

53rd ANNUAL REPORT 2012-2013

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NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR
Mahatma Gandhi Avenue, Durgapur-713209
West Bengal, INDIA

Institute of National Importance
under
Ministry of Human Resource Development, Government of India

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Progress at a Glance (2012-2013)

- The new Vision document of the Institute was approved.
- The Institute has been actively participating in the activities of TEQIP-II, a World Bank assisted programme for improvement in quality of technical education and research.
- The Institute was selected for establishing a Centre of Excellence on “Advanced Materials” involving Departments of Physics and Metallurgical & Materials Engineering under TEQIP-II with a proposed budget of Rs 5 crores.
- The curricula of all B. Tech. programmes were revised. Extra-curricular Activities were introduced as credit courses in the first and second semesters.
- Collaborative activities are in progress with CERN Geneva, NUS Singapore, Caledonian College of Engineering, Muscat and a number of premier universities abroad. Faculty exchange, visits of delegation, students’ internship and collaborative research have been taken up.
- Forty nine sponsored projects worth more than 20.94 crores are being executed by the faculty members presently while seven has been completed successfully during this year.
- The faculty members of the Institute have publication and acceptance of 411 papers in peer-reviewed journals and also published 260 papers in proceedings of national and international conferences in 2012-13.
- Faculty members acted as reviewers for 170 peer-reviewed journals and books.
- Four hundred and seven research scholars are carrying out research for PhD degree.
- Twenty five scholars were awarded PhD degree by the Institute in 2012-13.
- 598 students have been placed through in-campus interviews in the session 2012-2013. In addition, 111 students got their second job.
- In 2012-13 four pre-final year students did the summer internship at CERN, Geneva. Altogether, 10 students participated in summer internship abroad in different premier universities all over the world. 20 students presented papers in international conferences abroad.
- The Institute organized “INSPPIRE” programme, sponsored by DST. Two Hundred and ten school students participated in the programme where eminent scientists from different parts of the country addressed them.
- ANVESHAN: AIU Student Research Convention 2012-13 (East Zone) was organized in the Institute in association with Indian Universities (AIU) during February 19-21, 2013. Forty nine students participated in the convention from various states. 27 projects were presented in the convention in diverse areas like Molecular Biology, Nanoscience, Energy, Instrumentation, Robotics, Structures, Computer Science, Prosthesis, Pharmaceuticals, Geomorphology, Sustainable Development, etc.
- Four more workshop/short-term courses and one students’ congress were organized.
- The eighth Convocation of the Institute was held on November 10, 2012. Professor Sushanta Dattagupta, Vice Chancellor, Visva Bharati, Santiniketan delivered the Convocation Address as the Chief Guest. The Guests of Honour were Dr. Nigel S. Lockyer, Director, TRIUMF, Canada's National Laboratory of Particle and Nuclear Physