.00	7,08,67,256.00
Steel Chair Professor Fund	6,80,073.00	-		6,80,073.00
TOTAL	20,79,59,062.53	1,54,73,166.00	95,59,187.00	21,38,73,041.53
GRAND TOTAL(A+B)	1,77,81,72,583.51	23,49,56,351.00	95,95,554.00	2,00,35,33,380.51

4. CURRENT LIABILITIES & PROVISIONS			1	(Amount in Rupees)
	CURREN	ΓYEAR	PREVIOU	S YEAR
A. CURRENT LIABILITIES				
1. Deposits from Staff				
Security Deposit from Staff (L)	-		-	
Group Insurance	5,23,200.69		5,25,071.69	
CTD/RD	3,31,473.82		16,54,972.82	
Centre Expenses	-	8,54,674.51	-	21,80,044.51
2. Deposits from Students				
Students Health Home	-		-	
Medical Exam. Fees	-		-	
Mess Caution Money	-		-	
Mess Entrance Fees	-		-	
Mess A/c Hall-9 Payable	-		-	
Excess deposit from students	-		-	
College Caution Money	-		-	
Athletic Club Fund	-	-	-	-
3. Sundry Creditors				
a) For Goods & Services				
EMD/SD for suppliers	2,02,03,127.16		1,96,65,062.42	
Security deposit from contractors	15,97,399.00		14,33,695.00	
EMD/SD for suppliers - TEQIP-I	4,82,133.00	2,22,82,659.16	4,82,133.00	2,15,80,890.42
b) Others				
Building and other Capital work Payable	-		-	
PWD (Burdwan Div.) payable	<u>-</u>	-	-	-
4. Advances Received	-		-	
5. Interest accrued but not due on:				
a) Secured Loans /borrowings	-		-	
b) Unsecured Loans /borrowings	-		-	



6. Statutory Liabilities(GPF, TDS, WC TAX, CPF, GIS, NPS):				
a) Overdue	-		-	
b) Others				
Professional Tax	1,48,733.00		1,49,523.00	
Professional Tax (hostel emp.)	16,310.00		16,310.00	
Education Cess	1,062.00		1,062.00	
		1,66,105.00		1,66,895.00
7. Other Current liabilities				
a) Salaries				
Outstanding liabilities- Salary & others	5,55,05,183.62	5,55,05,183.62	9,61,64,746.62	9,61,64,746.62
b) Receipts against sponsored projects				
Project - SK Chatterjee	-		-	
PMGSY Training Project	-		-	
Project DST Green Tech Chemical	-		-	
Project - Ramalingaswami Fellow	-		-	
CEP NIT Durgapur Fund	91,04,831.03		-	
SRCC A/c	25,71,878.00		59,49,186.00	
SRCC Fund A/c	-	1,16,76,709.03	-	59,49,186.00
c) Receipts against sponsored fellowships & scholarships				
a) Other Scholarship	1,48,03,396.93		92,38,000.43	
b) NSS A/C	-	1,48,03,396.93	-	92,38,000.43
d) Unutilised Grants	-		-	
e) Other funds	-		-	
i) Pension & Gratuity Fund	4,83,15,945.75		4,83,15,945.75	
ii) Class Projects	12,679.65		12,679.65	
iii) Cultural Club Fund				
iv) Contributory Provident Fund	9,76,98,663.19		9,76,98,663.19	
v) General Provident Fund	-		41,60,34,551.48	
vi) Interest of GPF Investment	-		37,41,56,584.00	
vii) Interest on Savings Bank A/C-GPF	-		1,52,91,006.68	
viii) Interest on Inv.Pension Aid Fund Invest.	7,08,79,080.00		6,39,57,681.00	
ix) Interest on TEQIP-I Bank A/c	6,26,341.00		5,69,916.00	
x) Interest on savings Bank A/c-Pension & Gratuity	32,94,937.97		31,63,283.97	1,01,92,00,311.72
xi) Interest on savings Bank A/c-CEP NIT Dgp	1,27,525.00	22,09,55,172.56		
g) Other Liabilities	-		-	
Festival Advances (hostel employee)	-		-	
Group Insurance (Hostel employee)	-		-	
Advances for scooter / Bi-cycle	8,98,099.00		8,35,138.00	
Fraternity	35,820.00		83,422.00	
Co-Op Credit Society Ltd.	-	9,33,919.00	-	9,18,560.00
TOTAL (A)		32,71,77,819.81		1,15,53,98,634.70

B. PROVISIONS		
1. For Taxation		
2. Gratuity		
3. Super Annuation/Pension		
4. Accumulated leave Encashment		
5. Expenses payable		
6. Trade Warranties/Claims		
7. Others (Specify)		
TOTAL (B)	-	-
TOTAL (A+B)	32,71,77,819.81	1,15,53,98,634.70

5. Investment of Earmarked/Endowment Fund		(Amount in Rupees
	Current Year	Previous Year
Investment donation (AM Das)	1,51,698.00	1,41,589.00
Investment donation (DM Sen)	10,81,450.00	9,95,140.00
Investment donation (D K Pal)	3,13,637.00	2,98,138.00
Investment donation(Airvan Mondal)	7,01,387.00	6,66,728.00
Investment donation (SN Banerjee)	30,928.00	29,429.00
Investment donation (S Palchowdhury)	1,63,286.00	1,53,478.00
Investment donation (NG & H SAHA)	73,512.00	69,880.00
Investment donation (SM Chanda)	2,00,000.00	
Investment - Corpus Fund	18,37,63,551.00	17,31,43,886.00
Investment -Maintenance Fund	6,62,30,784.00	6,28,42,583.00
Investment -NIMSET	25,19,241.00	25,06,128.00
Investment- Staff Development Fund	6,76,24,768.00	6,31,59,090.00
Investment-Depreciation Fund	6,23,65,109.00	5,82,57,770.00
Investment - Students Aid Fund	43,23,440.00	40,65,766.00
Investment - Fixed Deposit- TEQIP-I	10,07,560.00	9,58,718.00
TOTAL (A)	39,05,50,351.00	36,72,88,323.00
Investment of Miscellaneous funds		(Amount in Rupees
Investment to SBI, REC Branch	1,84,32,504.00	1,75,38,975.00
Investment -Hostel Employee welfare fund	1,55,336.00	1,47,806.00
Investment- Mess Caution Money	35,03,676.00	33,30,542.00
Investment -Pension aid fund	13,12,08,221.00	12,48,33,169.00
Investment -Student Caution Money	28,75,453.00	28,75,453.00
Investment- Testing and Consultancy	27,89,272.00	25,50,459.00
Investment to General Provident Fund	-	67,92,34,607.00
Investment to General Fund	1,39,60,50,147.00	1,25,53,67,883.00
Investment to New Pension Scheme		1,84,78,592.00
TOTAL (B)	1,55,50,14,609.00	2,10,43,57,486.00
GRAND TOTAL (A+B)	1,94,55,64,960.00	2,47,16,45,809.00



6Bank Balances		(Amount in Rupees)
	Current Year	Previous Year
With Schedule Banks		
SBI 1A Rec A/c	2,19,72,77,769.46	2,02,04,37,083.28
SBI, GPF Savings Bank A/c	-	12,62,47,535.16
SBI Continuing Edu. Centre Sav Bank A/c		
SBI Pension & Gratuity Sav. Bank A/c	10,68,971.36	2,17,32,957.36
SBI College Caution Money	8,687.82	8,687.82
Canara Bank Savings Bank A/c No-5494	20,36,810.60	19,78,781.60
Canara Bank Extn. Counter Savings Bank A/c	44,78,958.52	4,93,37,026.08
SBI New Pension Scheme Bank A/c	-	38,88,829.25
Canara Bank A/c No-1111	1,73,422.00	1,68,484.00
Canara Bank A/c No-1113	2,98,327.00	2,89,830.00
Canara Bank A/c No-1114	2,02,500.00	1,96,733.00
Canara Bank A/cNo-1115	3,54,654.00	3,44,553.00
Canara Bank TEQIP-I	2,66,249.00	2,58,666.00
RBI A/c No-10680001001	4,71,68,503.00	9,72,242.00
SBI A/c No- 37850318679(CEP NIT Durgapur)	92,32,356.03	
TOTAL	2,26,25,67,208.79	2,22,58,61,408.55

7. LOANS, ADVANCES & DEPOSITS				(Amount in Rupees)
	Curren	nt Year	Previo	us Year
Advances to employees: (Non- interest bearing)				
a) Salary				
Temporary advance to staff	-		-	
Temporary Advance	33,58,262.09	33,58,262.09	25,81,127.09	25,81,127.09
b) Festival				
Festival Advances	2,39,719.39	2,39,719.39	2,39,719.39	2,39,719.39
c) LTC				
Advance for LTC (Home)	-		-	
Advance for LTC (NER)	(600.00)		(600.00)	
Advance for LTC (J & K)	-	(600.00)	-	(600.00)
d) Medical Advance				
Advances for marriage/treatment Temporary Advance to staff for medical treatment	-	-	-	-
) Out				
e) Others (to be specified)	0.40.550.00		0.04.450.00	
Advances to hostel employee	2,19,559.00		2,21,159.00	
CTD/RD Receivable	27,721.00		27,721.00	
EPF contribution to Hostel employee	13,19,273.00		7,07,437.00	
Imprest Advances to staff	39,182.00		21,783.00	
Co-Op Credit Society Ltd.	10,91,714.77		5,04,318.77	
Workers Welfare Cess	21,275.00		21,275.00	
NSS A/C	1,00,326.00	28,19,050.77	1,00,326.00	16,04,019.77



Long Term Advances to employees: (Interest bearing)				
a) Vehicle Loan				
b) Home Loan	_		-	
c) Others (to be specified)				
Advance for Computer to Employees	2,54,990.00	2,54,990.00	3,63,472.00	3,63,472.00
3. Advances and other amounts recoverable in cash				
or in kind or for value to be received				
a) On Capital account				
Advance to supplier	-		-	
b) To suppliers	-		-	
c) Others				
Library Caution Money	14,60,871.00		9,91,871.00	
Income Tax deposit	3,15,72,133.31		1,36,37,754.31	
Goods & Service Tax Deposit	38,18,799.30		3,49,187.97	
Service Tax Deposit	33,59,658.00		25,62,348.00	
Centre Expenses (BU) Recoverable	-		1,12,750.91	
Hostel employee welfare fund recoverable	-		11,899.00	
Income tax recoverable	-		1,11,400.00	
Mess account recoverable	-		3,29,307.04	
CPWD Advance for Completed Project	15,45,56,375.00		14,11,07,440.00	
NIT Durgapur Interest repayment account	5,000.00		5,000.00	
NIT Durgapur principal repayment account	5,000.00	19,47,77,836.61	5,000.00	15,92,23,958.23
4. Prepaid expenses				
a) Insurance	_		_	
b) Other expenses			_	
Prepaid expenses for computer Network & Band				
Prepaid expenses for computer Network & Band	-	-		-
5. Deposits				
a) Telephone				
DET -Durgapur for Telephone	-		-	
b) Lease Rent	-		-	
c) Electricity				
d) AICTE, if applicable	-		-	
e) MCI, if applicable	-		-	
f) Others (to be specified)				
DSP- Preparation of College Oval ground	-		-	
NICL- For transit insurance	-	-	-	-
Income Accrued     a) On Investment from earmarked/ endowment fund				
Accrued Interest on InvstCorpus Fund	48,92,774.00		71,47,325.00	
Accrued Interest on InvstDepreciation fund	11,41,264.00		29,91,122.00	
Accrued Interest on Investment- Donation Anirvan Mondal	12,610.00		9,781.00	
/ um vait Monda	12,010.00	<u> </u>	3,101.00	

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Accrued Interest on Investment- Student aid	4.00.050.00		1 01 010 00	
Fund	1,29,952.00		1,24,948.00	
Accrued Interest on InvstMaint Fund	3,64,308.00		32,00,069.00	
Accrued Interest on InvstStaff Dev Fund ACCRUED INTERST ON INVESTMENT-	16,05,637.00		32,43,048.00	
DONATION AM DAS	5,877.00		5,180.00	
ACCRUED INTERST ON INVESTMENT- DONATION DM SEN	14,489.00		21,406.00	
b) On investment-others				
Accrued Interest on InvstPension aid fund	48,14,167.00		42,67,820.00	
Accrued Interest on InvstGeneral Fund	4,73,56,572.00		3,81,45,742.00	
c) On loans and advances				
d) Others (includes income due unrealized Rs)		6,03,37,650.00		5,91,56,441.00
7. Other receivables				
a) Sales Tax and works contact Tax	33,155.46		33,155.46	
b)Projects Namami Gange	15,101.00		15,101.00	
c)Project - MOES HILLIUM Project	44,71,998.00		44,71,998.00	
d) TEQIP-II	4,15,500.00		4,15,500.00	
e)Income Tax TDS/TCS Refundable	29,91,939.46		29,91,939.46	
f)Receivable from NPS to 1A Rec.	-		1,11,71,132.00	
g) Project Ramalingswami Fellow	3,71,494.00		3,71,494.00	
h)Project Other	1,60,431.00	84,59,618.92	-	1,94,70,319.92
8. Claims Receivable		_		_
TOTAL		27,02,46,527.78		24,26,38,457.40

SCHEDULE TO RECEIPTS AND PAYMENT ACCOUNTS				
Particulars	Amount (In Rs.)	Amount (In Rs.)		
I. Opening Balances	Current Year	Previous Year		
a) Cash Balances		-		
b) Bank Balances				
i. In Current Account				
SBI 1A Rec A/c	2,02,04,37,083.28	1,94,91,53,530.78		
ii. In Deposit Account				
SBI College Caution Money	8,687.82	8,687.82		
SBI New Pension Scheme Bank A/c	-	98,59,275.25		
	8,687.82	98,67,963.07		
iii. In Savings Account				
SBI, GPF Savings Bank A/c	-	15,03,15,796.16		
SBI Pension & Gratuity Sav. Bank A/c	2,17,32,957.36	1,85,35,686.36		
Canara Bank Savings Bank A/c No-5494	19,78,781.60	19,22,422.60		
Canara Bank Extn. Counter Savings Bank A/c 8569101000352	4,93,37,026.08	11,98,15,005.12		
Canara Bank A/c No-1111	1,68,484.00	1,63,685.00		
Canara Bank A/c No-1113	2,89,830.00	2,81,575.00		
Canara Bank A/c No-1114	1,96,733.00	1,91,129.00		
Canara Bank A/cNo-1115	3,44,553.00	3,34,740.00		
Canara Bank TEQIP-I	2,58,666.00	2,51,299.00		
RBI A/C No- 10680001001	9,72,242.00			
	7,52,79,273.04	29,18,11,338.24		



II. Grants Received	Current Year	Previous Year
a) From Government of India		
GRANT IN AID - GOI - PLAN	21,91,00,000.00	27,15,53,000.00
GRANT IN AID - GOI - NON PLAN	1,58,60,64,622.00	1,26,09,38,354.00
	1,80,51,64,622.00	1,53,24,91,354.00
b) From State Government	-	-
)		
c) From other sources (details)	-	-
III. Academic Receipts	Current Year	Previous Year
REGISTRATION FOR PHD	32,300.00	5,72,000.00
CCB COUNCSELLING (CSAB)	15,000.00	-
TUTION FEES	31,28,35,203.00	31,41,37,156.10
INSTITUTE FEES	6,65,80,543.71	3,07,44,854.60
MIGRATION FEES	5,500.00	-
EDUCATION VERIFICATION	2,77,626.00	2,52,500.00
ADMISSION FEES	-	61,100.00
REGISTRATION FEES	21,830.00	-
HOSTEL FEES FROM STUDENTS	3,24,17,807.00	2,70,97,174.00
LIBRARY CHARGES FROM STUDENTS	55,07,700.00	
TRANSCRIPTION FEES	2,000.00	7,000.00
	41,76,95,509.71	37,28,71,784.70
IV. Receipts against Earmarked/ Endowment Funds		
DONATION- SM CHANDA ENDOWMENT FUND	2,00,000.00	-
	2,00,000.00	-

V. Receipts against Sponsored Projects/ Schemes	Current Year	Previous Year
SRCC	52,05,281.00	2,37,19,917.00
PROJECT OTHERS	1,97,863.00	14,55,907.00
	54,03,144.00	2,51,75,824.00

VI. Receipts against sponsored Fellowships and Scholarships	Current Year	Previous Year
OTHER SCHOLARSHIP	60,27,633.50	1,14,69,950.00
SCHOLARSHIP TO INSTITUTE RESEARCH SCHOLAR	1,37,58,420.00	47,98,130.00
SCHOLARSHIP M TECH	7,800.00	72,200.00
	1,97,93,853.50	1,63,40,280.00

VII. Income on Investments from:	Current Year	Previous Year
a) Earmarked/ Endowment Funds		
CORPUS FUND(INSTITUTIONAL)	1,68,324.00	-
NEW PENSION SCHEME FUND	-	-
	1,68,324.00	-



b) Other Investments		
INTEREST ON GPF GENERAL FUND INVESTMENT	1,76,95,583.00	4,87,71,780.00
INTEREST ON PENSION AID FUND INVESTMENT	5,64,24,137.00	-
INTEREST ON GENERAL FUND INVESTMENT	15,92,320.00	
INVESTMENT NEW PENSION SCHEME	_	-
INVESTMENT GENERAL FUND	4,67,56,832.00	-
INVESTMENT IN GENERAL PROVIDENT FUND	7,88,50,943.00	
	20,13,19,815.00	4,87,71,780.00

VIII. Interest received on	Current Year	Previous Year
a) Bank Deposits		
INTEREST FROM TEQIP-I BANK/FD A/C	7,583.00	7,367.00
INTEREST ON BANK A/C- CANARA EXTN	17,24,608.00	48,18,104.00
	17,32,191.00	48,25,471.00

b) Loans and advances	-	-

Saving Bank accounts		
INTEREST ON SAVINGS BANK-GPF	-	15,80,181.0
INTEREST ON SAVINGS BANK-PENSION A/C	1,31,654.00	75,815.00
INTEREST ON SAVINGS ACCOUNT	6,00,85,864.00	5,59,50,653.0
INTEREST ON SAVINGS BANK- CANARA BENACHITY	58,029.00	56,359.00
INTEREST ON SAVINGS BANK- NEW PENSION	-	2,22,340.0
INTEREST ON SAVINGS A/C DEPRECIATION FUND	8,497.00	8,255.00
INTEREST ON SAVINGS A/C CORPUS FUND	4,938.00	4,799.00
INTEREST ON SAVINGS A/C STAFF DEV	10,101.00	9,813.00
INTEREST ON SAVINGS A/C MAINT FUND	5,767.00	5,604.00
	6,03,04,850.00	5,79,13,819.00

IX. Investments encashed	Current Year	Previous Year
CTD/RD	4,02,239.00	5,14,803.00

### X. Term Deposits with Scheduled banks encashed

. Other Income (including Prior Period Income)	Current Year	Previous Year
GUEST HOUSE INCOME	15,37,774.00	8,84,354.00
ELECTRIC CHARGES FROM STAFF	22,13,096.00	21,95,326.00
OVERHEAD CHARGES OF PROJECTS	_	2,43,000.00
	_	585.00
WATER CHARGES RECOVERED	92,777.41	42,643.00
SALE OF TENDER, APPLICATION FORM, XEROX COUPON	34,120.00	11,23,050.00
LIQUIDATED DAMAGES	46,090.00	46,969.00
GARRAGE RENT	840.00	-
ELECTRIC CHARGES AND COLLECTION OF ROOM RENT	38,96,007.39	43,85,819.52
ASSESSED RENT/LICENCED FEES FROM STAFF	11,16,418.00	11,34,848.00
INCOME FROM TESTING AND CONSULTANCY	3,56,800.00	5,89,360.00
TESTING AND CONSULTANCY ACCOUNT	6,72,939.00	11,73,388.00
	99,66,861.80	1,18,19,342.52



II. Deposits and Advances	Current Year	Previous Year
EMD/SD FOR SUPPLIER	28,63,518.74	37,88,077.00
ADVANCE FOR COMPUTER TO EMPLOYEES	1,58,482.00	78,224.00
ADVANCE FOR HOSTEL EMPLOYEES	1,600.00	-
ADVANCE FOR SCOOTER / BI-CYCLE	62,961.00	1,36,255.00
TAMAL TARU GHOSH	105.00	-
ANIRUDDHA MONDAL, PHYSICS DEPTT	30,000.00	-
HIROK CHOWDHURY	3,145.00	-
TAMAL MONDAL	1,73,894.00	-
MANOJ KUMAR OZHA, AP EES DEPT	9,840.00	-
BARNALI MAJI, BIOTECH	19,116.00	-
ASISH MUKHERJEE	18,240.00	-
CO-OP CREDIT SOCIETY LTD	69,71,177.00	70,98,992.00
SANKAR CHANDRA MOI	7,492.00	-
BALA KRISHNA NAGRAJAN	28,478.00	-
SANDIP MOMDAL, EES	9,543.00	-
SOUMYA SEN SHARMA, REGISTRAR	36,464.00	-
SECURITY DEPOSIT FROM CONTRACTORS	1,63,704.00	17,532.00
SUDIPTA KUMAR DAS	-	2,538.00
SUMANTA ROY, EEC	-	2,538.00
HILLOL MUKHERJEE , PTI	29,524.00	-
IMP.ADV HILLOL MUKHERJEE, PTI	6,772.00	-
IMP.ADVANIRBAN SARKAR, DCA	2,700.00	-
IMP.ADVASIT KUMAR, JT REGISTRAR(ESTB)	4,782.00	-
IMP.ADVCHINTA MANI MISHRA WARDEN HALL-4	7,680.00	-
IMP.ADVDAKSHINA RANJAN KISKU, WARDEN HALL-12	5,473.00	-
IMP.ADVMANAB MALLIK, MME	11,340.00	-
IMP.ADVSANDIP MOMDAL, EES	283.00	-
IMP.ADV KALLOL KHAN, ASSO. PROF OF ME	220.00	-
IMP.ADV BARNALI MAJI, BIOTECH	2,210.00	-
IMP.ADVMANAS KUMAR MANDAL, ASSO PROF OF MME DEPT AND CHIEF WARDEN.	3,011.00	-
IMP.ADVTAMAL MONDAL	3,495.00	-
IMP.ADVKAUSHIK MANDAL, HOD DMS	981.00	-
IMP. ADV DEEPAK KUMAR, WARDEN -HALL-2	5,370.00	-
IMP.ADVKALYAN ADHIKARI, HOD EES DEPT.	3,552.00	-
IMP.ADVSAYON BHATTACHERJEE, ASST. REGISTRAR, SW.	2,336.00	-
IMP.ADVTANMOY KUMAR SAHA	214	-
IMP.ADVDEBJANI DUTTA	3810	-
IMP.ADVLAKSHMI KANTA DEY, HOD MATHEMATICS DEPT.	11350	-
IMP.ADVDHRUBAJYOTI ROY	191	-
IMP.ADVB NAGRAJAN	284	-
IMP.ADVBIMAL DAS, WARDEN HALL-09.	1025	-
IMP.ADV JOYDEEP BANERJEE	114	-
IMP.ADVABHIRAM HENS CHE DEPT.	810	-
IMP.ADV PATHIK KUMBHAKAR	818	-
IMP.ADVAMIYA KUMAR SARDAR, AR HOSTEL, WARDEN COUNCIL	6168	-
IMP.ADVAMITA BARIK, ASST. PROF. BIO TECH DEPT. AND WARDEN HALL-13	120	-



XIII. Miscellaneous Receipts including Statutory Receipts	Current Year	Previous Year
GST/ GOODS & SERVICE TAX	52,56,973.67	40,62,908.88

XIV. Any other Receipts	Current Year	Previous Year
HEFA INTEREST A/C	_	-
SERVICE TAX AND EDUCATION CESS	_	1,062.00
CONFERENCE AND SEMINAR	4,50,899.00	9,46,000.00
GROUP INSURANCE	5,93,935.00	6,71,966.00
FRATERNITY	_	79,960.00
HOSTEL EMPLOYEES WELFARE A/C	_	24,96,881.00
MISC. RECEIPTS	2,98,493.00	5,66,775.00
OTHER RECEIPT	37,56,196.00	18,85,120.00
PAY AND ALLOWANCE(NPS SUBSCRIPTION)	3,18,42,840.00	-
PAY AND ALLOWANCE(NPS CONTRIBUTION )	4,43,88,739.00	
NEW PENSION SCHEME(SBI Bank)	1,11,71,132.00	-
INCOME TAX	14,52,40,767.00	11,71,71,703.00
PAY AND ALLOWANCE(GPF SUBSCRIPTION)	6,94,45,882.00	6,77,69,270.00
PROVISIONAL CERTIFICATE FEES	1,000.00	-
	30,71,89,883.00	19,15,88,737.00

Particulars	Amount (In Rs.)	Amount (In Rs.)
I. Expenses	Current Year	Previous Year
a) Establishment Expenses		
GPF FINAL PAYMENT	-	4,86,37,963.00
OUTSTANDING SALARIES AND OTHERS	7,38,09,695.00	1,95,226.00
EPF CONTRIBUTION TO HOSTEL EMPLOYEES	6,11,836.00	7,07,437.00
PROFESSIONAL TAX	790.00	-1,350.00
NEW PENSION SCHEME (SBI Bank )(SUBS & CONT.)	7,60,85,724.00	2,96,59,263.00
PENSION SUBSCRIPTION	6,37,054.00	3,71,702.00
PENSION AND GRATUITY CHARGES	20,45,46,788.00	21,94,85,923.00
LEAVE SALARY	1,42,93,210.00	1,34,18,974.00
LTC EXPENDITURE (NER)	50,988.00	8,57,083.00
LTC EXPENDITURE (ALL INDIA)	63,42,271.00	-
LTC EXPENDITURE (J AND K)	2,53,330.00	44,168.00
TRAINING AND UPGRADATION OF STAFF	66,687.00	1,34,796.00
STAFF AMENITIES	-	26,880.00
PAY AND ALLOWANCE - HOSTEL EMPLOYEES	44,74,764.00	62,50,623.00
PAY AND ALLOWANCE	71,45,75,586.00	65,30,51,018.00
MEDICAL REIMBURSEMENT TO STAFF	1,56,50,358.00	1,34,23,274.00
TA TO STAFF	56,98,026.00	11,32,306.00
CHILDREN EDUCATION ALLOWANCE	59,51,847.00	54,68,682.00
LTC EXPENDITURE (HOME)	42,139.00	1,99,776.00
FACULTY PROFESSIONAL DEVELOPMENT	80,58,377.00	38,85,006.00
DAILY WAGES/CONTRACT WORKERS	17,54,704.00	16,69,703.00
	1,13,29,04,174.00	99,86,18,453.00



Academic Expenses		
TESTING AND CONSULTANCY ACCOUNT	8,65,720.00	
CCB COUNCSELLING (CSAB)	15,000.00	15,000.00
TUTION FEES	1,66,58,632.00	1,90,53,860.00
INSURANCE CHARGES FOR STUDENTS	-	3,46,296.00
REGISTRATION FEES	46,45,605.00	1,89,767.00
ADMISSION FEES	-	4,16,400.00
HOSTEL FEES FROM STUDENTS	69,93,900.00	47,94,800.00
CONVOCATION A/C	24,19,380.00	19,07,230.00
INTER NIT MEET	3,95,299.00	
LIBRARY JOURNAL	13,869.00	6,335.00
STUDENTS AMENITIES	4,60,320.00	
CELEBRATION OF INDEPENDANCE AND REPUBLIC DAY	99,490.00	81,265.00
CELEBRATION OF COLLEGE WEEK	1,79,000.00	
EXAMINATION EXPENDITURE	70,76,062.82	33,00,912.00
CONFERENCE AND SEMINAR	8,01,869.00	8,42,520.00
	4,06,24,146.82	3,09,54,385.00

) Administrative Expenses		
HEFA INTEREST A/C	42,64,622.00	13,81,352.00
GARBAGE BIN	-	2,36,250.00
CONSUMABLE CHARGES	37,88,217.00	19,88,673.00
DEPT. OPT COST-ECE	2,93,776.00	93,279
DEPT. OPT COST-DEAN (STUDENT WELFARE)	96,386.00	16,300
DEPT. OPT COST-ADMINISTRATIVE	24,937.00	
CELL AT NEW DELHI	7,00,000.00	
DEPT. OPT COST-HALL-10	15,000.00	
DEPT. OPT COST-HALL-1	11,420.00	
DEPT. OPT COST-HALL-4	15,000.00	
DEPT. OPT COST-HALL-11	43,147.00	
DEPT. OPT COST-HALL-13	52,656.00	
DEPT. OPT COST-HALL-14	44,566.00	
DEPT. OPT COST-DMS	14,879.00	
DEPT. OPT COST-REGISTRAR OFFICE	1,08,708.00	62,98
FACULTIES AMENITIES	99,249.00	1,24,83
AUDIT FEES	13,32,255.00	5,21,44
OUTSOURCING	16,81,22,506.00	14,19,14,86
CLEANING- OUTSOURCING	2,92,500.00	36,54,50
TA AND REMU. TO VISITING LECTURER	24,38,171.00	32,37,51
DEPT. OPT COST-ESTATE	7,45,779.00	4,96,81
TELEPHONE CHARGES	8,71,891.00	8,54,53
DEPT. OPT COST-INTERNAL TELEPHONE	49,766.00	88,83
AMBULANCE CHARGES	18,01,038.00	16,16,42
COMPUTER NETWORK AND BANDWIDTH	62,71,936.00	48,42,87
ACCREDITATION OF ENGINEERING COURSES	13,10,004.00	
TA AND REMUNERATION TO EXPERT/BOARD MEM	14,39,144.00	19,36,599
DEPT. OPT COST-CSE	3,39,212.00	1,16,42
MISC. EXPENSES	11,74,987.00	7,04,440
DEPT. OPT COST-PHYSICS	1,16,913.00	24,730



DEPT. OPT COST-DEAN (RESEARCH AND CONSULTANCY)	10,000.00	20,000.00
DEPT. OPT COST-COMPUTER CENTRE	84,706.00	20,000.00
WATER CHARGES TO DMC	-	12,93,565.00
WATER CHARGES TO DSP	1,86,648.00	3,74,472.00
ADVERTISEMENT EXPENSES	2,41,503.00	2,10,810.00
BANK CHARGES, COMMISSION AND INTEREST	1,45,350.83	23,047.64
DEPT. OPT COST-LIBRARY	77,760.00	1,18,698.00
DEPT. OPT COST- DEAN(ACADEMIC RESEARCH)	39,405.00	37,415.00
POSTAGE AND TELEGRAPH	1,80,110.00	1,68,777.00
CONTINGENCY TO INSTITUTE RESEARCH SCHOLAR	1,35,93,137.00	56,68,007.00
DEPT. OPT COST-WORKSHOP	83,089.00	-
DEPT. OPT COST-STORES	68,648.00	1,76,478.00
PRINTING AND STATIONERY A/C	11,17,045.00	5,78,542.00
DEPT. OPT COST-ACADEMIC SECTION	1,10,380.00	1,01,904.00
INSURANCE CHARGES	27,44,834.00	18,61,301.00
DEPT. OPT COST-FACULTY WELFARE	7,322.00	2,728.00
DEPT. OPT COST-WARDEN	2,37,898.00	1,92,075.00
DEPT. OPT COST-CIVIL ENGG	67,169.00	90,792.00
DEPT. OPT COST-MME DEPT	1,42,306.00	69,752.00
DEPT. OPT COST-DIRECTOR OFFICE	58,256.00	48,192.00
UPGRADATION OF INSTITUTE AUTOMATION	27,02,374.00	4,88,340.00
DEPT. OPT COST-CHEMICAL	2,55,448.00	57,629.00
DEPT. OPT COST-BIO TECH	3,20,220.00	1,02,912.00
FUEL FOR DG SET	6,83,760.00	5,41,008.00
LEGAL EXPENSES	49,39,140.00	8,73,950.00
DEPT. OPT COST-PTI	26,590.00	17,448.00
DEPT. OPT COST-CHEMISTRY (PG)	9,766.00	-
DEPT. OPT COST-HALL-8	-	10,000.00
DEPT. OPT COST-RESEARCH, CONSULTANCY	-	18,650.00
MEMBERSHIP OF PROFESSIONAL SOCIETY	45,630.00	1,02,630.00
OFFICE EXPENSES	4,60,045.00	60,618.00
DEPT. OPT COST-DIRECTOR BUNGLOW	14,645.00	53,016.00
DEPT. OPT COST-HUMANITIES	1,38,668.00	40,753.00
DEPT. OPT COST-HALL-2	25,083.00	14,967.00
DEPT. OPT COST-PERSONNEL SECTION	2,33,604.00	1,37,839.00
DRUGS AND MEDICINE FOR HOSPITAL	23,59,081.00	2,06,976.00
DEPT. OPT COST-STUDENTS WELFARE	85,448.00	63,346.00
CONSULTANCY WORKS	6,88,920.00	1,59,720.00
DEPT. OPT COST-HALL-3	11,070.00	
HOSTEL EMPLOYEES WELFARE A/C	18,36,474.00	16,66,168.00
WATER CHARGES EXPENDITURE	1,61,377.00	1,11,012.00
REMUNERATION TO SPECIALIST (PHYSICIAN)	45,99,905.00	45,64,800.00
EXTRA CURRICULAR ACTIVITIES	83,01,063.00	8,92,693.00
GENERAL STORES MATERIAL	11,28,648.00	23,15,006.00
MEETING EXPENSES	1,25,790.00	1,20,853.00
GUEST HOUSE EXPENDITURE	27,90,665.00	14,00,617.00
DEPT. OPT COST-MATHEMATICS	93,925.00	59,822.00
DEPT. OPT COST-MECH ENGG	1,61,060.00	81,441.00
DEPT. OPT COST-CHEMISTRY	2,64,440.00	61,619.00
MEDICAL EXPENSES FOR STUDENTS		97,802.00



DEPT. OPT COST-ELEC.ENGG.	1,95,865.00	-
ELECTRIC CHARGES TO DSP/DVC	5,79,01,389.00	2,34,77,284.00
DEPT. OPT COST-AUDIT SECTION	41,364.00	29,600.00
DEPT. OPT COST-EARTH AND ENVIN.SCI	1,09,955.00	37,361.00
COVID-19 EXPENSES	12,750.00	15,22,593.00
DEPT. OPT COST-ALUMNI AFFAIR OUTREACH	19,915.00	10,000.00
DEPT. OPT COST-HALL-12	-	14,630.00
DEPT. OPT COST-MBA	9,982.00	-
DEPT. OPT COST-ACCOUNTS SECTION	3,39,665.00	2,00,390.00
DEPT. OPT COST-SRCC	39,831.00	-
BANK CHARGES OF PENSION A/C		354.00
	30,62,07,786.83	21,45,84,080.64
d) Transportation Frances		
d) Transportation Expenses	04.400.00	40.040.00
TA AND REGN FOR SEMINAR/CONF. IN INDIA AND ABROAD	94,100.00	46,010.00
TA TO STAFF FOR MEDICAL PURPOSE	64,597.00	00 70 744 0
HIRE CHARGES OF CAR FROM OUTSIDE	36,61,973.00	20,76,714.00
	38,20,670.00	21,22,724.00
e) Repairs & Maintenances		
CIVIL MAINTENANCE - STAFF QRTS	7,10,899.00	30,70,740.0
DEPT. OPT COST-HOSPITAL	-	14,975.0
MAINT OF COLLEGE FURNITURE	1,60,135.00	7,61,138.0
CONTINGENCY - MAINTENANCE	1,85,570.00	
MAINTENANCE OF ELECTRICAL INSTALLATION	84,29,020.00	49,36,148.0
CONTINGENCY FOR MTECH SCHOLAR	77,812.00	
CONTINGENCY FOR MEDICAL UNIT	2,19,192.00	2,18,314.0
CIVIL MAINTENANCE - HOSTEL	30,23,648.15	5,78,577.0
ELECTRICAL MAINTENANCE- INST. BLDG	1,64,111.00	23,744.0
MAINTENANCE OF COLLEGE COMPUTER	2,69,961.00	1,08,192.0
MAINTENANCE OF COLLEGE EQUIPMENT	1,53,06,695.00	1,16,29,895.0
ELECTRICAL MAINTENANCE- STAFF QRTS	4,57,983.00	
CIVIL MAINTENANCE- INST. BLDG	95,95,737.00	49,86,010.0
	3,86,00,763.15	2,63,27,733.00
f) Prior period expenses		
II. Payments against Earmarked/ Endowment Funds  HOSTEL EMPLOYEES WELFARE FUND	Current Year	Previous Year
III. Payments against Sponsored Projects/ Schemes	Current Year	Previous Year
SRCC	85,82,589.00	1,75,68,231.00
PROJECT OTHERS	3,58,294.00 <b>89,40,883.00</b>	16,58,407.00 1,92,26,638.00
IV. Payments against sponsored Fellowships and Scholarships	Current Year	Previous Year
SCHOLARSHIP TO INSTITUTE RESEARCH SCHOLAR	8,67,79,503.00	8,77,19,972.00
SCHOLARSHIP M TECH	4,23,63,357.00	6,08,62,764.00
OTHER SCHOLARSHIP	4,62,237.00	10,90,076.00
	12,96,05,097.00	14,96,72,812.00



V. Investments and Deposits made	Current Year	Previous Year
a) Out of Earmarked/Endowments Funds	3,68,324.00	-
b) Out of own funds (Investment- Others)		
INVESTMENT- PENSION AID FUND	5,64,24,137.00	-
INVESTMENT- GENERAL FUND	13,03,09,000.00	16,66,40,306.00
INVESTMENT- GENERAL PROVIDENT FUND	10,00,00,000.00	9,21,48,957.00
	28,67,33,137.00	25,87,89,263.00

VI. Term Deposits with Scheduled Banks	Current Year	Previous Year
CTD/RD	17,25,738.00	6,26,859.00

Expenditure on Fixed Assets and Capital Works-in-Progress	Current Year	Previous Year
a) Fixed Assets		
STUDENT ACTIVITIES CENTRE	5,60,327.00	2,37,500.00
CPWD PROJECTS ONGOING	2,76,12,235.00	21,59,50,596.00
EQUIPMENT- ESTATE DEPTT	5,06,574.00	
EQUIPMENT- BIO TECH DEPTT	6,13,060.00	
EQUIPMENT- CHEMISTRY DEPTT	15,300.00	
EQUIPMENT- CSE DEPTT	71,05,101.00	
EQUIPMENT- ECE DEPTT	1,99,920.00	
EQUIPMENT- ELECTRICAL ENGG. DEPTT	3,93,500.00	
EQUIPMENT- GEOLOGY DEPTT	10,62,710.00	
EQUIPMENT- MATHEMATICS DEPTT	3,17,509.00	
EQUIPMENT- MECHANICAL ENGG. DEPTT	1,83,490.00	
EQUIPMENT- CE DEPTT	3,23,250.00	24,895.00
EQUIPMENT- HUMANITIES DEPTT		- 32,450.00
EQUIPMENT - MME DEPTT		- 2,60,900.00
EQUIPMENT FOR INSTITUTE-PLANT MACHINERY	3,89,49,396.00	1,30,66,891.00
RESEARCH INITIATION GRANT		- 21,43,759.00
FURNITURE FOR INSTITUTE	4,44,32,974.00	41,27,289.00
FURNITURE FOR GUEST HOUSE	18,964.00	
COMPUTERS AND COMPUTER PERIPHERALS FOR INSTITUTE	3,53,96,674.00	2,47,05,136.00
COMPUTER PERIPHERALS FOR COMP CENTRE	79,53,735.00	
E-BOOKS, E-JOURNAL, DATA BASE	8,27,00,141.00	3,33,40,625.00
BLDG. AND OTHER CAPITAL WORKS (A)	4,63,844.00	6,40,285.00
EQUIPMENT- CHEMICAL ENGG. DEPTT	72,170.00	58,250.00
LIBRARY BOOKS	1,93,49,577.00	
COMPUTER SOFTWARE FOR COLLEGE	13,38,000.00	25,44,788.00
CENTRE OF EXCELLENCE		- 11,37,250.00
	26,95,68,451.00	29,82,70,614.00

b) Capital Works-in-Progress	
CPWD PROJECTS ONGOING	-

VIII. Other Payments including statutory payments	Current Year	Previous Year
INCOME TAX	16,31,75,146.00	11,24,72,381.00
SERVICE TAX	7,97,310.00	7,92,311.00
GST/ GOODS & SERVICE TAX	1,33,03,486.00	75,74,539.00
	17,72,75,942.00	12,08,39,231.00



IX. Refunds of grants	-	-

Deposits and Advances	Current Year	Previous Year
EMD/SD FOR SUPPLIER	23,25,454.00	49,56,249.00
AJIT KR BHAGAT, SECURITY OFFICER	76,450.00	51,500.00
ASIT KUMAR, JT. REGISTRAR(ESTABLISHMENT)	20,000.00	
CO-OP CREDIT SOCIETY LTD	75,58,573.00	70,99,192.00
ABHIRAM HENS CHE DEPT	1,68,000.00	
ANIRUDDHA MONDAL, PHYSICS DEPT	30,000.00	
ANUP CHOUDHURY, CASH	1,70,000.00	
ASISH MUKHERJEE	40,980.00	
ADITYA PANDEY	52,990.00	
B NAGRAJAN	47,023.00	
BALA KRISHNA NAGRAJAN	72,478.00	
BARNALI MAJI, BIO TECH	1,08,000.00	
BIMAL DAS , CHEMICAL ENGG.	1,68,000.00	
CHIRANJIB KOLEY	5,000.00	
DAKSHINA RANJAN KISKU	50,000.00	
DEBASHISH MANDAL	1,27,722.00	
HARSH VARDHAN	62,800.00	
HIROK CHOWDHURY	23,000.00	
HILLOL MUKHERJEE, PTI	86,500.00	9,085.00
JAYDEEP HAWLADER	96,430.00	1,13,280.00
LIBRARY CAUTION MONEY (PG)	4,69,000.00	1,87,000.00
SHRI KRISHAN RAI	45,000.00	.,,
SUBHANKAR ROY BARMAN	1,09,300.00	
IRFAN AHMED	44,635.00	
JAYA SIKDER	20,000.00	
JITAMANYU CHAKRABORTY	20,000.00	
KALLOL KHAN	21,369.00	
KALYAN ADHIKARY	29,230.00	
MANOJ KR OZHA	50,000.00	
PARAG GUHA THAKURTA	80,000.00	
NILANJAN CHATTARAJ	10,000.00	
PARTHA SARATHI BHOWMIK	49,092.00	
S C MOI	1,85,000.00	
SEEMA SARKAR	25,000.00	
SOUMYA SEN SHARMA	2,70,000.00	
SUTANUKA BANERJEE	10,000.00	
TAMAL MONDAL	4,43,894.00	
TAMAL TARU GHOSH	7,000.00	
TAPAS DAS	1,00,000.00	
SANDIP DAS	85,000.00	50,000.00
SANDIP MONDAL, EES DEPTT	45,838.00	11,823.00
SOUMITRA BANERIEE	45,656.00	
	25 200 20	- 1,25,000.00
MANISH KUMAR JAISWAL	35,000.00	
IMP.ADV. TAMAL MONDAL	15,000.00	
IMP.ADVTAMAL MONDAL	10,000.00	0.055.00
IMP.ADVDEBASHISH MANDAL, ASSTT REGISTRAR IMP.ADVSANKAR NARAYAN MAHATO, HOD EE DEPT.	10,000.00 20,000.00	9,955.00









IMP.ADVHILLOL MUKHERJEE, PTI	10,000.00	3,500.00
IMP.ADVDEEPANWITA DAS, IT	-	15,000.00
IMP.ADVKALYAN ADHIKARI, HOD EES DEPT.	10,000.00	9,854.00
IMP.ADVDAKSHINA RANJAN KISKU, WARDEN HALL-12	15,000.00	15,000.00
IMP.ADVSUVAMOY CHONGDER	_	1,600.00
IMP.ADVANIRBAN SARKAR, DCA	10,000.00	10,000.00
IMP. ADVAMIYA KUMAR SARDAR	10,000.00	9,525.00
IMP. ADVBIMAN KR SAHA ROY	15,000.00	-
IMP. ADVDIPTESH DAS	20,000.00	-
IMP. ADVSAPNA RANWA	10,000.00	-
IMP. ADVSAYON BHATTACHARJEE	10,000.00	-
IMP. ADVSUBHASH CHANDRA RANA	20,000.00	-
IMP. ADVTANMOY KR SAHA	15,000.00	-
IMP. ADVKRISHNA PRIYA	15,000.00	-
IMP. ADVAMITA BARIK	15,000.00	-
IMP. ADVBIBHASH SEN	30,000.00	-
IMP. ADVD R KISKU	10,000.00	-
IMP. ADVPATHIK KUMBHAKAR	10,000.00	-
IMP. ADVARINDAM MODAK	20,000.00	-
IMP. ADVRAJIB GHOSH CHAUDHURI	15,000.00	-
IMP. ADVMANISHA BAL	15,000.00	-
IMP. ADVDEEPAK KUMAR	10,000.00	-
	1,43,73,758.00	1,33,76,239.00

XI. Other Payments	<b>Current Year</b>	Previous Year
GPF BANK (SBI 4913) SUBSCRIPTION	6,94,50,882.00	15,11,000.00
GROUP INSURANCE	5,95,806.00	5,51,652.00
HEFA PRINCIPAL LOAN	20,65,11,690.00	16,70,00,000.00
FRATERNITY	2,47,602.00	-
SALE OF TENDER, APPLICATION FORM, XEROX COUPON	1,06,000.00	-
	27,69,11,980.00	16,90,62,652.00

XII. Closing Balances	Current Year	Previous Year
a) Cash Balances	-	-
b) Bank Balances		
i. In Current Account		
SBI 1A Rec A/c	2,19,72,77,769.46	2,02,04,37,083.28
ii. In Deposit Account		
SBI College Caution Money	8,687.82	8,687.82
SBI New Pension Scheme Bank A/c	-	38,88,829.25
	8,687.82	38,97,517.07





iii. In Savings Account		
SBI, GPF Savings Bank A/c	-	12,62,47,535.16
SBI Pension & Gratuity Sav. Bank A/c	10,68,971.36	2,17,32,957.36
Canara Bank Savings Bank A/c No-5494	20,36,810.60	19,78,781.60
Canara Bank Extn. Counter Savings Bank A/c 8569101000352	44,78,958.52	4,93,37,026.08
Canara Bank A/c No-1111	1,73,422.00	1,68,484.00
Canara Bank A/c No-1113	2,98,327.00	2,89,830.00
Canara Bank A/c No-1114	2,02,500.00	1,96,733.00
Canara Bank A/cNo-1115	3,54,654.00	3,44,553.00
Canara Bank TEQIP-I	2,66,249.00	2,58,666.00
RBI A/c No-10680001001	4,71,68,503.00	9,72,242.00
	5,60,48,395.48	20,15,26,808.20

### NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR :: INDIA NPS TIER - I ACCOUNT

### BALANCE SHEET AS AT 31.03.2023

					(Amount in Rupees)
Liabilities	Amount(Rs.)	Amount(Rs.)	Assets	Amount(Rs.)	Amount(Rs.)
NPS Tier-I Account			NPS Tier-I Account		
Opening Balance			Investment		74,80,928.00
New Pension Scheme Fund	2,90,59,032.50		Subscription and Contribution Due		20,82,487.25
Less: Adjustment during the year	1,04,82,053.00				
Add: Surplus transter from Income & Expenditure Account	12,51,203.00	1,98,28,182.50			
			Cash at Bank		
			SBI Branch-I		1,02,64,767.25
		1,98,28,182.50			1,98,28,182.50

Joint Registrar (F&A)

Registrar

Director

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### NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR :: INDIA NPS TIER - I ACCOUNT INCOME & EXPENDITURE ACCOUNT FOR THE FINANCIAL YEAR 2022-23

Expenditure	Amount(Rs.)	Income	Amount(Rs.)
Interest Credited to Subscriber's			
Account		Interest Earned on Investment	1072446.00
Bank Charges			
		Interest on Savings Bank A/c	178757.00
		Less: Interest Accrued 31/03/14	
		interest Accrued but not due	
Excess of Income over Expenditure	1251203.00		
	1251203.00		1251203.00

Joint Registrar (F&A) Registrar Director

### NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR :: INDIA NPS TIER - I ACCOUNT RECEIPTS & PAYMENTS ACCOUNT FOR THE FINANCIAL YEAR 2022-23

(Amount in Rupees)

Receipts	Amount(Rs.)	Payments	Amount(Rs.)
Opening Balance as on 01/04/2022	38,88,829.25	Investment Withdrawal/Refund to NSDL	7,07,87,521.00
NPS Tier-I Account		Payable to NITD	1,11,71,132.00
Own Subscription University Contribution	3,17,21,461.00 4,43,64,263.00	Closing Balance as on 31/03/2023	1,02,64,767.25
Investment Encashed Interest Received on Investment	1,15,62,893.00 5,07,217.00		
Interest on Savings Bank A/c	1,78,757.00		
	9,22,23,420.25		9,22,23,420.25

Joint Registrar (F&A) Registrar Director





N	PRO'ATIONAL INSTITU	PROVIDENT FUND ACCOUNT TITUTE OF TECHNOLOGY DUI	PROVIDENT FUND ACCOUNT NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR INDIA		
	BALANCE	BALANCE SHEET AS AT 31st MARCH, 2023	MARCH, 2023		(Amount in Rupees)
Liabilities	Amount(Rs.)	Amount(Rs.)	Assets	Amount(Rs.)	Amount(Rs.)
GPF/CPF			Investment		71,36,03,784.00
Opening Balance			Int Accrued		•
General Provident Fund	41,60,34,551.48		Subscription Due		•
INTEREST ON GPF INVESTMENT	37,41,56,584.00		GPF/CPF		•
INTEREST ON SAVINGS BANK-GPF	1,52,91,006.68		UC due to CPF		•
	80,54,82,142.16		NPS-II		•
			lax recovered from Interest on		
Add: Adjustment during the year	3,54,80,498.00		Investments		•
Add: Surplus transfer from Income			Pending retund from Income Tax		
& Expenditure Account	3,48,16,170.00		Department		•
	87,57,78,810.16				
			Cash at Bank		
Less: Subscription		87,57,78,810.16	SBI Branch-I		16,21,75,026.16
				·	
		87,57,78,810.16			87,57,78,810.16

Director

Joint Registrar (F&A)

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### PROVIDENT FUND ACCOUNT NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR INDIA INCOME AND EXPENDITURE ACCOUNTS FOR THE FINANCIAL YEAR 2022-2023

(Amount in Rupees)

Expenditure	Amount(Rs.)	Income	Amount(Rs.)
·	Amount(N3.)		, ,
Interest Credited to:		Interest earned on Investment	38,93,282.00
GPF/CPF	-	Add: Interest accrued	3,09,15,703.00
		Add:Tax recovered on Interest-Refund	
		to	
Institute Contribution	-	be obtained	-
NPS Tier-II Account	-	Add: Interest on SB	7,185.00
Excess of Income over Expenditure	3,48,16,170.00		
	3,48,16,170.00		3,48,16,170.00

Joint Registrar (F&A) Registrar Director





### PROVIDENT FUND ACCOUNT NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR INDIA RECEIPTS AND PAYMENTS ACCOUNTS FOR THE FINANCIAL YEAR 2022-2023

(Amount in Rupees)

	1		Nupees)
Receipts	Amount(Rs.)	Payment	Amount(Rs.)
Opening Balance as on 01/04/2022		GPF Withdrawal	3,68,53,625.00
SBI Branch-I	12,62,47,535.16	GPF Adv	5,83,200.00
GPF Subscription	6,94,50,882.00	NPS Tier-II	-
CPF Subscription	-	Institute Contribution Withdrawal	-
GPF Loan Refund	12,967.00		
CPF Institute Contribution	-		
NPS Tier-II Account	-	Investment during the year	-
Investment Encashed	-		
Interest Received	39,00,467.00	Closing Balance	
		SBI Branch-I	16,21,75,026.16
	19,96,11,851.16		19,96,11,851.16

Joint Registrar (F&A) Registrar Director

### SPONSORED RESEARCH AND CONSULTANCY CELL

Balance Sheet as at 31st March, 2023

				(Amount In Rupees)
SOURCES	SOURCES OF FUNDS	Sch	Current Year	Previous Year
CORPUS/CAPITAL FUND AND LIABILITIES	VD LIABILITIES			
CAPITAL FUND		1	3,42,40,088.40	3,84,65,137.51
EARMARKED /ENDOWMENT FUNDS	T FUNDS	2	12,44,362.90	-
CURRENT LIABILITIES AND PROVISIONS	ROVISIONS	3	12,02,84,721.47	11,65,12,413.26
TOTAL			15,57,69,172.77	15,49,77,550.77
APPLICATIO	APPLICATION OF FUNDS		Current year	Previous year
FIXED ASSETS		4		
1	Tangible Assets		4,42,39,916.54	97,96,370.08
1	Intangible Assets			
	Capital Work in			
ı	Progress			
INVESTMENTS FROM EARMARKED/ENDOWMENT	IARKED/ENDOWMENT	7		
FUNDS		J	-	_
INVESTMENTS - OTHERS		9	9,34,69,335.00	8,00,000.00
CURRENT ASSETS		7	1,59,23,961.45	14,39,50,352.69
LOANS, ADVANCES & DEPOSITS	SITS	8	21,35,959.78	4,30,828.00
TOTAL			15,57,69,172.77	15,49,77,550.77
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	ND NOTES ON ACCOUNTS	26		

Deputy Registrar(SRCC)

NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

Dean(R&C)



### PONSORED RESEARCH AND CONSULTANCY CELL

Income and Expenditure account for the year ended 31st March ,2023

		•	(Amount In Rupees)
PARTICULARS	Schedule	Current Year	Previous Year
INCOME			
Income from Consultancy Projects	6	1,68,40,360.02	1,08,83,053.18
Income from Research Projects	10	25,94,631.65	11,47,361.05
Income form Intellectual Property Right(IPR)	11	-	-
Grant/Subsidies	12	-	-
Income from Investment	13	34,69,335.00	10,596.00
Interest Earned	14	24,85,147.00	28,45,512.00
Other Income	15	37,35,983.25	42,08,088.50
Prior Period Income	16	4,877.00	
TOTAL(A)		2,91,30,333.92	1,90,94,610.73
EXPENDITURE			
Consultancy Projects Expenditures	17	1,25,71,623.81	86,67,602.40
Sponsored Projects - Research Expenditure	18	31,03,365.30	9,03,675.54
Staff Payments & Benefits- ( Establishment Expense)	19	1	•
Adminstrative and General Expenses	20	71,95,369.58	46,92,261.11
Transportation Charges	21	-	-
Repair & Maintenance	22	-	-
Finance Cost	23		-
Depreciation	4	37,20,944.44	12,05,226.32
Other Expenses	24		-
Prior Period Expenses	25	46,60,036.00	-
TOTAL(B)		3,12,51,339.13	1,54,68,765.37
Balance being excess of Income over Expenditure(A-B)		(21,21,005.21)	36,25,845.36
BALANCE BEING SURPLUS/(DEFICIT) CARRIED TO CAPITAL FUND		(21,21,005.21)	36,25,845.36

Deputy Registrar (SRCC)

NATIONAL INSTITUTE OF TECHNOLOGY, DURGAPUR

Dean(R&C)

## SPONSORED RESEARCH AND CONSULTANCY CELL RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31st March, 2023

RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
Opening Balance			GST Paid	47,31,400.00	19,52,224.00
a)Cash balances			TDS Paid	1,97,123.00	70,362.00
b)Bank balances	14,22,67,641.69	9,18,86,857.93	Project Fund Payment	1,53,22,900.20	63,96,500.16
		•	Scholarship Paid	ı	32,000.00
Interest received from investment	1	10,596.00	Bank Charges Paid	32,183.96	14,347.24
Interest received from Banks Project Fund Receipts	24,85,147.00 4,59,95,598.00	28,45,512.00 7,73,75,817.00	Travelling Allowances Other Cost Fellowship	66,35,953.20 1,83,69,540.40	62,000.00 1,48,85,154.85
NIT Durgapur	444.00	61,37,723.00	Consumables	57,53,244.68	48,99,048.48
Consultancy and Research Fees Workshop	2,55,44,037.00	1,03,64,221.05	Contingencies Assets Purchased	19,38,943.42 3,81,64,490.90	11,47,417.56 1,09,89,520.40
Grant	95,577.00	•	Professional Charges	59,000.00	48,380.00
Scholarship receipts	1	32,000.00	Other Payments Investments(Fixed Deposits) Civil Works Karyashala Consultancy Refund to Funding Agency Closing Balance a)Cash balances b)Bank balances	65,41,375.61 9,00,00,000.00 49,455.00 4,10,003.00 1,52,84,506.67 11,68,377.00	58,88,130.60
Total	21,68,88,444.69	18,86,52,726.98	Total	21,68,88,444.69	18,86,52,726.98



### **Balance Sheet Schedule**

### SCHEDULE -1

Capital Fund	Opening balance	Add. During the yr.	Less During the yr.	Closing Balance
Capital Fund	3,84,65,137.51	(21,21,005.21)	21,04,043.90	3,42,40,088.40
Total	3,84,65,137.51	(21,21,005.21)	21,04,043.90	3,42,40,088.40

### SCHEDULE -2

### Earmarked /Endowment Funds

Particulars	Opening balance	Add. During the yr.	Less During the yr.	Closing Balance
Institute Research & Development Fund(IRDF)		1683235.00	859681.00	823554.00
Departmental Promotional Accounts(DPA)		210404.45	-	210404.45
Research Management Fund(RMF)		210404.45	-	210404.45
Total		21,04,043.90	8,59,681.00	12,44,362.90

### SCHEDULE -3

Current Liabilities and Provisions Particulars	Amount Rs.	Amount Rs.
	Amount No.	Amount No.
Sundry Creditors:	400047.00	440000 00
Amiya Kumar Samanta	460347.00	112000.00
Aniruddha Bhattacarya	1017.00	1017.00
Department Overhead Shares	2586044.42	841617.60
Dilip Kumar Singh Roy	1797528.69	632914.80
Diptes Das	3649000.00	662000.00
Dutta Prints	1790.00	1790.00
Eastern Coal Fields Ltd	1536236.00	312000.00
Essar Oil Gas Exploration	943410.00	566400.00
Hindustan Petroleim Corporation Limited	1.05	1.05
Ins National Institute of Technology	532948.00	532948.00
MDI Murshidabad	0.00	24850.00
N B Sai Prasad	1000.00	1000.00
Neo Metaliks	0.00	429520.00
Nibrain Consultancy Service	14000.00	14000.00
NIT Durgapur	0.00	337480.00
Project PI Overhead Shares	4187583.75	1262426.40
Pronab Roy	577000.00	150000.00
Puja E F Bricks	1764.00	1764.00
Rowdra Ghatak	111250.00	111250.00
Sandip Kumar Lahiri	1.00	1573340.67
Science and Engineering Research Board	211649.00	211649.00
Showmen Saha	529113.66	96753.39
Shree Rajlaxmi Travels Co	8142.00	8142.00
Shyam Sel and Power LTD	18101.00	118000.00
Somnath Karmakar	129167.35	609344.35
SP Enterprises	22632.00	22632.00
Stup Conseltants Pvt Ltd.	86400.00	86400.00
Supriya Pal	127560.73	3180026.73
A.K Samanta & Diptesh Das	380000.00	-
Bandhan Bandhu Majumdar	5250.00	-



Madan Mohan Ghosh	116500.00	-
R P Nanda	240000.00	-
Sabasachi Biswas	129173.00	-
Debojyoti De Majumdar Enterprise	1.00 0.02	-
Nayak Tour & Travels	9672.00	_
S Ś Solution	5369.00	-
Supriya Bera(Consultant) Tapabrata Chakraborty	289.00 444.00	-
Vaibhavi Lab Products	42876.00	-
Agni Shanti Buildtech Pvt Ltd	100000.00	-
Ashok Kumar Dutta	73750.00	-
Associated Architect & Engg Co-Operative Society	4602.00	-
Bhavyabharat Infrastructure and Construction	127322.00	-
Central Board of Irigation and Power	27000.00	-
DAV Model School KSTP Asansol	0.50	-
DCS Limited	46020.00	-
Girraj Ji Stone Crusher Pvt Ltd	118000.00	-
Modern Road Makers Pvt Ltd	19942.00	-
M/S Santosh Sahewala	236000.00	-
National River Conversation Directorate	153000.00	-
Scheme for Promotion of Academic & Research Collabor	0.04	-
Techno India Group Public School, Durgapur	47200.00	-
Vilniaus Gedimino Technikos Universitetas	123676.00	-
WB Tourism Development Corporation	62500.00	-
Sudip Shekhar Mukhopadhyay	296847.52	
Total (A)	19899120.73	11901266.99
Other Liabilities Security Deposit	21119.00	
Karyashala Workshop	89997.00	-
Overhead Fund Utilised	691357.00	-
Total (B)	802473.00	-
Statutory Liabilities: GST Payable	594455.31	571647.64
TDS Payable	7783.70	93816.00
·		
Total (B)	602239.01	665463.64
Fund: Project Fund	50518233.82	92956162.23
Project Fund Utilised (Assets)	48462654.91	10989520.40
Total ( C )	98980888.73	103945682.63
Grand Total (A+B+C)	120284721.47	116512413.26

### SCHEDULE -6 Investment -Others

Pariculars	Amount Rs.	Amount Rs.
Canara Bank FD-(8569401001713/1)	0.00	700000.00
Canara Bank FD( 8569401001735/1 )	0.00	100000.00
Fixed Deposit (140052417450/1)	10392902.00	_
Fixed Deposit (140052494355/1)	10391273.00	_
Fixed Deposit (140052669038/1)	10388015.00	_
Fixed Deposit (140053009379/1)	10383129.00	_
Fixed Deposit (140053103350/1)	10381500.00	_
Fixed Deposit (140053199057/1)	10379871.00	_
Fixed Deposit (140053285031/1)	10378243.00	_
Fixed Deposit (140052887788/1)	10384758.00	_
Fixed Deposit (140052568529/1)	10389644.00	_
Tota	93469335.00	800000.00





### **Current Assets**

Particulars	Amount Rs.	Amount Rs.
Sundry Debtors:		
Ajit Kumar Meikap	16902.00	16902.00
Amrita Mukherjee	35960.00	35960.00
Aniruddha Mondal	34609.00	34609.00
Anirudhha Chandra	2360.00	2360.00
Anjan Sen and Associates	35500.00	35500.00
Arjyajyoti Goswami	0.00	199.00
Ashish Bhattacharjee	23233.00	23233.00
Barb Bhowan Simeco	2950.00	2950.00
Binary Centre	7850.00	7850.00
Biochem	18900.00	18900.00
Datta Prints	26550.00	26550.00
Durbadal Mandal	0.00	33532.00
Elmack Engineering PVT LTD	0.00	96600.00
Esar Enterprise	3150.00	3150.00
Frontiers Media	51155.00	51155.00
Icon Solution	4248.00	4248.00
Indrani Sarkar	34500.00	34500.00
Interlab Instruments and Equipments	14000.00	14000.00
IRD Account IITD	0.00	66313.00
Japan Society for Plan	78875.00	78875.00
MBA Syndicate	4850.00	4850.00
Mriganka Sekhar Mukhopadhyay	0.00	5421.00
MS Mukhopadhyay	130098.00	124677.00
P Enterprisees	22632.00	22632.00
Pratik Chakraborty	114300.00	114300.00
Promptech Instruments PVT LTD	92718.00	92718.00
Radical Scientific Equipments PVT LTD	40000.00	40000.00
S Ali	92502.00	88514.00
Sheru Ali	0.00	3988.00
Shubhadip Atta	30000.00	30000.00
Sree Rajlaxmi Travels	8142.00	8142.00
S Saha	176477.00	176477.00
Subashis Karmakar	0.00	20220.00
Sudit Sekhar Mukhopadhyay	28570.00	28570.00
Switching AVO Electro Power LTD	15360.00	15360.00
Tamal Mondal	0.00	34476.00
Tata Consultancy(29250)	87750.00	29250.00
Tech Science Pvt Ltd	250000.00	250000.00
V K Kharwar	0.00	5730.00
CGCEL(Rupam Diwedi)	29500.00	-
Project Director, NHAI Durgapur	1875000.00	-
NIT Durgapur	285152.00	-
V INFOSYS SOLUTION	0.80	
S Karmakar	20220.00	-
Total (A)	3694013.80	1682711.00



Bank Balances: With Schedule Banks:- a)Canara Bank A/c No.8569101003197	12229947.65	142267641.69
Total (B)	12229947.65	142267641.69
Grand Total(A+B)	15923961.45	143950352.69

### SCHEDULE -8 Loan, Advances and Deposits

Particulars	Amount Rs.	Amount Rs.
TDS Receivable	1237703.00	430828.00
ITC Receivable	610891.78	-
other receipts	287365.00	-
Total	2135959.78	430828.00

### SCHEDULE-9 Income From Consultancy Project

Particulars	Current Year	Previous Year
Durgapur Real Estate Pvt Ltd.	-	275000.00
Ramkrishna Engineering	-	125000.00
Ram Chandra Paul	-	100000.00
Narayan Kumar	-	200000.00
SSk Infrastructures	-	580000.00
Gayatri Projects Ltd.	-	240000.00
East India Pharmaceutical Works Ltd	-	100000.00
Chakraborty and Company	-	260000.00
HNGIL Rishra	-	125000.00
DP Construction	-	85000.00
Nimbus Irrigation Pvt Ltd.	-	25424.00
Srijan Home Maker	-	75000.00
NRIDA	-	544084.75
WBSRDA Purba Burdwan Division	-	62500.00
Mishra and Associates	-	50000.00
ISMU Project Division Dhanbad	-	794879.00
Dascon Sourav Commercial Private Limited	-	77966.20
Parashmani Medical Center Pvt Ltd	-	75000.00
Electro Mech Engineers	-	78000.00
ADDA	-	36400.00
Srijon Nirman	-	265874.56
ACE Pipeline Contracts Pvt Ltd	-	30000.00
Chittaranjan Locomotive Works	-	477500.00
Mars Development	-	40000.00
Bright Project Private Limited	-	350000.00
PIR Projects Consultancy	-	68750.00
Scientific Design Company,USA	-	1966674.67
Apex Engineering	30000.00	-
Arun Kumar Mohanty	400000.00	-
Ashok Kumar Dutta	187500.00	-



Total	16840360.02	10883053.18
Other Consultancy	22000.00	-
Tata Consultancy	1056250.00	-
Fertis India Pvt Ltd	500000.00	-
Vrinda Engineers Pvt. Ltd.	212500.00	75000.00
Vilniaus Gedimino Technikos Universitetas	167321.00	-
V.K. Gupta & Associates	300000.00	-
Techno India Group Public School	23400.00	-
Swami Resorts Pvt. Ltd.	475000.00	-
Shyam Sel & Power Limited	776000.00	-
S.S. Solution	750000.00	-
Ranjit & Associates	125000.00	-
Ram Kripal Singh Construction Pvt Ltd	300000.00	300000.00
Project Director NHAI Durgapur	1875000.00	-
NSC Projects Pvt Ltd	310872.00	-
NHAI Durgapur	1837500.00	-
Neo Metaliks Ltd	364000.00	-
National Council of Science Museums	156640.00	-
MDI Murshidabad	2340.68	-
M/S Santosh Sahewalla	875000.00	-
M/S R P Mishra & Associates	37500.00	-
M/S Metal Craft Engineering	87500.00	75000.00
Lloyd Insulation India Ltd	100000.00	-
K.M Kumar (Executive Engineer & SM (C-II)	227661.86	-
Jra Infratech	500000.00	-
Jawahar Lal Singh	65000.00	-
IDI Infra Pvt. Ltd.	170000.00	-
Growever Infra Pvt Ltd	500000.00	-
Girrajji Stone Crusher Pvt Ltd.	200000.00	-
Executive Engineer ISMU Project Division, Dhanbad (CPWD)	59220.00	-
Executive Engineer ISMU Project Division, Dhanbad (CPWD)	257838.00	-
ESSAR Oil and Gas Exploration and Production Ltd	480000.00	-
EE & SM (C-II) Rajarhat CPWD Kolkatta	39808.48	-
ECL	2625000.00	2625000.00
CGCEL	25000.00	-
CE Testing	50000.00	700000.00
C.B. Enterprise	37500.00	-
Bivab Developers Pvt Ltd	450000.00	-
Bhavya Bharat Infrastructure & Construction Pvt. Ltd.	52008.00	-
Bengal Aerotropolis Projects Limited	130000.00	-

### SCHEDULE-10

### **Income From Research Project**

Particulars	Current Year	Previous Year
ACE Pipeline Contracts Pvt Ltd	-	21000.00
Anindya Kumar Majumder	-	4550.00
Bharat Trading Company Bhawani Construction & Suppliers	-	30291.00 1495.00
ewanganj Stone Company		8645.00
Effluent and Watertreament	_	6000.00
HI Tech Sweetwater Tech Pvt		3510.00
Jyotirmoy Mukherjee		3510.00
Kamlaadityya Construction Pvt Ltd.		45500.00
L and T Power Ltd.	_	4550.00
Partha Sarathi Ghosh	_	4121.00
Pave Cap		11830.00
Pevco Associates		1500.00
Priyanshu Enterprise		1500.00
Puja E F Bricks		21125.00
R&S Brothers		4121.00
R.V. Engineering		15925.00
Rafic Enterprise		1500.00
Rajlaxmi Construction		5200.00
Rattan Ispat Pvt Ltd		1495.00
S S Enterprise		2366.00
Samridh Enterprise		39000.00
Sanjoy Kumar Brothers		6825.00
Shapoorji Pallonji and Co		4490.00
Shyam Steel		12900.00
Sibnath Dubey		27301.70
Sona Construction		15500.00
Sushil Kumar Kataruka		14325.35
Tata Consultancy(29250)		568750.00
Techno Trade Co		3000.00
Trikon Enterprise		1755.00
Western India Mining Services Pvt Ltd	_	7500.00
Chatterjee Enterprise	7150.00	-
NSC Projects Pvt Ltd	170300.00	-
S Enterprise	1950.00	-
Abhinanadan Enterprises	1755.00	-
Associated Construction and Consultancy	240000.00	-
B.B.S. Enterprise	26000.00	-
·	3900.00	-
B.M Construction	91000.00	_
Bhavyabharat Infrastructure & Co. Pvt. Ltd	5850.00	_
Blue Enterprise	96850.00	-
Captain Steel India Ltd.		-
Chatterjee Construction	5850.00	-
Dascon Sourav Commercial Pvt Ltd	54600.00	- 
DAV Model School, KSTP Asansol	105625.00	154700.00
Deal Magsil Dutta Enterprise	52702.00 3510.00	15000.00
Garg Engineering & Construction Pvt Ltd	22750.00	-



	11700.00	
Ghosh Construction	1950.00	_
Ghosh Enterprise	39000.00	
Gita Construction	35100.00	-
Joy Santosi Enterprise	31459.32	
Joyous Block & Panels Pvt. Ltd.	66300.00	34580.00
K & K Minerals Pvt. Ltd	201500.00	34360.00
Kakali Enterprise	3900.00	-
M/S Associated Architect & Engg	48750.00	-
M/S Megastruct		-
M/S NSC Projects Pvt Ltd	66132.00	-
M/S R K Enterprise	5850.00	-
Ma Manasa Enterprise	39000.00	-
Maan Steel & Power Ltd.	1950.00	-
Maithan Steel & Power Limited	65000.00	-
Mangalmoy Gorai	9282.00	-
Manpasand Cements Pvt Ltd.	22100.00	-
MDI Murshidabad	21059.33	32500.00
Metcon Water system pvt ltd	20917.00	-
Montecarlo Ltd	8644.92	-
MR Enterprise	13000.00	-
MS BM Construction	3900.00	-
National Institute of Technology Durgapur	376.00	-
NCC Limited	52000.00	-
Nirman Construction	39650.00	-
OHMS Electrical & Co.	11700.00	-
OM Traders	3900.00	-
Orchid Engineers Co-operative Society Ltd	10556.00	-
Orchid Realty	3900.00	-
P. K. Thakur & Company Ltd	1755.00	9500.00
Paras Nath Singh	89700.00	-
Reliable Uniseven Struc Mech (JV)	1950.00	-
RIC Steel and Power pvt. Ltd.	3900.00	-
RK Construction	1950.00	-
Royal India Construction	39005.08	-
S.B Enterprise	7800.00	-
Sanjay Kumar Upadhaya	71500.00	-
Shyam Set & Power Ltd	18200.00	-
Sing Construction Corporation	1755.00	-
Sonu & Saroj	89700.00	-
SPS Infrabuild Pvt. Ltd	183300.00	-
Sri Ganseh Engineering Works	131300.00	-
Srijon Nirman	1950.00	-
Sudhamoy Das	3900.00	-
Suhana Enterprise	1950.00	-
Sylvanous Supply Syndicate	35100.00	-
Tapoban Housing Development Pvt Ltd	54600.00	
TESCON	52650.00 19048.00	-
Triveni Engicons Pvt. Ltd.	19046.00	· -
Umesh Kumar Singh	55250.00	

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### **SCHEDULE -13**

### Income from investment

Particulars	Current Year	Previous Year
Interest From Fixed Deposits	3469335.00	10596.00
Total	3469335.00	10596.00

### **SCHEDULE -14**

### **Interest Earned**

Particulars	Current Year	Previous Year
Interest Received (Canara Bank A/c No.8569101003197)	2485147.00	2845512.00
Total	2485147.00	2845512.00

### **SCHEDULE -15**

### Other Income

Particulars	Current Year	Previous Year
Overhead Income of Projects	3704983.25	4208088.50
Fellowship & Manpower	31000.00	0
Total	3735983.25	4208088.50

### **SCHEDULE -16**

### **Prior Period Income**

Particulars		Current Year	Previous Year
Project NITD/SRCC/PPG/MATH/2019/16 (48565)		2341.00	-
Project NITD/SRCC/SG/CY/2020/7(165283)		2536.00	-
	Total	4877.00	-

### **SCHEDULE-17**

### **Consultancy Project Expenditure**

Particulars	Current Year	Previous Year
Amiya Kumar Samanta	158726.00	112000.00
Aniruddha Bhattacharya	-	20339.00
Dilip Kumar Singh Roy	401872.54	324493.00
Diptesh Das	2970000.00	662000.00
Pronab Roy	300000.00	115000.00
Sandip Kumar Lahiri	-	1573340.67
Showmen Saha	213976.27	246075.00
Somnath Karmakar	1220000.00	2437828.00
Atul Krishna Banik	480000.00	-
R P Nanda	1080000.00	-
Kalyan Adhikari	384000.00	-
Supriya Pal	4059132.00	3176526.73
Sabyasachi Biswas	76923.00	-
Samarjit Kar	125491.00	-
A.K Samanta & Diptesh Das	380000.00	-
Showmen Saha & Somnath Karmakar	253646.00	-
Shalini Das	360000.00	-



Total	12571623.81	8667602.40
SP Enterprise	24640.00	-
SC Das	10200.00	-
Maa Trading	6431.00	-
Nightangle	19906.00	-
Sneha Konar	10950.00	-
Biswajit Singh Kapoor	10950.00	-
Majumdar Enterprise	24780.00	-

### SCHEDULE-18

### **Sponsored Projects-Research Expenditure**

Particulars	Current Year	
Dilip Kumar Singh Roy	790352.78	308421.80
Pronab Roy	182000.00	35000.00
Rowdra Ghatak	810000.00	437500.00
Showmen Saha	143140.00	80855.89
Somnath Karmakar	3000.00	17307.85
Supriya Pal	259115.00	3500.00
Sarbamangla Scientific	-	6732.00
Avijit Dalal	-	210.00
Ajit Kumar Meikap	-	14148.00
Supriya Bera	289.00	-
R P Nanda	128000.00	-
Diptesh Das	17000.00	-
Amiya Kumar Samanta	299621.00	-
Sabyasachi Biswas	57500.00	-
Madan Mohan Ghosh	116500.00	-
Sudip Shekhar Mukhopadhyay	296847.52	
To	otal 3103365.30	903675.54

### **SCHEDULE -20**

### **Administrative and General Expenses**

Particulars	Current Year	Previous Year
Interest to Funding Agencies	2997597.00	2368428.00
Project PI and Department Overhead Shares	3299098.01	2104044.00
Consultancy Charges	141306.00	146070.00
Office Expenses	80766.57	10991.87
Professional Charges	10620.00	48380.00
Bank Charges	1847.00	14347.24
Post Doctoral Fellowship	301397.00	-
Salary for Contractual Employee	311719.00	-
Travelling & Conveyance Expenses	17554.00	-
Repairing & Maintainence of Equipment	33465.00	-
Tota	T 7195369.58	4692261.11



### SCHEDULE -25 Prior Period Expenses

Particulars	Current Year	Previous Year
Apurba Layek PI Overhead Share	58200.00	-
Bibhash Sen Pl Overhead Share	76200.00	-
Amit Kumar Chakraborty PI Overhead Share	138000.00	-
Ankush Acharyya PI Overhead Share	18345.00	-
Animesh Dutta PI Overhead Share	256275.00	-
Aniruddha Mondal PI Overhead Share	76772.00	-
Apurba Kumar Patra Pi Overhead Share	150000.00	_
Ashish Bhattacharjee PI Overhead Share	35.00	_
Bijoy Kumar Saha PI Overhead Share	46974.00	_
Chiranjib Koley PI Overhead Share	95122.00	_
Debojyoti De Pl Overhead Share	668.00	_
Durbadal Mandal (ECE) PI Overhead Share	52916.00	_
Gopinath Halder Pl Overhead Share	2599.00	_
Kazi Sufia Khannam PI Overhead Share	30000.00	_
Laxmi Kanta Dey Pi Overherad Share	6228.00	_
Mamta Dulai Computer Science(PI Share)	75300.00	_
Manas Kumar Mondal PI Overhead Share.	45000.00	_
Oindrilla Mukherjee Pi Overhead Share	35.00	_
Partha Sarathee Bhowmik Pi Overhead Share	48000.00	_
Pathik Kumbhakar Pl Overhead Share	4253.00	_
Pijush Topadar PI Overhead Share	162139.00	_
Pinaki Pal Pl Overhead Share	24681.00	_
Rajat Mahapatra PI Overhead Share	117535.00	
Rajnarayan Saha PI Overhead Share	46477.00	
Sankar Chandra Moi PI Overhead Share	99000.00	
Satya Bagchi Pi Overhead Share	6450.00	
Sayantari Ghosh PI Overhead Share	21000.00	
Shibendu Shekhar Roy Pl Overhead Share	91500.00	
Soumen Basu Pi Overhead Share	73410.00	
Sougata Saha PI Overhead Share	14800.00	
Sudip Chattopaddhyay Pi Overhead Share	162063.00	
Sudipta Mondal Pi Overhead Share	45000.00	
Sudit Sekhar Mukhopaddhyay PI Overhead Share	52886.00	_
Sujit Kumar Mondal PI Overhead Share	72000.00	
Sujit Sankar Panja Pi Overhead Share	75654.00	
Sukadev Sahoo PI Overhead Share	21821.00	
Supriya Pal Project Pi Overhead Share	39156.00	
Swapna Ranawa Pi Overhead Share	35544.00	
Tamal Mondal PI Overhead Share	36000.00	
Tanmoy Kumar Saha Pi Overhead Share	59400.00	_
Tapas Kumar Saha Pi Overhead Share	17607.00	-
Utpal Adhikary Pi Overhead Share	97606.00	-
MS Mukhopadhyay	4038.50	-
Sandip Kumar Lahiri	361321.00	-
Dilip Kumar Singh Roy	32035.00	-
Diptes Das	112327.00	-
Amiya Kumar Samanta	115218.00	-
Avijit Saha	9446.00	-
/ Wijit Sana	3440.00	-







Total	4660036.00	-
H Bairagya	16431.00	-
MK Das	10200.00	-
Partha Sarthy Banerjee	13200.00	-
Supriya Bera (Consultant)	3000.00	-
Madan Mohan Ghosh	10200.00	-
Sheru Ali	3892.00	-
MS Mukhopadhyay	52308.00	-
Pronab Roy	35150.00	-
Amiya Kumar Samanta	25650.00	-
Sheru Ali	13680.00	-
Avijit Saha	20520.00	-
Rowdra Ghatak	10000.00	-
Aniruddha Bhattacarya	10000.00	-
Sujit Kumar Mondal	10000.00	-
Partha Sarathee Bhowmik	10000.00	_
Nirmal Kumar Roy (Consultant)	25000.00	_
Chiranjib Koley	25000.00	_
Chiranjib Koley	10000.00	_
Pronab Roy	14200.00	_
Dilip Kumar Singh Roy	14534.00	_
Diptes Das	124250.00	-
Amiya Kumar Samanta	222168.00	-
Sheru Ali	38114.00	-
Dilip Kumar Singh Roy	193931.00	-
Amiya Kumar Samanta	214285.00	-
Avijit Saha	12957.00	-
Avijit Saha	136234.00	_
Ajit Kr. Meikap Pi Overhead Share	22836.00	_
Somnath Karmakar	8077.00	_
Sheru Ali	4038.50	_
R.P Nanda	88000.00	_
Pronab Roy	68000.00	-
Sheru Ali	7144.00	_

Amount Rs.

							Amount Rs.	
Cost of	Addition During	Deletion	Total Cost of	Opening	During the year	Total	WDV of Assets	WDV of Assets
Acquisition	the Year	During the	Acquisition	Depreciation	Depreciation	Depreciation	31.03.2023	31.03.2022
		year			-			
4056892.00	5486139.76	0.00	9543031.76	811378.40	1603920.97	2415299.37	7127732.39	2245512.60
4050892.00	5480139.70	0.00	9543031.76	811378.40	1603920.97	2415299.37	/12//32.39	3245513.60
1864508.00	32446851.14	0.00	34311359.14	139838.10	1854332.40	1994170.50	32317188.64	1724669.90
1804308.00	32440631.14	0.00	34311339.14	133030.10	1634332.40	1994170.30	3231/100.04	1724009.90
5080196.40	0.00	0.00	5080196.40	254009.82	254009.82	508019.64	4572176.76	4826186.58
3000130.40	0.00	0.00	3000130.40	254005.02	254005.02	300013.04	4372170.70	4020100.50
	231500.00		231500.00		8681.25	8681.25	222818.75	0.00
	231300.00		231300.00		8081.23	0001.23	222818.73	0.00
11001596.40	38164490.90	0.00	49166087.30	1205226.32	3720944.44	4926170.76	44239916.54	9796370.08
11001330.40	30104430.30	0.00	75100007.30	1203220.32	3,20344.44	7520170.70	77233310.34	3/303/0.08



8. DETAILED SCHEDULE OF DEPR	Opening	Depreciation		(Amount in Rup	,
Particulars	depreciation as on 01.04.2022	during the year	Total depreciation	WDV as on 31.03.2023	WDV as on 31.03.2022
Land	-	-	-	10305688.62	10305688.62
Total (A)	-	-	-	10305688.62	10305688.62
Buildings					
Mod. Of Lab -AM & Drugs	19,81,460.46	0	1981460.46	1	
Mod. Of Lab -Chemical	19,86,948.36	0	1986948.36	1	
Mod. Of Lab -Chemistry	6,94,361.70	0	694361.7	1	
Mod. Of Lab -Civil	25,21,373.89	2233	2523606.889	89340.36137	91573.3613
Mod. Of Lab -Electrical	34,12,386.32	0	3412386.32	1	
Mod. Of Lab -Geology	20,45,716.63	0	2045716.63	1	
Mod. Of Lab -Library	16,90,936.13	0	1690936.13	1	
Mod. Of Lab -Maths	78,799.50	0	78799.5	1	
Mod. Of Lab -Mech	48,13,257.31	6100	4819357.306	243993.1341	250093.134
Mod. Of Lab -Metallurgy	19,40,464.04	0	1940464.04	1	
Mod. Of Lab -Micro Processor	5,98,840.41	0	598840.41	1	
Mod. Of Lab -Physics	25,95,176.50	0	2595176.5	1	
Mod. Of Lab -Printed Circuit	5,06,924.67	0	506924.67	1	
Mod. Of Lab -Workshop	28,34,188.23	0	2834188.23	1	
Bldg. & Other Cap works (A)	11,35,03,694.16	928920	114432614.2	40219291.56	29838732.5
Boys Hostel-360	2,60,94,764.41	372347	26467111.41	14893893.22	15266240.2
Conf. Hall	26,66,899.42	32687	2699586.425	1307494.855	1340181.85
Const. high Vol. Lab	29,96,997.31	55487	3052484.309	2219469.691	2274956.69
Const. of Shed	7,32,979.50	8647	741626.5042	345864.9958	354511.995
Const. of Store,Elec. HP Lab	5,26,491.12	4244	530735.1212	169746.9988	173990.998
Const. of Out of Int Sav./A.c	4,54,371.58	0	454371.58	109740.3900	
Elect. M.ch. Shop	7,92,264.34	12300	804564.3377	491984.2223	504284.222
Extn. 2nd Floor CSE & ECE	22,51,544.53	39227	2290771.528	1569062.472	1608289.47
Ext. Guest house	29,76,468.66	65562	3042030.659	2622475.051	2688037.05
Ext. Hospital	77,75,512.48	191287	7966799.476	7651484.744	7842771.74
Ext. Comp. centre	33,81,711.04	1784	3383495.04	71371.5002	
Girls Hostel	3,33,70,543.09	5282971	38653514.09	237434906.9	73155.500 242717877.
Hostel Annexed to Exist Hostel					
	66,38,532.00	1659633	8298165	74683501	7634313
Lab. Bldg. CE Dept.	3,18,726.40	0	318726.4	1	
Liab. Bldg.	31,93,492.17	22169	3215661.171	886739.8987	908908.898
Overhead Tank	20,441.79	331	20772.78871	13227.21129	13558.2112
Renovation Works	5,67,30,329.05	8285117	65015446.05	373981161.2	342576278.
Student Activity Centre	1,43,12,627.59	407038	14719665.59	16319530.66	16493818.6
Designing Mural & Wall Cladding	41,549.07	767	42316.07319	30683.92681	31450.9268
Boundary Wall	86,63,895.97	1476334	10140229.97	69553589.03	10345502.0
Boys Hostel-120	24,93,643.87	48151	2541794.865	1926044.835	1974195.83
Constn.of 3 storied IT	68,08,075.64	131369	6939444.637	5254753.743	5386122.74
Constn.of IT Bldg.	3,38,128.20	6699	344827.1953	267979.8047	274678.804
Constn. Cafeteria	4,94,565.44	9550	504115.4432	381992.6868	391542.686
Constn. Lec. Gallery	40,08,635.50	84443	4093078.499	3377709.971	3462152.97
Constn. New Class	35,43,304.38	73093	3616397.378	2923703.502	2996796.50
Extn Academic Centre	15,64,258.22	30205	1594463.22	1208205.19	1238410.1
Covered Space 500sq for CSE	7,86,013.80	16579	802592.7979	663138.2021	679717.202
Fountain in front of Acc.Bldg.	8,84,283.85	17075	901358.8464	683006.1536	700081.153
Construction Gallery at Lords gr.	7,52,083.32	20684	772767.3209	827362.6791	848046.679
Const of Staff Club	9,27,824.38	38989	966813.3804	1559543.62	1598532.6
Upgradation of Drains	53,35,470.53	224205	5559675.53	8968210.47	9192415.4
Upgradation of Roads	2,34,86,897.81	1563755	25050652.81	66510200.19	68073955.1
Subsidiary Drainage	7,57,215.00	47385	804600	1895400	194278
Const of Boys Hostel 1250 Seated	-	0	0	0	
New Academic Block Construction	6,23,04,884.10	3898915	66203799.1	155956600.9	159855515
Constn. of Lab Chem/Biotech	3,23,99,800.98	2027515	34427315.98	81100584.03	83128099.0
Constn. Faculty accommodation	6,99,79,429.85	4379173	74358602.85	175166904.2	179546077



Construction of G1 Market Complex	2,38,25,336.20	1490942	25316278.2	59637672.8	61128614.8
Construction of International Student Hostel	5,04,81,000.00	3159000	53640000	126360000	129519000
500 Seated Girls Hostel	-	0	0	0	0
Fixing of Wire nets in hostels	5,32,855.00	33345	566200	1333800	1367145
Renovation/Extension of Hostels CPWD	47,80,214.44	360135	5140349.438	14405400.56	14765535.56
Pipeline & Sewage line	32,75,937.82	752682	4028619.823	35243300.18	4537982.177
VIP GUEST HOUSE	95,98,944.00	2399736	11998680	107988120	110387856
Roof Treatment of Quarters	11,49,845.00	71955	1221800	2878200	2950155
Construction of S.N. Roy Memorial Bldg	3,84,63,885.51	1798274	40262159.51	71930965.49	73729239.49
Extension of existing Hostel (Hall-1)	1,53,95,064.37	646926	16041990.37	25877027.63	26523953.63
Construction Boys/Girls Hostel Augmentation of CSE Dept Shed on Chemistry Dept- Assets	10,04,51,058.77	6901218	107352276.8	276048706.2	282949924.2
Addition- 2021-22	2,78,000.00	278000	556000	13344000	13622000
Boys Hostel 1250 Seated Asset Addition- 2021-22 Construction of EE measurement labs- Assets Addition- 2021-	1,81,24,000.00	18124000	36248000	869952000	888076000
22	1,94,000.00	194000	388000	9312000	9506000
Bldg. And Other Capital Works Addition 2022-23	-	9277	9277	454567	
Student Activity Centre Addition 2022-23	-	11207	11207	549120	
Total (B)	79,85,59,325.79	67703667	866262992.79	2968785046.65	2892089892.65

<u>2017-18</u>

Particulars	Opening	Depreciation	Total	WDV as on	WDV as on
	Depreciation as	during the	Depreciation	31.03.2023	31.03.2022
	on 01.04.2022	year			
Plant, Machineries & Equipment					
Antenna Proj.	1,83,257.48	385	183642.4844	4620.515633	5,005.52
Centre of excellence	3,07,15,865.74	6632	30722497.74	79582.60725	86,214.61
Cont. Edn.Centre	55,813.26	101	55914.26046	1219.739535	1,320.74
Elec.Dgree Course	85,12,990.72	0	8512990.72	1	1.00
Env. Engg. Mon.of Ind.waste	9,99,999.00	0	999999	1	1.00
EPBAX College	44,45,786.43	23700	4469486.429	284395.5712	3,08,095.57
Equip.CE Dept.(testing & con.)	51,102.90	0	51102.9	1	1.00
Equip.C.E	1,39,85,586.35	235128	14220714.35	2823712.188	30,58,840.19
Equip.Chemical	80,77,140.01	139727	8216867.01	1689675.33	18,29,402.33
Equip.Chemistry	42,15,435.02	74211	4289646.015	913028.9849	9,87,239.98
Equip.C-Nance	1,50,796.78	397	151193.7758	4764.224245	5,161.22
Equip.Comp.Centre	17,77,841.04	29870	1807711.041	358437.9592	3,88,307.96
Equip.Comp.Sc.& Engg	24,64,204.46	31620	2495824.462	379439.6175	4,11,059.62
Equip.Elec.& Comm	77,40,871.72	95135	7836006.72	1141623.28	12,36,758.28
Equip.Elect.	66,48,773.56	156040	6804813.562	1929256.558	20,85,296.56
Equip.Mch.Shop	2,32,848.13	948	233796.1283	11372.57167	12,320.57
Equip.UNESCO	31,71,233.69	0	3171233.69	1	1.00
Equip.Humanities	9,71,287.39	156650	1127937.392	2467733.888	26,24,383.89
Equip.Inst.Mgmt	1,54,77,975.58	254083	15732058.58	3048988.135	33,03,071.14
Equip.IT	93,87,853.23	79106	9466959.226	949264.8138	10,28,370.81
Equip.Maths	2,86,460.10	2886	289346.0954	34634.98455	37,520.98
Equip.MCA	38,23,984.57	33256	3857240.568	399076.6319	4,32,332.63
Equip.Mech.	92,32,387.99	182550	9414937.99	2192473.73	23,75,023.73
Equip.Metalurgical	69,22,771.95	101383	7024154.955	1216597.245	13,17,980.25
Equip.PG	92,207.00	0	92207	1	1.00
Equip.Physics	36,34,910.59	55899	3690809.592	688395.1078	7,44,294.11
Equip.Applied Mechanics	18,37,172.19	8917	1846089.187	107011.2735	1,15,928.27
Equip.Purc.out of Resc. Fund	43,19,403.08	0	4319403.08	1	1.00



Total (C)	24,81,00,026.50	10697151.1	258797177.6	163704438.6	12,46,59,609.72
Equip.Mech. 2022-23 Addition		9174.5	9174.5	174315.5	-
Equip.Maths 2022-23 Addition		15875.45	15875.45	301633.55	-
Equip.Geology 2022-23 Addition		53135.5	53135.5	1009574.5	
Equip.Estate Deptt 2022-23 Addition		331.2	331.2	6292.8	
Equipment- Estate Dept. 2022-23 Addition		24997.5	24997.5	474952.5	_
Equip.Elect. 2022-23 Addition		19675	19675	373825	
Equip.Elec.& Comm 2022-23 Addition		9996	9996	189924	
Equip.Comp.Sc.& Engg 22-23 Addition		355255.05	355255.05	6749845.95	
Equipment- Chemical Engg. Deptt 2022-23 Addition		3608.5	3608.5	68561.5	
Equip. Bio Tech 2022-23 Addition		16162.5	16162.5	307087.5	
Equip. Bio Tech 2022-23 Addition		30653	30653	582407	
Equip.Chemistry 22-23 Addition		765	765	14535	
Equipment for Institute- Plant Machinery- 2022-23 Addition	13,043.00	1947469.9	1947469.9	37001926.1	2,47,033.00
Equipment- Humanities Deptt- 2021-22 Addition Equipment- MME Dept	1,623.00 13,045.00	1623 13045	3246 26090	29204 234810	30,827.00 2,47,855.00
Equipment for Institute- Plant Machinery- 2021-22 Addition	6,53,345.00	653345		11760201	1,24,13,546.00
Equipment - Chemical Engg. Deptt 2021-22 Addition	2,913.00 6 53 345 00	2913 653345	5826 1306690	52424 11760201	55,337.00
Equipment- CE Deptt -2021-22 Addition	1,245.00	1245	2490	22405	23,650.00
Centre of excellence -2021-22 Addition	56,863.00	56863	113726	1023524	10,80,387.00
Equipment for institute- 2020-21 ADDITION	23,44,476.00	1172238	3516714	19928049	2,11,00,287.00
Equipment- Estate Dept.	7,212.00	2404	9616	38459	40,863.00
Equipment purchased	25,78,993.70	274390	2853383.7	3292678.3	35,67,068.30
Equipment for institute	2,01,98,780.66	3121928	23320708.66	43593301.07	4,67,15,229.07
Equip. Video Conf.	35,87,527.20	65892	3653419.199	790695.8011	8,56,587.80
Equip.Store	2,93,954.54	4973	298927.5395	59672.46049	64,645.46
Solar water heating system	42,25,728.88	82252	4307980.882	987019.1184	10,69,271.12
Equip.Liabrary	19,27,327.17	52968	1980295.166	635609.8336	6,88,577.83
Equip.Estate Deptt	17,37,003.97	57449	1794452.967	689392.0333	7,46,841.03
Equip. Constn.cell	36,841.28	677	37518.27572	8117.724281	8,794.72
Equip. Workshop	1,43,185.36	2158	145343.3563	25897.64369	28,055.64
Equip.Earthquake lab	16,15,014.54	22018	1637032.539	264217.4613	2,86,235.46
Equip.Geology	8,66,794.96	19627	886421.9618	235520.0382	2,55,147.04
Equip. Internal Tele	42,22,012.20	65317	4287329.2	783801.8004	8,49,118.80
Equip. Bio Tech	97,50,143.48	161293	9911436.483	1935512.517	20,96,805.52
Dissel Gen.Set	85,30,335.74	106206	8636541.736	1274473.264	13,80,679.26
Equip.Physics Traning Lab	5,15,242.00	8658	523900.0025	103891.9975	1,12,550.00
Tot.Stn. & polter for Constn. Cell	2,11,350.82	2098	213448.8201	25171.17992	27,269.18
Equip.MBA	55,449.40	11675	67124.39572	174890.6043	1,86,565.60
Equp. High Vol.Lab	1,25,98,218.59	132047	12730265.59	1584568.412	17,16,615.41
Equp. & Fur Exam Cell	23,64,245.73	283937	2648182.73	4224464.27	45,08,401.27
VSAT with ER Net	14,59,854.27	0	1459854.271	0.998694984	1.00
Teaching Aids	39,42,385.80	13332	3955717.804	159979.7658	1,73,311.77
Resc. Proj	81,40,831.52	145557	8286388.52	1746689.26	18,92,246.26
REC- Phy. Poly Proj 01-02	2,199.00	0	2199	1	1.00
Personal Comp Laptop	10,77,999.00	0	1077999	1	1.00
M.Tech Corrission Sc.	12,15,666.17	0	1215666.17	1	1.00
MODROB Workshop	6,84,126.17	3190	687316.1733	38275.82671	41,465.83
Inst. Net work	35,59,566.98	0	3559566.98	1	1.00
Exp-GOI for Faculty Resch	62,565.42	110	62675.41978	1325.380224	1,435.38
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> 468 ANNUAL ACCOUNT 2022-2023



Particulars	Opening	Depreciation	Total	WDV as on	WDV as on
	Depreciation as on 01.04.2022	during the year	Depreciation	31.03.2023	31.03.2022
<u>Vehicles</u>					
Motor Vehicle	17,49,957.22	0	1749957.22	1	1.00
Total (D)	17,49,957.22	0	1749957.22	1	1.00
Francisco O Francis					
Furniture & Fixture Equipment / Furniture for institute	4,37,81,869.83	2170817	45952686.83	15195719.99	1,73,66,536.99
Research Initiation Grant	82,58,737.68	1487438	9746175.68	11324384.32	1,28,11,822.32
Furniture for Class Room	67,29,382.59	194229	6923611.586	1359603.874	15,53,832.87
Furniture for 360 Boys Hostel	11,52,508.88	35909	1188417.879	251359.1213	2,87,268.12
Furniture for Guest house	32,723.73	1159	33882.73024	8117.26976	9,276.2
Furniture for Bio tech	48,747.19	2497	51244.18543	19192.81457	21,689.8
Furniture for Institute	6,82,57,382.85	9235462	77492844.85	67630185.15	7,68,65,647.15
Furniture for PTI	4,729.86	222	4951.864978	1548.135022	1,770.1
Furniture for CSE Deept.	2,83,216.72	13269	296485.7197	92886.28026	1,06,155.2
Furniture UPS- 2019-20	3,14,619.00	104873	419492	978808	10,83,681.00
Equipment / Furniture for institute- 2020-21 ADDITION	2,19,248.00	96349	315597	1323051	14,19,400.00
Research Initiation Grant- 2020-21 ADDITION	5,49,848.00	96349	646197	5400455	54,96,804.00
Research Initiation Grant- 2021-22 Addition	1,60,782.00	160782	321564	1822195	19,82,977.00
Furniture for Institute 2021-22- Addition	3,09,547.00	309547	619094	3508195	38,17,742.00
Furniture for Guest house 22-23 Addition		1422.3	1422.3	17541.7	
Furniture for Institute 2022-23- Addition		3332473.275	3332473.275	41100500.73	
Ψ_± 1 (e)	12.01.02.242.22	47040707.50	4.470.404.40.0	450000540.4	12 20 24 602 05
Total (E)	13,01,03,343.33	17242797.58	147346140.9	150033743.4	12,28,24,002.93
Office Equipment Industry institute Interaction	7,12,754.95 2,23,092.33	0 26708	712754.95 249800.325	1 169149.675	1.00 1,95,857.68
Office Equipment Industry institute Interaction	7,12,754.95	0	712754.95	1	1.00
Office Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)	7,12,754.95 2,23,092.33	0 26708	712754.95 249800.325	1 169149.675	1.00 1,95,857.68
Office Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)	7,12,754.95 2,23,092.33	0 26708	712754.95 249800.325	1 169149.675	1.00 1,95,857.6
Office Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)  Computer Peripherials  Computer Centre	7,12,754.95 2,23,092.33 9,35,847.28	0 26708 26708	712754.95 249800.325 962555.275	1 169149.675 169150.675	1.00 1,95,857.6 1,95,858.6
Office Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)  Computer Peripherials  Computer Centre  Comp.Sc. & Engg	7,12,754.95 2,23,092.33 <b>9,35,847.28</b> 1,15,74,766.90	0 26708 26708	712754.95 249800.325 962555.275 11574766.58	1 169149.675 169150.675	1.00 1,95,857.6 1,95,858.6 (0.32)
Office Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)  Computer Peripherials  Computer Centre  Comp. Sc. & Engg  Comp. Soft.for College	7,12,754.95 2,23,092.33 <b>9,35,847.28</b> 1,15,74,766.90 1,30,60,868.20	0 26708 26708 0	712754.95 249800.325 962555.275 11574766.58 13060868.2	1 169149.675 169150.675 0 1	1.00 1,95,857.6 1,95,858.6 (0.32) 1.00
Office Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)  Computer Peripherials  Computer Centre  Comp. Sc. & Engg  Comp. Soft.for College PC's with Access.	7,12,754.95 2,23,092.33 9,35,847.28 1,15,74,766.90 1,30,60,868.20 17,99,840.36 2,83,66,914.56	0 26708 26708 0 0 0	712754.95 249800.325 962555.275 11574766.58 13060868.2 1799840 28366915	1 169149.675 169150.675 0 1 0.000166739 0.004418116	1.00 1,95,857.6 1,95,858.6 (0.32) 1.00 (0.36)
Office Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)  Computer Peripherials  Computer Centre  Comp. Sc. & Engg  Comp. Soft.for College  PC's with Access.  Computers and comp. peripherials for Institute	7,12,754.95 2,23,092.33 <b>9,35,847.28</b> 1,15,74,766.90 1,30,60,868.20 17,99,840.36	0 26708 26708 0 0	712754.95 249800.325 962555.275 11574766.58 13060868.2 1799840	1 169149.675 169150.675 0 1 0.000166739	1.00 1,95,857.6 1,95,858.6 (0.32) 1.00 (0.36) 0.44
Office Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)  Computer Peripherials  Computer Centre  Comp. Sc. & Engg  Comp. Soft.for College  PC's with Access.  Computers and comp. peripherials for Institute  Comp.peripherials for Comp.Cent	7,12,754.95 2,23,092.33 9,35,847.28 1,15,74,766.90 1,30,60,868.20 17,99,840.36 2,83,66,914.56 4,40,79,706.64 57,93,959.29	0 26708 26708 0 0 0 0 0 133870.71	712754.95 249800.325 962555.275 11574766.58 13060868.2 1799840 28366915 44079706.64 5927830.001	1 169149.675 169150.675 0 1 0.000166739 0.004418116 0 -0.000522624	1.00 1,95,857.6 1,95,858.6 (0.32) 1.00 (0.36) 0.44
Diffice Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)  Computer Peripherials  Computer Centre  Comp. Soft.for College PC's with Access.  Computers and comp. peripherials for Institute  Comp.peripherials for Comp.Cent  Computer Software- 19-20	7,12,754.95 2,23,092.33 9,35,847.28 1,15,74,766.90 1,30,60,868.20 17,99,840.36 2,83,66,914.56 4,40,79,706.64 57,93,959.29 13,58,704.00	0 26708 26708 0 0 0 0 0 133870.71	712754.95 249800.325 962555.275 11574766.58 13060868.2 1799840 28366915 44079706.64 5927830.001 1358704	1 169149.675 169150.675 0 1 0.000166739 0.004418116 0 -0.000522624	1.00 1,95,857.6 1,95,858.6 (0.32) 1.00 (0.36) 0.44 - 1,33,870.7
Diffice Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)  Computer Peripherials Computer Centre Comp. Soft. for College PC's with Access. Computers and comp. peripherials for Institute Comp. peripherials for Comp. Cent Computer Software- 19-20 Computer Software- 20-21 Computers and comp. peripherials for Institute- 20-21 Computers and comp. peripherials for Institute- 20-21	7,12,754.95 2,23,092.33 9,35,847.28 1,15,74,766.90 1,30,60,868.20 17,99,840.36 2,83,66,914.56 4,40,79,706.64 57,93,959.29 13,58,704.00 35,08,000.00	0 26708 26708 0 0 0 0 133870.71 0 877000	712754.95 249800.325 962555.275 11574766.58 13060868.2 1799840 28366915 44079706.64 5927830.001 1358704 4385000	1 169149.675 169150.675 0 1 0.000166739 0.004418116 0 -0.000522624 0	1.00 1,95,857.6 1,95,858.6 (0.32) 1.00 (0.36) 0.44 - 1,33,870.7
Diffice Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)  Computer Peripherials Computer Centre Comp. Soft. for College PC's with Access. Computers and comp. peripherials for Institute Comp. peripherials for Comp. Cent Computer Software- 19-20 Computer Software- 20-21 Computers and comp. peripherials for Institute- 20-21	7,12,754.95 2,23,092.33 9,35,847.28 1,15,74,766.90 1,30,60,868.20 17,99,840.36 2,83,66,914.56 4,40,79,706.64 57,93,959.29 13,58,704.00	0 26708 26708 0 0 0 0 0 133870.71	712754.95 249800.325 962555.275 11574766.58 13060868.2 1799840 28366915 44079706.64 5927830.001 1358704	1 169149.675 169150.675 0 1 0.000166739 0.004418116 0 -0.000522624	1.00 1,95,857.6 1,95,858.6 (0.32) 1.00 (0.36) 0.44 - 1,33,870.7 - 8,77,000.0
Office Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)  Computer Peripherials  Computer Centre  Comp. Soft.for College PC's with Access.  Computers and comp. peripherials for Institute  Comp.peripherials for Comp.Cent  Computer Software- 19-20  Computer Software- 20-21  Computers and comp. peripherials for Institute- 20-21  ADDITION  Computer and Computer Peripherals- 2021-22 Addition	7,12,754.95 2,23,092.33 9,35,847.28 1,15,74,766.90 1,30,60,868.20 17,99,840.36 2,83,66,914.56 4,40,79,706.64 57,93,959.29 13,58,704.00 35,08,000.00 64,15,906.00	0 26708 26708 0 0 0 0 133870.71 0 877000 3207953	712754.95 249800.325 962555.275 11574766.58 13060868.2 1799840 28366915 44079706.64 5927830.001 1358704 4385000 9623859	1 169149.675 169150.675 0 1 0.000166739 0.004418116 0 -0.000522624 0 0	1.00 1,95,857.6 1,95,858.6 (0.32) 1.00 (0.36) 0.44 - 1,33,870.7 - 8,77,000.0 96,23,859.0 1,97,64,109.00
Office Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)  Computer Peripherials Computer Centre Comp. Soft.for College PC's with Access. Computers and comp. peripherials for Institute Comp.peripherials for Comp.Cent Computer Software- 19-20 Computer Software- 19-20 Computer Software- 20-21 Computers and comp. peripherials for Institute- 20-21 ADDITION Computer Software- 20-21 Computer Software for College- 2021-22 Addition Computer Software for College- 2021-22 Addition Computers and comp. peripherials for Institute 2022-23	7,12,754.95 2,23,092.33 9,35,847.28 1,15,74,766.90 1,30,60,868.20 17,99,840.36 2,83,66,914.56 4,40,79,706.64 57,93,959.29 13,58,704.00 35,08,000.00 64,15,906.00 49,41,027.00	0 26708 26708 0 0 0 0 133870.71 0 877000 3207953 4941027 508958	712754.95 249800.325 962555.275 11574766.58 13060868.2 1799840 28366915 44079706.64 5927830.001 1358704 4385000 9623859 9882054 1017916	1 169149.675 169150.675 0 1 0.000166739 0.004418116 0 -0.000522624 0 0 6415906 14823082 1526872	1.00 1,95,857.6 1,95,858.6 (0.32) 1.00 (0.36) 0.44 - 1,33,870.7 - 8,77,000.0 96,23,859.0 1,97,64,109.0
Office Equipment Industry institute Interaction Digital Copier & Xerox Machine	7,12,754.95 2,23,092.33 9,35,847.28 1,15,74,766.90 1,30,60,868.20 17,99,840.36 2,83,66,914.56 4,40,79,706.64 57,93,959.29 13,58,704.00 35,08,000.00 64,15,906.00 49,41,027.00	0 26708 26708 0 0 0 0 133870.71 0 877000 3207953 4941027	712754.95 249800.325 962555.275 11574766.58 13060868.2 1799840 28366915 44079706.64 5927830.001 1358704 4385000 9623859 9882054	1 169149.675 169150.675 0 1 0.000166739 0.004418116 0 -0.000522624 0 0 0 6415906 14823082	1.00 1,95,857.66 1,95,858.66 (0.32) 1.00 (0.36)
Office Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)  Computer Peripherials Computer Centre Comp. Sc. & Engg Comp. Soft.for College PC's with Access. Computers and comp. peripherials for Institute Comp.peripherials for Comp.Cent Computer Software- 19-20 Computer Software- 19-20 Computer Software- 20-21 Computers and comp. peripherials for Institute- 20-21 ADDITION Computer Software for College- 2021-22 Addition Computer Software for College- 2021-22 Addition Computers and comp. peripherials for Institute 2022-23 Addition	7,12,754.95 2,23,092.33 9,35,847.28 1,15,74,766.90 1,30,60,868.20 17,99,840.36 2,83,66,914.56 4,40,79,706.64 57,93,959.29 13,58,704.00 35,08,000.00 64,15,906.00 49,41,027.00	0 26708 26708 0 0 0 0 133870.71 0 877000 3207953 4941027 508958 7079335	712754.95 249800.325 962555.275 11574766.58 13060868.2 1799840 28366915 44079706.64 5927830.001 1358704 4385000 9623859 9882054 1017916 7079335	1 169149.675 169150.675 0 1 0.000166739 0.004418116 0 -0.000522624 0 0 6415906 14823082 1526872 28317339	1.00 1,95,857.6 1,95,858.6 (0.32) 1.00 (0.36) 0.44 - 1,33,870.7 - 8,77,000.0 96,23,859.0 1,97,64,109.0
Office Equipment Industry institute Interaction Digital Copier & Xerox Machine  Total (F)  Computer Peripherials Computer Centre Comp. Sc. & Engg Comp. Soft.for College PC's with Access. Computers and comp. peripherials for Institute Comp.peripherials for Comp.Cent Computer Software- 19-20 Computer Software- 19-20 Computer Software- 20-21 Computers and comp. peripherials for Institute- 20-21 ADDITION Computer Software for College- 2021-22 Addition Computer Software for College- 2021-22 Addition Computers and comp. peripherials for Institute 2022-23 Addition	7,12,754.95 2,23,092.33 9,35,847.28 1,15,74,766.90 1,30,60,868.20 17,99,840.36 2,83,66,914.56 4,40,79,706.64 57,93,959.29 13,58,704.00 35,08,000.00 64,15,906.00 49,41,027.00	0 26708 26708 0 0 0 0 133870.71 0 877000 3207953 4941027 508958 7079335	712754.95 249800.325 962555.275 11574766.58 13060868.2 1799840 28366915 44079706.64 5927830.001 1358704 4385000 9623859 9882054 1017916 7079335	1 169149.675 169150.675 0 1 0.000166739 0.004418116 0 -0.000522624 0 0 6415906 14823082 1526872 28317339	1.00 1,95,857.6 1,95,858.6 (0.32) 1.00 (0.36) 0.44 - 1,33,870.7 - 8,77,000.0 96,23,859.0 1,97,64,109.0



#### NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

Electrical Installation						
Electrical Installation		6.05.522.25	2	000000 07		4.00
11 KV Elec. Inst. 33 KV Transmission line		6,06,639.95	0	606639.95	1	1.00
Elec. Sub Stn.		4,48,28,600.55 21,87,172.75	2142345 88251	46970945.55 2275423.749	25708139.45 1186093.191	2,78,50,484.45 12,74,344.1
250KV line with Elec.Sub.Stn.		2,85,881.53	2953	288834.5319	35428.4881	38,381.4
		2,03,001.33				30,301.4
Equipments for Institute		-	0	0	0	-
Furniture for Institute		-	0	0	0	-
то	otal (H)	4,79,08,294.78	2233549	50141843.78	26929662.13	2,91,63,211.13
<u>Liabrary Books</u>						
Book bank		47,94,860.53	346853	5141713.532	1387410.738	17,34,263.7
Liabrary Book Bank		1,92,35,382.41	1860108	21095490.41	7440434.592	93,00,542.5
Liabrary Books		9,58,71,899.14	11012404	106884303.1	45899852.42	5,60,46,507.4
Revenue fund Capitaliased		1,00,80,598.91	0	10080598.91	1	1.00
Library Journal (Assets)		71,22,010.54	1559564	8681574.539	7126315.461	86,85,879.4
Liabrary Books- 22-23 ADDITION		-	1934957.9	1934957.9	17414619.1	
Т	otal (I)	13,71,04,751.53	16713886.9	153818638.4	79268633.31	7,57,67,194.2
Intangible Assets  E Book Ejournal & Data base  E Book Ejournal & Data base 2022-23 ADDITION		15,07,41,759.00	28389716.52 7251677.4	179131475.5 7251677.4	6668124.998 10877516.6	(0.00)
т	otal (I)	15,07,41,759.00	35641393.92	186383152.9	17545641.6	(0.00)
	ï	15,07,76,617.01 34,858.01				
TEQIP Assets						
Building (TEQIP-I)		-	0	0	9897307	98,97,307.0
Equipment TEQIP-I		-	0	0	155065026	15,50,65,026.00
Vehicle(TEQIP-I)		-	0	0	515937	5,15,937.0
Furniture (TEQIP-I)		-	0	0	7998127	79,98,127.0
Library Books (TEQIP-I)		-	0	0	11513246	1,15,13,246.0
То	otal (K)	-	0	0	184989643	18,49,89,643.00
Consideration of the Constitution of the Const	11.1.12	1.62.66.14.056.20	400005044.0	4005477000	200024222	FO 02 40 470 T
Grand Total (A+B+C+D+E+F+G+	m+I+K)	1,63,66,11,956.38	168865644.2	1805477600	3660248237	58,03,40,478.7



Current Year

# SCHEDULE - 3C UNUTILISED GRANTS FROM UGC, GOVERNMENT OF INDIA AND STATE GOVERNMENT

Amount in Rupees

Previous Year

	Current Year	Previous Year
	23700000.00	23700000
	271553000.00	271553000
Total(a)	295253000.00	295253000
	231763174.00	231763174
Total(b)	231763174.00	231763174
	63489826.00	63489826
Total(c)	0	0
Total(d)	0	0
	0	0
Total(e)	0	0
Total(f)	0	0
	0	0
l otal(g)	0	0
Total(h)	0	0
	0	0
	Total(b)  Total(c)  Total(d)  Total(f)  Total(g)	23700000.00   271553000.00

\*Grand Total (A+B+C+D)

63489826

63489826.00



Scanned Copy of Separate Audit Report Of the Annual Account For the year 2022-23





# O/O THE DIRECTOR GENERAL OF AUDIT (CENTRAL), KOLKATA

#### महानिदेशक लेखा परीक्षा का कार्यालय (केंद्रीय) , कोलकाता

8 K S Roy Road GIP Building Kolkata , West Bengal PIN 700001



Ltr No: INSPECTION WING/2023-2024/DIS-1143162

Date: 22 Sep 2023

To,

1 The Director, National Institute of Technology, Durgapur, Mahatma Gandhi Avenue, Durgapur, PIN-713209

Subject: Separate Audit Report on the accounts of the National Institute of Technology, Durgapur, for the financial year 2022-23

#### Sir/Madam,

A copy of the Separate Audit Report, alongwith Annexure, on the accounts of the National Institute of Technology, Durgapur, for the financial year 2022-23, is forwarded to the Director, National Institute of Technology, Durgapur, Mahatma Gandhi Avenue, Durgapur, PIN-713209, for information and necessary action.

Arrangement may please be made for preparation of Hindi Version of the Separate Audit Report, with Annexure, at your end, and for sending the same directly to the Ministry.

It may please be ensured that the Audited Accounts and the Separate Audit Report, along with Annexure, are placed before the apex body, for consideration and adoption, before the same are sent to the Government for being placed in the Parliament.

A copy of the printed Annual Report, for the financial year 2022-23 (both English and Hindi Version), containing the Audited Accounts and the Separate Audit Report, along with Annexure, as laid before the Parliament, may please be forwarded to this office, for necessary action at this end.

Yours faithfully,

Encls: As above

TANUSHREE BISWAS
Deputy Director

#### Copy to:-

Ltr No: INSPECTION WING/2023-2024/DIS-1143162/C1
1 Finance and Accounts Section, NIT, Durgapur for information
Ltr No: INSPECTION WING/2023-2024/DIS-1143162/C2
2 OAD-AB Section, for information



Separate Audit Report on the accounts of the National Institute of Technology, Durgapur for the year ended 31 March 2023

We have audited the attached Balance Sheet of the National Institute of Technology, Durgapur, as at 31 March 2023, the Income and Expenditure Account and Receipts and Payments Account, for the year ended on that date, under Section-19(2) of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971, read with Section 22(2) of the National Institutes of Technology Act, 2007. These financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statements, based on our audit.

- 2. This Separate Audit Report contains the comments of the Comptroller and Auditor General of India (CAG) on the accounting treatment only, with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transactions, with regard to compliance with the Law, Rules and Regulations (i.e., Propriety and Regularity aspects) and efficiency-cum-performance aspects, etc., if any, are reported through Inspection Reports/CAG's Audit Reports separately.
- 3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.



#### NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR



- 4. Based on our audit, we report that:
- We have obtained all the information and explanations, which, to the best of our knowledge and belief, were necessary for the purpose of our audit;
- ii. The Balance Sheet and Income and Expenditure Account/Receipts and Payments Account, dealt with by this report, have been drawn in the revised format of Accounts prescribed by the Ministry of Education (erstwhile Ministry of Human Resource Development), Government of India, for Central Education Institutions, vide order No.29-4/2012-PD dated 17 April 2015.
- iii. In our opinion, proper books of accounts and other relevant records have been maintained by the National Institute of Technology, Durgapur, as required, insofar as it appears from our examination of such books.
- iv. We further report that

#### Comments on Accounts

- A Balance Sheet
- 1.1 Liabilities

#### 1.1.1 Current Liabilities and Provisions (Schedule 3): ₹33.30 crore

Despite similar mention in the previous year's audit report, and in violation of the Format of Accounts approved by MoE, the above head was overstated by ₹9.77 crore, due to inclusion of the fund balances and interest, of the 'Contributory Provident Fund' (₹9.77 crore). This also resulted in overstatement of the 'Current Assets' (Schedule 7) by same amount.

#### 1.2 Assets

#### 1.2.1 Current Assets (Schedule 7): ₹261.97 crore

The above head was understated by an amount of ₹3.44 crore due to non-depiction of Prepaid expense (proportional expense) in respect of annual subscription of e-journal for 2023-24. The Institute has erroneously booked an amount of ₹4.93 crore as intangible assets which are annual

Subscriptions for database and e-journals spanning over the period 22-23 (₹1.49 crore) and 23-24 (₹3.44 crore). This has also resulted in overstatement of fixed assets by the same amount.

#### B Income and Expenditure Accounts

#### 2.1 Expenditure

#### 2.1.1 Academic Expenses (Schedule 16): ₹1.61 crore

The Institute has erroneously booked an amount of ₹4.93 crore as intangible assets which are annual subscriptions for database and e-journals spanning over the period 2022-23 and 2023-24. Resultantly, Academic Expenses did not include an amount of ₹1.49 crore as proportional expenditure incurred for annual subscription of e-journals and databases for the year 2022-23 which needed to be booked as Academic Expenses. This has resulted in understatement of Academic Expenses and overstatement of excess of income over expenditure by the same amount.

#### 2.1.2 Depreciation (Schedule 4): ₹19.56 crore

The above head was understated by an amount of ₹0.27 crore due to charging of depreciation at the rate of 20% (applicable for 'Computer Peripherals') instead of 40% as applicable for 'Compute Software (intangible Asset)', as the Institute had included Computer Software valuing ₹1.37 crore under the Asset head 'Computer Peripherals'. This has further resulted in overstatement of excess of Income over Expenditure.

#### C General Comments

- 3.1 The Institute had not collected any Certificate of Accrued Interest from Bank. Instead calculated Accrued Interest on their own, considering a flat rate of Interest for all Investments.
- 3.2 In contravention to the Format of Accounts as prescribed by the MoE (Erstwhile MHRD), the Institute has not depicted its utilisation of Capital Grants in Schedule 10 and Schedule 3C. Instead, it has depicted the Unutilised Capital Grants received from the Ministry under Schedule 2 (Earmarked Fund).



- 3.3 The Institute had booked capital expenditure during the financial year as ₹1.89 crore in the 'Corpus/ Capital Fund' (Schedule 1), 0.96 crore in the 'Earmarked Fund', ₹21.91 crore in the 'Current Liabilities and Provisions' (Schedule 3C), ₹40.20 crore in the 'Fixed Assets' (Schedule 4) and ₹26.96 crore in the Receipts and Payments Account. This discrepancy of figures needs to be reconciled. Similar observation was raised in previous report.
- 3.4 The difference between Receipt of Plan Grant and Utilization is ₹352 which has not been depicted under Unutilised Grant.
- 3.5 As per Schedule 4 (Fixed Assets), Addition to Fixed Assets under the head Library Books was ₹1.93 crore. However, as per the Accession Register, the figures for the year 22-23 was shown as ₹0.77 crore. The figures need to be reconciled.
- 3.6 Current Liabilities amounting to ₹4.82 lakh has remained unadjusted under the head 'Sundry Creditors EMD/SD for suppliers-TEQIP-1' for more than 5 years. Effective steps need to be taken for early disposal of the same.
- 3.7 In contravention to the Format of Accounts as prescribed by the MoE (Erstwhile MHRD), Investments from Earmarked Funds (Schedule 5) has not been depicted separately by the Institute.
- 3.8 Despite mentioned in the previous Report, the Institute has not made any actuarial provision towards retirement benefits and leave encashment of eligible employees, in terms of Accounting Standard 15.
- 3.9 Investments matured during the financial year could not be verified in audit due to non-availability of copy of investment certificates which are submitted in the Banks during encashment/reinvestment.
- 3.10 Despite mentioned in previous audit, in deviation from the Format of Accounts prescribed by MoE, three reserve funds, with a total balance of ₹5.00 crore, were created under the head 'Corpus/Capital Fund' (Schedule 1).

3.11 The Institute did not exhibit "Schedule-3(a) Sponsored Projects and Schedule 3(b) sponsored Fellowship and scholarship, as per the format of Accounts (MoE).

#### D. Grants-in-Aid

The National Institute of Technology Durgapur (NITD), is mainly financed by grants from the Government of India (GoI). For the financial year 2022-23, it received grants from the GoI, amounting to ₹180.52 crore (Revenue: ₹158.61 crore, which includes HEFA Interest: ₹0.43 crore and Capital: ₹21.91 crore). In addition, it had an opening balance of ₹6.71 crore from the previous financial year's unspent grants. Out of the total grants of ₹187.23 crore, so available, it spent ₹179.18 crore (Revenue: ₹152.22 crore and Capital: ₹26.96 crore), leaving an unspent balance of ₹8.05 crore, as on 31 March 2023.

#### E. Net Effect

The net effect of the comments given in preceding paragraphs was that both-the Assets, as well as Liabilities-were overstated by ₹9.77 crore, as at 31 March 2023, and the surplus (being the Excess of Income over Expenditure) was overstated by ₹1.76 crore, for the year ended 31 March 2023.

- v. Subject to our observations in the preceding paragraphs, we report that the Balance Sheet, Income and Expenditure Account and Receipts and Payments Account, dealt with by this report, are in agreement with the books of accounts.
- vi. In our opinion, and to the best of our information, and according to the explanations given to us, the said financial statements, read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in the Annexure to this Separate Audit Report, give a true and fair view, in conformity with accounting principles generally accepted in India.
  - a. insofar as it relates to the Balance Sheet, of the state of affairs of the
     National Institute of Technology, Durgapur, as at 31 March 2023 and



b. insofar as it relates to Income and Expenditure Account, of the *surplus*, for the year ended on that date.

For and on behalf of the C&AG of India

Place: Kolkata

Date: 11.09.1013

(Debolina Thakur) Director General of Audit (Central), Kolkata

#### Annexure

#### A. Adequacy of the Internal Audit System

The Internal Audit System of the Institute is inadequate, on account of the following:

- i. There is no Internal Audit Manual, for use in the Internal Audit Wing.
- ii. The Internal Audit Wing functions as a pre-checker of all bills, before payments are made to vendors. The wing did not, however, prepare any Internal Audit Report.

#### B. Adequacy of the Internal Control System:-

The Internal Control System of the Institute is inadequate, on account of the following:

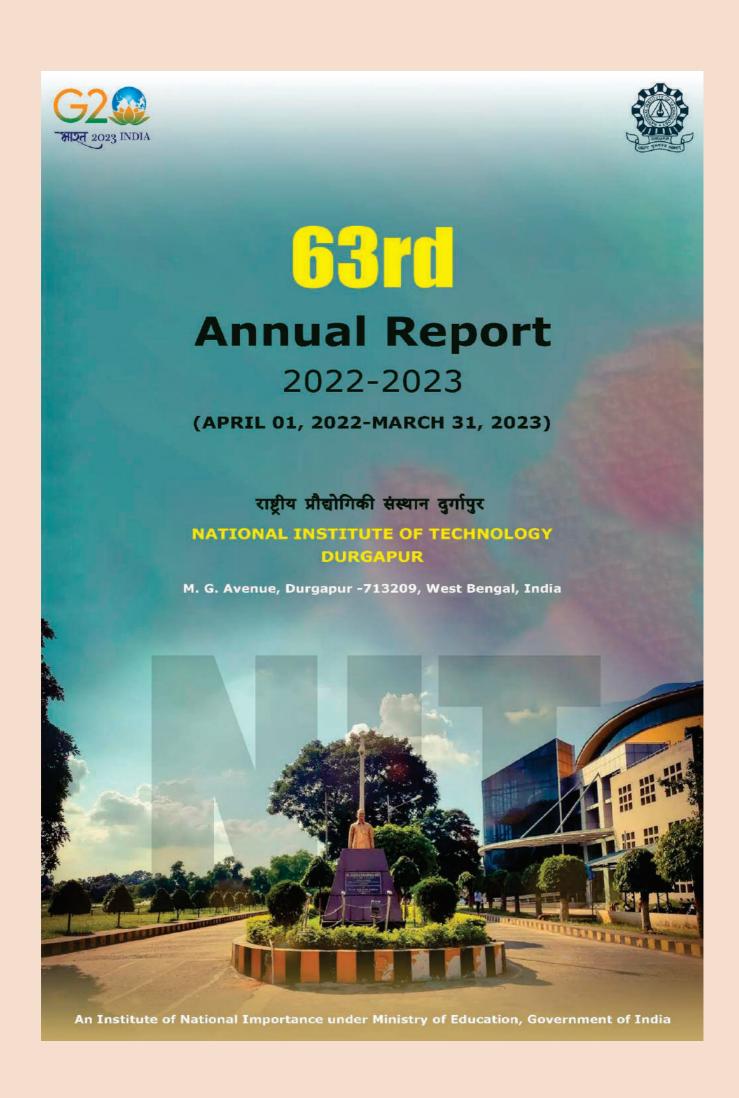
- i. Charts of accounts are not in use.
- ii. Chart of accounts and accounting manual are not periodically verified and amended.
- iii. All suppliers' invoices are not routed through the accounting department.
- iv. The Fixed Asset Register is not being tallied with the financial accounts, on a periodic basis. Further, basic information in regard to Fixed Assets, such as the rates of depreciation, estimated life spans, accumulated depreciation, estimated salvage values etc., are not available in the Register.
- v. There is no procedure in place, for verification of the Fixed Assets of the Institute, on a periodic basis.
- vi. Stocks are not physically verified on annual basis.

#### C. Physical verification of Fixed Assets and Inventory

The Institute did not conduct physical verification of its Fixed Assets and Inventories, during the financial year 2022-23.

#### D. Regularity in payment of Statutory Dues:

The Institute was regular in payment of its statutory dues, for the financial year 2022-23.



# राष्ट्रीय प्रोत्याभिकी संस्थान तुर्गापुर

## NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

Mahatma Gandhi Avenue, Durgapur-713209 West Bengal, INDIA, www.nitdgp.ag.in

(An Autonomous Institution of the Covt, of India under the aegis of MHRD)

No. MID I'sn. ap. 088 Release Order 2019/Nay.

Dated: 29,11,2019

#### OFFICE ORDER

With reference to the Office Order No. NITD/Estt,/IP-958/2019, dated 12th September 2019, Dr. Vijay Kumar Dwivedi, Professor, Department of Civil Engineering, National Institute of Technology Durgapur is hereby released with effect from forenoon of 1st December 2019 to join the post of Assessor on deputation basis in Alahanadi Water Dispute Tribunal, Ministry of Jal Shaktl, Department of Water Resources, River Development & Ganga Rejuvenation, Govt. of India, New Delhi – 110 001 in the pay scale of HAG, Rs.67,000/- (increment @3% per annum) for a period of one-year to the Tribunal or till the life of the Tribunal or till Turther orders, whichever is cardi, st-with the Government instructions in this regard from time to time.

During the period of deputation, CPF (contributory provident fund) contribution, Leave Salary contribution and Group Insurance contribution for Prof. Vijay Kumar Dwivedi have to be paid per month in favour of the account of National Institute of Technology Durgapur at the prescribed rate as per Rules of the institute.

The Basic pay of Dr. Vijay Kumar Dwivedi for the month of November, 2019 is Rs.2,01600/- in the pay Level of I-IA & at the pay range of Rs. 1,59,100 to Rs.2,20,200 as per 7th CPC.

In respect of Leave account Prof. Vijay Kumar Dwivedi has credit of 250.18 Days as Earned Leave and 220.00 Days as Half Pay Leave till December, 2018 and Seven (7) days Casual Leave as on 29th November, 2019...

Registrar

Copy to:-

1. Director,

2. Dean, Academic

3. Dean, Faculty Welfare

4. Head of the Department, Civil Engineering,

5. Joint Registrar (F&A)

6. Assistant Registrar (Internal Audit).

7. Director's/Registrar's Secretariat,

8. Dr. Vijay Kumar Dwivedi, Professor, Department of Civil Engineering NITD.

9. File Copy(Personnel)

Joint Registrat (stil)



## राष्ट्रीय प्रोद्योगिकी संस्थान दुर्गापुर NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

Mahatma Gandhi Avenue, Durgapur-713209 West Bengal, INDIA, <u>www.njtdgp.ac.in</u> (An Autonomous Institution of the Covt. of India under the aegis of ME)

No. NITD/Estt./4P-958-VKD/Deputation-Ext (MWDT)/2020

Dated: 09,09,2020

#### OFFICE ORDER

In pursuance of para 3 of OM vide No. F. No. 2/6/2016-Estt.(pay-II) dated 17.02.2016 issued by the DoPT in respect of tenure of deputation covered by DoP&T's OM No. vide 6/8/2009-Estt.(Pay-II) dated, 17.06.2010 and with the approval of the Competent Authority, the deputation tenure of Dr. Vijay Kumar Dwivedi, Professor of the Department of Civil Engineering of NIT Durgapur presently working as. Assessor on deputation with Mahanadi Water Dispute Tribunal, Govt. of India, Ministry of Jal Shakti, RD & GR, Department of Water Resources, at Janpat Bhawan, New Delhi is hereby extended for a period of one year w.e.f 03.12.2020 to 02.12.2021 or till the life of the Tribunal or till further order, whichever is earliest in public interest on the existing terms and conditions of deputation.

Registrar

To

- The HOD, Deptt of Water Resources, RD&GR, Mahanadi Water Dispute Tribunal, Ministry of Jal Shakti, Govt.of India, New Delhi.
- 2. The Section officer, Deptt of Water Resources, RD&GR, Mahanadi Water Dispute Tribunal, Ministry of Jal Shakti, Govt.of India, New Delhi

#### Copy to :-

- 1. The Director,
- 2 The Dean, Academic
- 3. The Dean, Faculty Welfare
- 4. The Head of the Department, Civil Engineering
- 5. The Joint Registrar (F&A)
- 6. The Assistant Registrar (Internal Audit).
- 7. Director's/Registrar's Secretariat,
- 8. Dr.Vijay Kumar Dwivedi, Assessor (on deputation basis), Deptt of Water Resources, RD&GR, Mahanadi Water Dispute Tribunal, Ministry of Jal Shakti, Govt.of India, Janpat Bhawan, New Delhi
- 9. File Copy(Personnel)

Joint Malstray (Entro

#### NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR-713209, WEST BENGAL, INDIA

Minutes of the 59th Meeting of the Board of Governors of National Institute of Technology Durgapur held on Tuesday, September 21, 2021 from 11:30 a.m. onward in the online mode over the Microsoft Teams.

The following members attended the Meeting:

Prof. (Retd.) Sadanand Sadashiv Gokhale	
Chairperson of BoG	Chairperson
National Institute of Technology Durgapur	
Durgapur-713209	
Prof. Anupam Basu	
Director	Member
National Institute of Technology Durgapur	
Durgapur-713209	
Shri Indrajit Kuri	
Under Secretary (NITs)	Member
Deptt. of Higher Education,	
Ministry of Education, Shastri Bhawan,	
New Delhi- 110 001	
Dr. D.K. Majumdar	
Former Professor	Member
(DIPSAR) University of Delhi,	
C-8,IDPL Apartments Plot NoGH10,	
Sector 10A Gurgaon-122001	
Dr. Mitali Mukerji,	
Professor and Head,	Member
Department of Bioscience & Bioengineering,	
Faculty, School of Artificial Intelligence and Data	
Science (AIDE), Indian Institute of Technology	
Jodhpur, NH - 62, Karwar, Rajasthan - 342037	
Prof. V.K. Tewari	
Director	Member
Indian Institute of Technology, Kharagpur	
Pin-721302, India	
Prof. Apurba Kumar Patra	
Professor,	Member
Department of Chemistry,	(Senate Nominee)
NIT Durgapur	(benate Nonlinee)
Dr. Jayati Dey	
Associate Professor	Member
Department of Electrical Engineering	(Senate Nominee)
NIT Durgapur	(Senate Nominee)
Shri Soumya Sen Sharma	
Registrar	S
	Secretary
NIT Durgapur	

Development Centre (CDC) – the erstwhile Training and Placement Cell) at NIT Durgapur at a consolidated remuneration of Rs.65000/- (Sixty Five Thousand only) per month and a suitable accommodation in Campus on License fee basis for a period of three years as proposed.

59.07 To consider the Annual Accounts of the Institute for the year 2020-21.

The Annual Accounts of the Institute for the year 2020–21 was placed before the BoG. The same was also approved by the Finance Committee.

The Board approved the Annual Accounts 2020–21 and recommended immediate submission of the same to CAG for audit.

59.08 To consider the introduction of Minor degree possibilities for the B.Tech students.

The Board, as proposed by the 61st Senate meeting (item no.-61.5), approved the introduction of Minor Degree for B.Tech students for the academic year 2021-2022 for the UG students admitted from 2021 onward.

To consider the extension of deputation period of Dr. Vijay Kumar Dwivedi, Professor, Department of Civil Engineering, presently Assessor on deputation to Mahanadi Water Dispute Tribunal.

The Board deliberated on the appeal for extension of deputation period of Dr. Vijay Kumar Dwivedi, Professor, Department of Civil Engineering as **Assessor** on deputation to the Mahanadi Water Dispute Tribunal and decided to extend the leave for a further period of one year with effect from 03.12.2021.

59.10 To ratify the approval of the Chairperson, Board of Governors for the conduction of an International Conference organized by Department of Biotechnology, NIT Durgapur on "Recent Advances in Molecular Plant - Pathogen Interactions (RAMPPI 2021)" held during September 6-10, 2021.

The Board ratified the approval of the Chairperson, Board of Governors for the conduction of an International Conference organized by Department of Biotechnology, NIT Durgapur on Recent Advances in Molecular Plant-Pathogen Interactions (RAMPPI 2021) held during September 6-10, 2021.

The Board also approved the conduction of an International Conference organized by Department of Biotechnology, NIT Durgapur on **Women's Leadership in Science and Technology** during October-November 2021, and suggested that the latter proposal may be sent to the Ministry for approval.

59.11 To report to the Board regarding restarting residential campus for vaccinated students at NIT Durgapur.

The Board noted the proposal for restarting residential campus for vaccinated students at NIT Durgapur in keeping with COVID Protocol issued by the State Government.

# MAHANADI WATER DISPUTES TRIBUNAL GOVERNMENT OF INDIA MINISTRY OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION "A" WING, 4<sup>III</sup> FLOOR, JANPATH BHAWAN JANPATH, NEW DELHI

No. F.4/OWDT/Admn./ O4A/ ITCE.

Date: v; November, 2022

The Registrar
National Institute of Technology Durgapur
Mahatma Gandhi Avenue,
Durgapur – 713209 (WB)

SUB:- Extension of deputation period of Dr. Vijay Kumar Dwivedi, Assessor on deputation to Mahanadi WDT.

Sir,

The services of Dr Vijay Kumar Dwivedi, Professor, Deptt. of Civil Engineering NIT Durgapur were taken as Assessor on deputation basis to this Tribunal, initially for a period of one year with effect from the date he take over the charge of Assessor i.e.03.12.2019 (F/N) and which was further extended for the period of two year from 03.12.2020 to 02.12.2022. Accordingly, his present term of deputation is due to expire on 02.12.2022 (A/N).

The work of the Tribunal, which is established to resolve the Mahanadi Water Disputes with the participating States, which has not been completed. As such, the Tribunal continues to function as before till final award is pronounced by this Tribunal. Hence, the Tribunal would like to retain the services of Dr. Dwivedi for further period of one year.

In view of the above, you are requested to please extend the deputation period of Dr Vijay Kumar Dwivedi for further period of one year w.e.f. 03.12.2022 to 02.12.2023 or till the life of the Tribunal or till further order, whichever is earliest in public interest on the existing terms and conditions of deputation. We have obtained the willingness of Dr Vijay Kumar Dwivedi,(copy enclosed).

This has approval of Hon'ble Chairman, Mahanadi Water Disputes Tribunal [Justice A. M. Khanwilkar, former Judge of Hon'ble Supreme Court of India]

Thanking you.

Encl: As above

Copy to: Dr. Vijay Kumar Dwivedi, Assessor, MWDT

J-5

(Rajesh Sharma) Registrar

## MAHANADI WATER DISPUTES TRIBUNAL

GOVERNMENT OF INDIA
MINISTRY OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
"A" WING, 4<sup>TH</sup> FLOOR, JANPATH BHAWAN
JANPATH, NEW DELHI

No. F.4/MWDT/Admn./ 04A/ 4079

Date: 29 November, 2022

The Registrar
National Institute of Technology Durgapur
Mahatma Gandhi Avenue,
Durgapur – 713209 (WB)

REGISTRAR OFFICE

Subject:-Extension of deputation period of Dr. Vijay Kumar Dwivedi, Assessor on deputation to Mahanadi WDT.

Sir,

Please refer to this office letter No.F..4/MWDT/Admn/04A/466 dated 15.11.2022 on the subject above requesting you to kindly accord approval of extension of deputation of Dr. Vijay Kumar Dwivedi, Professor on deputation as Assessor in Mahanadi Water Disputes Tribunal for a period of one year beyond 2<sup>nd</sup> December, 2022. The response on the same is awaited from your end.

It is requested that the necessary approval may please be accorded expeditiously. Meanwhile as the time is short further action in this regard is being taken up accordingly in anticipation.

Thanking you.

Yours faithfully,

(Rajosh Sharma)

Registrar



#### Extension of deputation period of Prof. Vijay Kumar Dwivedi, Department of Civil Engineering presently Assessor on deputation to Mahanadi WDT

12 messages

Director NIT Durgapur <director@admin.nitdgp.ac.in>

Tue, Dec 20, 2022 at 4:16 PM

To: Sadanand Gokhale <ssgok1@gmail.com>, "Prof. Sadanand Sadashiv Gokhale" <chairperson.bog@nitdgp.ac.in>

Cc: Indrajit Basak <indrajit.basak@me.nitdqp.ac.in>

Respected Sir,

Please find the attached note sheet regarding the extension of deputation period of Prof. Vijay Kumar Dwivedi, Department of Civil Engineering Presently Assessor on deputation to Mahanadi WDT. All the relevant documents are also attached.

Submitted for your kind approval please.

With kind regards,

Yours sincerely,

Indrajit Basak
Director (Officiating)
National Institute of Technology Durgapur
Mahatma Gandhi Avenue
Durgapur – 713 209 (W.B.), India



Sadanand Gokhale <ssgok1@gmail.com>

Tue, Dec 20, 2022 at 8:43 PM

To: Director NIT Durgapur <director@admin.nitdgp.ac.in>

Cc: "Prof. Sadanand Sadashiv Gokhale" <chairperson.bog@nitdgp.ac.in>, Indrajit Basak <indrajit.basak@me.nitdgp.ac.in>

Approved with reservation. Since Prof. V. K. Dwivedi is on deputation for the past three years, it is necessary to have a realistic assessment about requirement of further extensions and his duties and responsibilities towards his parent organization viz. NIT Durgapur. I have some concerns about NITD student interests vis-a-vis teaching, research, guidance of PG / PhD scholars etc. Some clarity about the type of leave, salary, PF etc.should also be added in the note sheet. A statement from Prof. V. K. Dwivedi is desirable.

Sadanand Gokhale

[Quoted text hidden]

Director NIT Durgapur <director@admin.nitdgp.ac.in>

Wed, Dec 21, 2022 at 12:51 PM

To: "Head, Civil Engg. NITdgp" <hod@ce.nitdgp.ac.in>, Registrar NIT Durgapur <registrar@admin.nitdgp.ac.in>, "Dr. Vijay Kumar Dwivedi" <vijaykumar.dwivedi@ce.nitdgp.ac.in>

Dear Sir,

Kindly refer to the trailing mail. The following information are needed to the Chairperson, BOG, NIT Durgapur:

HOD (CE) - Present academic responsibilities of Prof. V. K. Dwivedi at your department.

Registrar – Present status of leave salary contribution, PF contribution etc. of Prof. Dwivedi at NIT Durgapur.

Prof. V. K. Dwivedi - Present work status as Assessor, Mahanadi, WDT.

You are requested to kindly furnish the above information as soon as possible for further transmission to the Chairperson, BOG.

With best regards,

Director (Officiating)

**Dr. Vijay Kumar Dwivedi** <vijaykumar.dwivedi@ce.nitdgp.ac.in>
To: Director NIT Durgapur <director@admin.nitdgp.ac.in>

Thu, Dec 22, 2022 at 12:55 PM

To:

The Director

National Institute of Technology Durgapur,

Durgapur

Sir,

Please accept my gratitude for giving me an opportunity to submit my work status as an Assessor with Mahanadi Water Dispute Tribunal.

Due to meeting with Technical Teams of the Party States, which continued till late evening on 21st Dec. 2022, I could not revert back to you.

To be more authentic, I am requesting the Registrar, Mahanadi Water Dispute Tribunal (MWDT), New Delhi to forward to your esteemed office status of my tenure as an Assessor with Mahanadi Water Dispute Tribunal, New Delhi.

Kindly consider the report of the Registrar, MWDT as my work status and oblige.

Thanking you,

Sincerely Yours,

Prof. Vijay Kumar Dwivedi

[Quoted text hidden]

**Director NIT Durgapur** <director@admin.nitdgp.ac.in>
To: Indrajit Basak <indrajit.basak@me.nitdgp.ac.in>

Thu, Dec 22, 2022 at 1:21 PM

[Quoted text hidden]

Soumya Bhattacharyya <soumya.bhattacharyya@ce.nitdgp.ac.in>

Sat, Dec 24, 2022 at 8:53 PM

To: Purnendu Ray <purnendu.ray@ce.nitdgp.ac.in>

Cc: Diptesh Das <diptesh.das@ce.nitdgp.ac.in>, Director NIT Durgapur <director@admin.nitdgp.ac.in>

Dear Sir,

Please find the trailing email for your kind information and necessary action.

Thanks & Regards,

S. Bhattacharyya,CE Dept.

[Quoted text hidden]
[Quoted text hidden]

With Regards... Diptesh Das

hod@ce.nitdgp.ac.in

Department of Civil Engineering National Institute of Technology Durgapur Pin -713 209, W.B., INDIA, www.nitdgp.ac.in

Ph.: +91343-2754176 /77, +91-9434788152 alt email : diptesh.das@ce.nitdgp.ac.in

Uday Chandra Mukherjee <dracs@admin.nitdgp.ac.in>

Mon, Dec 26, 2022 at 5:47 PM

To: Director NIT Durgapur <director@admin.nitdgp.ac.in>, Registrar NIT Durgapur <registrar@admin.nitdgp.ac.in>

Sir,

The Present status of leave salary contribution, PF contribution etc. of Prof. Dwivedi at NIT Durgapur is given in the attached file.

Regards, CMA Uday Chandra Mukherjee, PhD Joint Registrar (F&A) NIT, Durgapur

 Forwarded message -From: Bijoy Hensh <br/> <br/>bijoykumarhensh@gmail.com> Date: Mon, Dec 26, 2022 at 4:43 PM Subject: Re: Extension of deputation period of Prof. Vijay Kumar Dwivedi, Department of Civil Engineering presently Assessor on deputation to Mahanadi WDT To: Uday Chandra Mukherjee <dracs@admin.nitdqp.ac.in> बिजय हेंस राष्ट्रीय प्रौद्योगिकी संस्थान दुर्गापुर लेखा अनुभाग BIJOY HENSH NITDURGAPUR ACCOUNTS SECTION On Wed, Dec 21, 2022 at 5:57 PM Uday Chandra Mukherjee <dracs@admin.nitdgp.ac.in> wrote: For Point No. 2 CMA Uday Chandra Mukherjee, PhD Joint Registrar (F&A) NIT, Durgapur Forwarded message ----From: Director NIT Durgapur < director@admin.nitdgp.ac.in> Date: Wed, Dec 21, 2022 at 12:51 PM Subject: Fwd: Extension of deputation period of Prof. Vijay Kumar Dwivedi, Department of Civil Engineering presently Assessor on deputation to Mahanadi WDT To: Head, Civil Engg. NITdgp <hod@ce.nitdgp.ac.in>, Registrar NIT Durgapur <registrar@admin.nitdgp.ac.in>, Dr. Vijay Kumar Dwivedi <vijaykumar.dwivedi@ce.nitdgp.ac.in> [Quoted text hidden] V K Dwivedi CPF Statement.xlsx 17K Director NIT Durgapur <director@admin.nitdgp.ac.in> Mon, Dec 26, 2022 at 5:55 PM To: Indrajit Basak <indrajit.basak@me.nitdgp.ac.in>, Asit Kumar <drest@admin.nitdgp.ac.in> [Quoted text hidden] V K Dwivedi CPF Statement.xlsx 17K HoD\_Civil Engg.@NITdgp <hod@ce.nitdgp.ac.in> Fri, Feb 10, 2023 at 3:32 PM To: Director NIT Durgapur <director@admin.nitdgp.ac.in> Cc: Registrar NIT Durgapur <registrar@admin.nitdgp.ac.in>, "Dr. Vijay Kumar Dwivedi" <vijaykumar.dwivedi@ce.nitdgp.ac.in> Dear Sir. The present teaching load of Prof. V. K. Dwivedi is nil as he is on deputation. However, presently he is guiding one PhD student of the Civil Engineering Department. [Quoted text hidden] With Regards... Diptesh Das hod@ce.nitdgp.ac.in **Department of Civil Engineering** 

National Institute of Technology Durgapur

## **Director NIT Durgapur** <director@admin.nitdgp.ac.in> To: Indrajit Basak <indrajit.basak@me.nitdgp.ac.in>

Fri, Feb 10, 2023 at 3:42 PM

[Quoted text hidden]

Dr. Vijay Kumar Dwivedi <vijaykumar.dwivedi@ce.nitdgp.ac.in>

Fri, Feb 17, 2023 at 3:46 PM

To: Director NIT Durgapur <director@admin.nitdgp.ac.in>

To:

The Director,

National Institute of Technology Durgapur,

Durgapur

Sir

With reference to your mail on Dec. 21, 2022, present work status of Prof. Vijay Kumar Dwivedi on deputation to Mahanadi Water Dispute Tribunal, New Delhi was forwarded to your esteemed office on Dec. 23, 2022 by the Registrar of Mahanadi Water Dispute Tribunal, New Delhi.

I request you to kindly approve my deputation as Assessor at Mahanadi Water Dispute Tribunal, New Delhi beyond 2nd Dec. 2022 and arrange to send (i) the Office Order for Extension of deputation period so as to get the extension from Ministry of Jal Shakti, Govt. of India for my period beyond 2nd Dec. 2022 and (ii) up to date CPF statement in respect of the undersigned so as to get any deposit due from the Mahanadi Water Dispute Tribunal, New Delhi.

Thanking you, Sincerely Yours,

Prof. Vijay Kumar Dwivedi

[Quoted text hidden]

**Dr. Vijay Kumar Dwivedi** <vijaykumar.dwivedi@ce.nitdgp.ac.in> To: Director NIT Durgapur <director@admin.nitdgp.ac.in>

Fri, Jun 16, 2023 at 4:37 PM

To:

The Director,

National Institute of Technology Durgapur,

Durgapur - 713209

Sir,

Most respectfully, I bring to your kind notice that consequent to your mail of 21 Dec. 2022, my Status as Assessor with Mahanadi Water Disputes Tribunal at New Delhi was forwarded to your esteemed office on 23rd Dec. 2022 by the Registrar, Mahanadi Water Disputes Tribunal, New Delhi. Since then, I have not heard from your esteemed office.

I am just curious to know whether any Office Order from NIT Durgapur would be issued for my extension beyond the period of 2nd Dec. 2022 or the approval of the Honorable Chairman, Board of Governor of National Institute of Technology Durgapur is sufficient enough for the period of my extension on deputation beyond 2nd Dec. 2022.

A line of confirmation from your end would relieve me from my mental tension.

Thanking you,

Faithfully Yours,

Prof. Vijay Kumar Dwivedi

[Quoted text hidden]

#### NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR



Mahatma Gandhi Avenue, Durgapur-713209, (W.B), India, www.nitdgp.ac.in-(An Autonomous Institution of the Govt. of India under the Ministry of Education)

No. NITD/Estt./4P-958-VKD/Deputation-Extn.(4th.)/2022

REGISTRAR OFFICE

NOTE SHEET

Sub: Extension of deputation period of Dr. Vijay Kumar Dwivedi, Professor of the Deptt. of Civil Engg. presently Assessor on deputation to Mahanadi WDT.

Enclosed please find the letters of Mahanadi Water Disputes Tribunal vide No. F.4/MWDT/ Admn./04A/466 dated 15-11-2022 & F.4/MWDT/Admn./04A/489 dated 29-11-2022 on the subject cited above, the Competent Authority of Tribunal requested to extend the deputation period of Dr. V. K. Dwivedi for futher period of one year w.e.f 03.12.2022 to 02.12.2023 or till the life of the Tribunal or till further order, whichever is earliest in the public interest as the work of Tribunal has not been completed.

Dr. Vijay Kumar Dwivedi joined the Tribunal as Assessor on deputation on 03.12.2019 after being released from the Institute on 01.12.2019(F/N) for a period of one year w.e.f 03.12.2019 to 02.12.2020 vide office order No. NITD/Estt./4P-958/Release order/2019/Nov dated: 29.11.2019 which was extended for the period two year from 03.12.2020 to 02.12.2022 as per approval of the Competent Authority of the Institute vide its 59th Meeting (No.59.09) of BOG meeting held on 21.09.2021.

In accordance with the guidelines of the OM of DoPT vide para 1& 4 of F.No.2/6/2016.Estt.(Pay) dated 17.02.2016 "the borrowing Organisation (herein MWDT) may extend the period of deputation upto the seventh year at a stretch where absolute necessary in public interest, subject to the prior approval of the lending Organisation (herein NITD) keeping with all other terms and conditions unchanged covered under OM vide No.6/8/2009-Estt.(Pay-II) dated 17.06.2010".

Relying upon the facts mentioned above, the Competent Authority of this Inistitute may consider the extension of deputation period of Dr. Vijay Kumar Dwivedi for further one year (for 4th year term) w.e.f 03.12.2022 to 02.12.2023 or till the life of Tribunal or till further order, whichever is earliest in public interest on the existing terms and conditions of deputation.

Submitted for perusal & decision please.

Dated:14.12.2022

Dortoh Don 14.12.22 HOD (Deptt. of Civil Engg.)

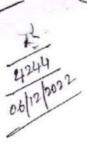
Jt. Registrar

Registra

Director (Officiating)

Chairperson, Bog

your comment approval.



#### MAHANADI WATER DISPUTES TRIBUNAL

GOVERNMENT OF INDIA
MINISTRY OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
"A" WING, 4<sup>TH</sup> FLOOR, JANPATH BHAWAN
JANPATH, NEW DELHI

No. F.4/MWDT/Admn./ 04A/ 4/29 9

Date: 29 November, 2022

The Registrar
National Institute of Technology Durgapur
Mahatma Gandhi Avenue,
Durgapur – 713209 (WB)

REGISTRAR OFFICE

Subject:-Extension of deputation period of Dr. Vijay Kumar Dwivedi, Assessor on deputation to Mahanadi WDT.

Sir,

Please refer to this office letter No.F..4/MWDT/Admn/04A/466 dated 15.11.2022 on the subject above requesting you to kindly accord approval of extension of deputation of Dr. Vijay Kumar Dwivedi, Professor on deputation as Assessor in Mahanadi Water Disputes Tribunal for a period of one year beyond 2<sup>nd</sup> December, 2022. The response on the same is awaited from your end.

It is requested that the necessary approval may please be accorded expeditiously. Meanwhile as the time is short further action in this regard is being taken up accordingly in anticipation.

Thanking you.

TE (ESTE)

Yours faithfully

(Rajesh Sharma)

Registrar

2022 De NAM J-12

#### MAHANADI WATER DISPUTES TRIBUNAL

GOVERNMENT OF INDIA
MINISTRY OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
"A" WING, 4<sup>TH</sup> FLOOR, JANPATH BHAWAN
JANPATH, NEW DELHI

No. F.4/OWDT/Admn/ 04A/ 466

Date: vc November, 2022

The Registrar
National Institute of Technology Durgapur
Mahatma Gandhi Avenue,
Durgapur – 713209 (WB)

SUB:- Extension of deputation period of Dr. Vijay Kumar Dwivedi, Assessor on deputation to Mahanadi WDT.

Sir.

The services of Dr Vijay Kumar Dwivedi, Professor, Deptt. of Civil Engineering NIT Durgapur were taken as Assessor on deputation basis to this Tribunal, initially for a period of one year with effect from the date he take over the charge of Assessor i.e.03.12.2019 (F/N) and which was further extended for the period of two year from 03.12,2020 to 02.12.2022. Accordingly, his present term of deputation is due to expire on 02.12.2022 (A/N).

The work of the Tribunal, which is established to resolve the Mahanadi Water Disputes with the participating States, which has not been completed. As such, the Tribunal continues to function as before till final award is pronounced by this Tribunal. Hence, the Tribunal would like to retain the services of Dr. Dwivedi for further period of one year.

In view of the above, you are requested to please extend the deputation period of Dr Vijay Kumar Dwivedi for further period of one year w.e.f. 03.12.2022 to 02.12.2023 or till the life of the Tribunal or till further order, whichever is earliest in public interest on the existing terms and conditions of deputation. We have obtained the willingness of Dr Vijay Kumar Dwivedi,(copy enclosed).

This has approval of Hon'ble Chairman Mahanadi Water Disputes Tribunal [Justice A. M. Khanwilkar, former Judge of Hon'ble Supreme Court of India]

Thanking you.

Yours faithfully,

(Rajesh Sharma) Registrar

Encl: As above

Copy to: Dr. Vijay Kumar Dwivedi, Assessor, MWDT



# Regarding the Extension of deputation period of Prof. Vijay Kumar Dwivedi, Professor on deputation as Assessor to Mahanadi Water Disputes Tribunal.

1 message

Registrar Office <registrar.office@nitdgp.ac.in>

Mon, Sep 18, 2023 at 12:25 PM

To: mahanaditribunal@gmail.com

Cc: Director NIT Durgapur <director@nitdgp.ac.in>, "Dr. Vijay Kumar Dwivedi" <vijaykumar.dwivedi@ce.nitdgp.ac.in>, Dean FW <deanfaculty@nitdgp.ac.in>, "Head, Civil Engg. NITdgp" <hod@ce.nitdgp.ac.in>, Uday Chandra Mukherjee <jr.fa@nitdgp.ac.in>, A Das <dr.audit@nitdgp.ac.in>, Registrar NIT Durgapur <registrar@nitdgp.ac.in>, Asit Kumar <jr.est@nitdgp.ac.in>

Madam/Sir,

Please find the attached file regarding the above mentioned subject.

Thanks & Regards,

Registrar Office NIT, Durgapur - 713209 West Bengal, India

Reg-Extension of deputation\_Prof. V.K.Dwivedi.pdf 2288K



#### Deputation period of Prof. Vijay Kumar Dwivedi, Department of Civil Engineering, NIT Durgapur presently Assessor on deputation to Mahanadi WDT – reg. 2 messages

Director NIT Durgapur <director@admin.nitdgp.ac.in>

Wed, Apr 12, 2023 at 1:24 PM

To: mahanaditribunal@gmail.com

Cc: Sadanand Gokhale <ssgok1@gmail.com>, Indrajit Basak <indrajit.basak@me.nitdgp.ac.in>, Registrar NIT Durgapur <registrar@admin.nitdgp.ac.in>

> No. NITD/Ext./15 Date: 12.04.2023

To, The Registrar Mahanadi Water Disputes Tribunal Ministry of Jal Shakti Department of Water Resources, RD & GR, 4th Floor, 'A' Wing, Janpath Bhawan, Janpath New Delhi - 110 001

Sub: Deputation period of Prof. Vijay Kumar Dwivedi, Department of Civil Engineering, NIT Durgapur presently Assessor on deputation to Mahanadi WDT - reg.

Dear Sir,

Prof. Vijay Kumar Dwivedi, Professor Dept. of Civil Engineering, NIT Durgapur is on deputation as Assessor at Mahanadi Water Dispute Tribunal, Ministry of Jal Shakti, Department of Water Resources, River Development & Ganga Rejuvenation, Govt. of India, New Delhi. He is on deputation for more than 3 years since 03.12.2019. On request from Mahanadi WDT the deputation period was extended time to time, which is compromising the academic and research interests of the Department of Civil Engineering and as a whole that of NIT Durgapur. In order to plan next semester Prof. Dwivedi should return back to the parent Institute by the end of April 2023 without fail.

When Prof. Dwivedi is on deputation, all the relevant service matters (all types of leave, PF contributions, CRs etc.) will not be with NIT Durgapur. He may progress his foreign visit request through deputed institution. At the time of repatriation to the parent organization such records will be sent to NIT Durgapur administration for record keeping.

Thanking you,

Prof. Indrajit Basak Director (Officiating) National Institute of Technology Durgapur Mahatma Gandhi Avenue Durgapur - 713 209 (W.B.), India

Letter to the Registrar Mahanadi WDT regarding deputation period of Prof. Dwivedi.pdf

Director NIT Durgapur <director@admin.nitdgp.ac.in>

Fri. May 19, 2023 at 11:53 AM



# राष्ट्रीय प्रौद्योगिकी संस्थान दुर्गापुर

(शिक्षा मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्व का संस्थान) महात्मा गांधी एभेन्यू, दुर्गापुर - 713209, (पश्चिम बंगाल), भारत

# NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

(An Institute of National Importance Under Ministry of Education (Shiksha Mantralaya), Govt. of India)
MAHATMA GANDHI AVENUE, DURGAPUR - 713209, (WEST BENGAL), INDIA

Prof. Indrajit Basak
Director (Officiating)

No. NITD/Ext./15 Date: 12.04.2023

To,
The Registrar
Mahanadi Water Disputes Tribunal
Ministry of Jal Shakti
Department of Water Resources, RD & GR,
4<sup>th</sup> Floor, 'A' Wing,
Janpath Bhawan, Janpath New Delhi – 110 001

Sub: Deputation period of Prof. Vijay Kumar Dwivedi, Department of Civil Engineering, NIT Durgapur presently Assessor on deputation to Mahanadi WDT – req.

Dear Sir,

Prof. Vijay Kumar Dwivedi, Professor Dept. of Civil Engineering, NIT Durgapur is on deputation as Assessor at Mahanadi Water Dispute Tribunal, Ministry of Jal Shakti, Department of Water Resources, River Development & Ganga Rejuvenation, Govt. of India, New Delhi. He is on deputation for more than 3 years since 03.12.2019. On request from Mahanadi WDT the deputation period was extended time to time, which is compromising the academic and research interests of the Department of Civil Engineering and as a whole that of NIT Durgapur. In order to plan next semester Prof. Dwivedi should return back to the parent Institute by the end of April 2023 without fail.

When Prof. Dwivedi is on deputation, all the relevant service matters (all types of leave, PF contributions, CRs etc.) will not be with NIT Durgapur. He may progress his foreign visit request through deputed institution. At the time of repatriation to the parent organization such records will be sent to NIT Durgapur administration for record keeping.

Thanking you,

(Prof. Indrajit Basak)

Copy: i) Chairperson, BOG & FC, NIT Durgapur

ii) Registrar, NIT Durgapur



# राष्ट्रीय प्रौद्योगिकी संस्थान दुर्गापुर

(शिक्षा मंत्रालय, भारत सरकार के अधीन राष्ट्रीय महत्व का संस्थान) महात्मा गांधी एभेन्यू, दुर्गापुर-713209, (पश्चिम बंगाल), भारत

## NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

An Autonomous Institute of the Govt. of India under Ministry of Education (Shiksha Mantralaya)

MAHATMA GANDHI AVENUE, DURGAPUR - 713209, (WEST BENGAL), INDIA

No. NITD/Estt./4P-958-VKD/Deputation-Extn/2023

Dated:14.09.2023

The Registrar Mahanadi Water Disputes Tribunal Ministry of Jal Shakti Department of Water Resources, RD& GR Janpath Bhawan, Janpath New Delhi - 110001

Sub:- Regarding the Extension of deputation period of Prof. Vijay Kumar Dwivedi, Professor on deputation as Assessor to Mahanadi Water Disputes Tribunal.

Ref: Letter No. F.4/MWDT/Admn/04A/369 dated 21.08.2023.

Dear Sir.

Please refer to your letter vide No.F.4/MWDT/Admn./ 04A/466 dated 15.11.2022, vide request for an Extension of the deputation period of Prof. Vijay kumar Dwivedi as Assessor to the Tribunal.

In this connection, I am to inform you that on expiry of the deputation period of Prof. Dwivedi on 02.12.2022 (A/N), the Competent Authority of the Institute has not accorded the approval for further extension (beyond 2nd December 2022).

The Competent Authority of this Institute (Officiating), vide in his communication dated 12.04.2023 had intimated to the Tribunal for repatriation of Prof. Dwivedi to his parent Institute by the end of April, 2023 without fail for the interest of the Institute, which has not been complied with.

In view of that, I am directed to inform you to take necessary action sincerely for the repatriation of Dr. Dwivedi from the post of Assessor on deputation to Tribunal to his parent post of Professor of this Institute (NIT Durgapur) with immediate effect, to regularize the service, with compliance the terms and conditions on repatriation as per rule.

Registrar(1/c)

Encl: as stated above.

Copy to:

- 1) The Hon'ble Chairman Mahanadi WDT, for kind information and necessary action please.
- 2) The Director, NITD for kind information please.
- 3) Dr. Vijay Kumar Dwivedi, Professor on Deputation as Assessor to Mahanadi WDT.
- 4) The Dean (Faculty Welfare).
- 5) The HOD, Department of Civil Engineering.
- 6) The Joint Registrar (F&A)
- 7) The Deputy Registrar (Internal Audit)
- 8) Director's/Registrar's Secretariat
- File Copy (4P-958)



#### NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

Mahatma Gandhi Avenue, Durgapur-713209, (W.B), India, <u>www.nitdgp.ac.in</u> (An Autonomous Institution of the Govt. of India under the Ministry of Education)

No. NITD/Estt./4P-958-VKD/Deputation-Extn/2024

Dated: 14.01.2024

To

Prof. Vijay Kumar Dwivedi
Professor on Deputation as Assessor
Mahanadi Water Disputes Tribunal
Ministry of Jal Shakti
Department of Water Resources, RD& GR
Janpath Bhawan, Janpath
New Delhi – 110001

Sub:-Joining Instruction to the parent post of this Institute as per terms and conditions of DOPT on deputation- regarding

Ref: Letters of Mahanadi WDT vide No.F.4/MWDT/Admn/04A/429 dated 20.09.2023 & F.4/MWDT/Admn/04A/569 dated 22.11.2023.

Dear Sir.

On the subject cited above, this is to inform you that, as per records, the approved term of your deputation period expired on 02.12.2022 and further extension of deputation period has not been acceded to by the Competent Authority of this Institute, and found that you have neglected to join the Institute which assumes as overstay while on deputation without any approval.

In view of the above, you are directed to join the Institute immediately, for compliance of the directive of the Competent Authority for the interest of the Institute.

Registrar (I/c)

Encl: as stated above.

Copy to the:

1) Director, NITD for kind information please.

- 2) Registrar, Mahanadi Water Disputes Tribunal, request for urgent action to release Prof. Dwivedi from MWDT Pl.
- 3) Dean (Faculty Welfare).
- 4) HoD, Department of Civil Engineering.
- 5) Joint Registrar (F&A).
- 6) Deputy Registrar (Internal Audit).
- 7) Director's/Registrar's Secretariat.

14/01/2024

8) File Copy (4P-958).



### राष्ट्रीय प्रौद्योगिकी संस्थान, दुर्गापुर NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

MAHATMA GANDHI AVENUE, DURGAPUR-713209 West Bengal, INDIA, <u>www.nitdgp.ac.in</u>

An Autonomous Institution of the Govt. of India under Ministry of Education (Shiksha Mantralaya)

Minutes of the meeting regarding Tier1 conferences held on January 16, 2024 at 5:00pm in the Senate Room of S. N. Roy building held by the Director with the Registrar (I/C), all Deans and Heads of Departments.

#### Resolutions of the Meeting

- List of Tier I Level Conferences / Workshops /Symposia for the purpose of availing CPDA is resolved as attached. The common criteria apply to all departments. In addition, specific criteria have been resolved for some departments.
- 2. In addition to the above, the Director is empowered to approve any specific cases that are recommended by the DAC of respective departments and Dean (FW).
- Faculty members are encouraged and permitted to present papers in those conferences that are of inter-disciplinary nature in the list of conferences mentioned.

#### List of Tier I Level Conferences / Workshops /Symposia

Presenting papers in National / International Conferences / Workshops / Symposia and attending special training in India and abroad organized or promoted by:

- Reputed publishing houses / societies / professional bodies like IEEE, IET, IETE, ASME, ASCE, ASM International, ASTM International, ACM, Elsevier, Springer, Wiley, Taylor Francis, CRC Press, Narosa, SCITE Press, ACS, RSC, IOP, APS, AIP, WASET, Inderscience, Emerald, SAGE, AIAA, ASW, EPiC, AWS, IEI, IMS, ORSI, American Marketing Association, American Psychological Association, etc.
- 2. CFT Institutes like IITs, NITs, IIMs, etc.
- 3. Institutes / Universities with NIRF ranking up to 100
- 4. University/Institute having QS World University Ranking within 1000.
- Government funded agencies and research organizations like AICTE, DRDO, ISRO, CSIR, DST, DAE, Naval Research Board, DBT, BRNS, INSA, IASc, NAS, ICAR, ICMR, MNRE, IICB, ISC etc.
- Reputed PSUs, like ONGC, IOC, HPCL, BPCL, Oil India, UCIL, GAIL, NAL, Coal India, SAIL, etc.
- 7. Reputed industrial houses enlisted on NSEs, BSEs, SEBI, RBI, etc.
- 8. Department specific criteria in addition to the points mentioned in Sl. Nos. 1 to 7:

Dept. Name	Department Specific Criteria
CE	ICI, IAEE, Indian Geotechnical Society, ISSMGE, ISET, TRB

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MM	Indian Institute of Metals, TMS Foundation, Institute of Indian Foundrymen
СН	AIChE, IIChE, Indian Chemical Society, AIPB, International Society of
	Applied Phycology.
PH	ICTP, CERN, BNL, INFN, Max Plank Institute
CY	Societies (RSC,ACS, CRS, ICS) or Councils or Associations in India and abroad
	in the field of Chemistry/Chemical Science/Material Science/Medicinal
	Science/Environmental Science/theoretical and computational Science, National
	Corrosion council of India, Electro Chemical Society of India, Society of Physical
	Chemistry, National Association of Corrosion Engineers, Indian Society of
	Chemists And Biologists, Indian Chemical Council, Society for Materials
	Chemistry, Indian Institute of Chemical Engineers, CBEES, Sciknowledge
	European Conferences, IEEE, EMBO, Indian Council of Chemists, Indian Council
	of Cancer Research, World cancer Congress. The Society of Polymer Science,
	Indian Paint and Coating Association, Photobiology Society, Royal Society of
	Biology, American Society for Pharmacology and Experimental Therapeutics,
	Society of Medicine Research, British Pharmacological Society, IUPAC
	conferences, ICNTC Conference, Society of Biological Chemists, Materials
	Research Society of India, European Materials Research Society, Turkish
	Chemical Society, Egyptian Chemical Society, Brazilian Chemical Society,
	Canadian Society for Chemical Technology, The Electrochemical Society, World
	Association of Theoretical and Computational Chemists, National and regional
	Crystallographic societies, Chemical Society of Japan, and others.
EES	Goldschmidt, EGU, AGU. IGC, IAGOD. SEG. EMC, Granulite's and
	Granulite's, The Geological Society of India, GSA, GSL, USGS, MedGU-23,
	EPA, INC-IAH, IAH, EMSI, ICE, ICS, Indian Society of Remote Sensing.
DMS	RBI, NIBM, MSM, NIFM, SEBI, NSE, BSE, ICAI, ICWAI, ICSI, ICRA,
	CRISIL, MCA, MoF, MoC or any Ministry under Gol, UN, UNDP, LINCTAD,
	IMF, World Bank, ADB, ILO, OECD, Academy of International Business
	(AIB), Academy of Management (AOM), Australian and New Zealand
	Marketing Association (ANZMA), British Academy of Management
	(BOM), American Finance Association (AFA), Market Research Society
	of India (MRSI), Indian Finance Association (IFA), All India Commerce
	Association (AICA), Indian Association of applied psychology (IAAP),
	Strategic Management Forum of India.

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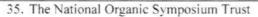
- 1. AIChE (American Institute of Chemical Engineers)
- American association/society of Immunology/ Microbiology/Chemical/ Geophysical Union / Phytopathological/ Plant Biologists/ Biochemistry and Molecular Biology/ Heart /Cell biology/(Genetics)/ cancer research
- AMI (Association of microbiologists of India)/ Food Scientists and Technologists, AFST(I)
- Asia Oceania Geosciences Society (AOGS)/ FEDERATION OF BIOTECHNOLOGY/ Polymer Society
- 5. Australian Society for Microbiology
- 6. Bioclues
- Bioinformatics and Bioengineering Technical Committee (BBTC)/ Bioinformatics Organization,/ EMBnet: Global Bioinformatics Network
- 8. British Society of Gastroenterology/ Immunology/
- 9. Chemcon (Indian institute of chemical engineers)
- 10. Clinical Infectious Disease Society
- 11. Deep Carbon Obsevatory, USA (DCO)
- 12. European Congress on Advanced Nanotechnology and Nanomaterials/ Geosciences Union/ Helicobacter and microbiota study group/ Molecular Biology Organization and Laboratory/ Biochemical Engineering Sciences/ Clinical Microbiology and Infectious Disease/ Macrophage and Dendritic Cell/ Gastroenterology/ Computational Biology
- 13. Fanconi Anemia Research Foundation
- 14. FEBS: Federation of European Biochemical Societies
- Federation of American Societies for experimental biology (FASEB) meeting
- 16. Gordon conference, USA
- Indian Biophysics Society (IBS)/ Immunological/ Peptide/ Cell Biology/ Gastroenterology/ nanomedicine/ Regenerative science/ Virology
- 18. Indian Science Congress
- 19. Indo-German/Japan/US. Science and Technology Forum
- International Continental Scientific Drilling Program (ICDP)/ Ocean Discovery Program (IODP)/ Rice/Wheat Blast Conference/ InCoB: International Conference on Bioinformatics
- International Society/Association for computational Biology/ Infectious Disease/ Microbial Ecology (ISME)/ Stem Cell Research/ Microbiota/ Carotenoid / Probiotics and Prebiotics
- 22. International Union of Immunological societies
- 23. Keystone conference, USA
- 24. Korean Society for Biochemistry and Molecular Biology/Microbiology
- 25. Max Planck Society
- 26. Microbiology/Biotechnology Society of India
- 27. MidSouth Computational Biology and Bioinformatics Society (MCBIOS)
- 28. National Academy of Agricultural Sciences/ Medical Sciences/Sciences
- Proteomics Society/ Biophysical Society/ Society of Biological Chemists/ Rheology/ Physiological/ Industrial Microbiology and Biotechnology(SIMB)
- 30. RECOMB: Conference on Research in Computational Molecular Biology.
- 31. Royal Society of Biology/Chemistry
- 32. The Biotech research society, India (BRSI)
- 33. The Federation of Immunological Societies of Asia-Oceania (FIMSA)
- 34. The International Union of Biochemistry and Molecular Biology

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World Congress on Infectious Diseases/Biotechnology

37. WHO Conferences

Morandal K. Mandal HOD, MME (SIC) HOD, ME HOD, Physics. HOD, DMS. Roboto HOD, EE HOD, EES Deligani Datti HOD, Chamistry sikden Digital Dass MOD, BT. HOD, CHE

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> Chairman (Constr.) Chairman (CEE) Dean (FW)

Registrar (1/1)

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HOD, CE

Director. 22 17/1/2024

Annexure - L

#### NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

#### **CONTINGENT LIABILITIES and NOTES ON ACCOUNTS – SCHEDULE 27**

#### **A. CONTINGENT LIABILITIES**

#### The following Court Cases are pending before the various Courts.

SL	Court Case No.	<u>Subject</u>	Date of	<u>Authority</u>	<u>Status</u>	<u>Advocate</u>
No.			<u>Filling</u>			
1.	W.P.No.7359 (W) of 2004.  NATIONAL INSTITUTE OF TECHNOLOGY, DURGAPUR VS BIJOY KRISHNA DAS & ORS	Hostels of R.E. College enjoyed pay scale under the Govt. of West Bengal w.e.f. 01.04.1981 vide Govt. order No. 998-EDN(T)/4C-6 /79 dated 07.12.1981.	2004	High Court at Calcutta.	Pending	Rajashree Venket Kundalia
2.	W.P.No.7358 (W) of 2004. NATIONAL INSTITUTE OF TECHNOLOGY , DURGAPUR VS ANANGA MOHAN MAJHI & ORS	All the 37 applicants are engaged by the students in their respective Messes. Students pay their wages from the student fund and NIT Durgapur was not	2004	High Court at Calcutta.	Pending	Rajashree Venket Kundalia

3.	FMA 76 of 2020 AVERI MUKHOPADHYAY VS UOI &ORS.	The case filed by Averi Mukhopadhyay states the nonappearance of her name in the shortlist of candidates for the post of Assistant Professor inspite of possessing excellent academic background requisite for the post.	2018	High Court at Calcutta.	Pending	Rajashree Venket Kundalia
4.	W.P.26042 (w) 2012 SK SHAHDOT VS NIT DURGAPUR.	Sk. Shahdot is seeking promotion to the post of skilled staff, pursuant to his compassionate employment in view of his qualifications.	2012	High Court at Calcutta.	Pending	Rajashree Venket Kundalia
5.	FMA 545 of 2013 PRABIR CHATTOPADHYAY VS NIT DURGAPUR.	Writ petition now pending in appeal filed by unsuccessful candidate in recruitment for the post of physical training instructor.	2013	High Court at Calcutta.	Pending	Rajashree Venket Kundalia
6.	W.P.No. 30647(W) of 2015 SARAVANAN CHANDRAN VS NIT DURGAPUR.	Shri Saravanan Chandran is seeking promotion to the post of Professor.	2015	High Court at Calcutta.	Pending (Writ Petition is adjourned and now the case is pending in the supplementary list of cases)	Rajashree Venket Kundalia
7.	W P No. 14690 (W) of 2019 Ranjan Kumar Mitra Vs. Union of India and Other	Shri Ranjan Kumar Mitra is seeking promotion to the post of Associate Professor.	2019	High Court at Calcutta.	Judgement has come. Petitioner have been advised to submit a comprehensive written representation to the Union of India	Rajashree Venket Kundalia

_							
						(Ministry of Law and Justice). NIT Durgapur has to dispose off the matter within 2 weeks from the date of the reasoned order to	
						be served by the	
						aforesaid authority.	
						,	
T	8.	W P No. 14709 (W) of	Shri Sujit Karmakar is seeking promotion to the post of	2019	High Court at	Do	Rajashree Venket
		2019	Associate Professor.		Calcutta.		Kundalia
		Sujit Karmakar Vs. The Union of India and Others.					
T	9.	W P No. 14691 (W)of	Shri Shantanu Pramanik is seeking promotion to the	2019	High Court at	Do	Rajashree Venket
		2019	post of Associate Professor.		Calcutta.		Kundalia
			post of rissociate i foressor.		Carcacta.		Randund
		Shantanu Pramanik Vs.					
		The Union of India and					
		Others.					

10.	W P No. 14693 (W)of 2019 Rabindranath Barman Vs. The Union of India and Others.	Shri Rabindranath Barman is seeking promotion to the post of Associate Professor.	2019	High Court at Calcutta.	Do	Rajashree Venket Kundalia
11.	W.P.20741(w) of 2016 SUBHAS CHANDRA ROY VS NIT DURGAPUR.	Shri Subhas Chandra Roy filled affidavit for missing his service book.	2016	High Court at Calcutta.	Pending	Rajashree Venket Kundalia
12.	AP 425 of 2020, AP 426 of 2020 & AP 427 of 2020 MERINT INDUSTRIAL INFRASTRUCTURE PRIVATE LIMITED VS. NIT DURGAPUR	File cases for claim of Rs. 10.38 Crores with interest 12% per annum for renovation of Hall - 1, Hall – 2 and Hall - 5	2020	Arbitration Proceedings	Pending	Sandip Sikder
13	WPA 22879 of 2023 Harsh Vardhan Vs NIT Durgapur	Denial of admission of an eligible candidate / student belongs to schedule caste in the EE course in the academic year 2023-2024	2023	High Court at Calcutta.	Disposed off	Rajashree Venket Kundalia
14	T. S .330/ 21 Mallinath Roy -v- NITD	Mallinath Roy was appointed on purely temporary basis. Quarter No. L.S. 20/2A was allotted to Mallinath Roy for residential purpose. He remain in possession of the Quarter even after expiry of the contractual period. Mallinath Roy filed the Title Suit to restraining NITD from taking over possessing of the quarter from his custody.	2023	Durgapur Court	Proceedings in progress and W.S. filed on 30.09.2023	Sandip Sikder

15	T. S. 194/ 2014 Kalyan Das -v- NITD	Shambhu Charan Das father of Kalyan Das was an employee of NITD erstwhile R.E. College. Who was missing for a long period. Kalyan Das filed the Title Suit for claiming P.F. & Gratuity of Shambhu Charan Das and declaration of date of death of Shambhu Charan Das.	2014	Durgapur Court	We have taken advantages of ex-parte to avoid the conformation of Date of Death from the end of NITD.	Sandip Sikder
16	MP 727/ 20 Ajit Kumar Bhagat -v- Tapas Kar	On 26.08.2020 Tapas Kar closed the security gate from outside. He was shouting and restricted entry and exit of residents of NIT Durgapur. Ajit Kumar Bhagat filed a case U/S 107/116(3) of Cr.P.C.	2020	Durgapur Court	Disposed off	Sandip Sikder
17	File No. 1(09)/2023/ALCR Sri Suman Das-v- NITD	Suman Das was dismissed from his job due to misconduct & violation of terms and conditions.	2023	Durgapur Court	Proceedings in progress at ALC (C)	Sandip Sikder
18	File No. 1(09)/2023/ALCR Sri Dipankar Das-v- NITD	Sri Dipankar Das was dismissed from his job due to misconduct & violation of terms and conditions.	2023	Durgapur Court	Proceedings in progress at ALC (C)	Sandip Sikder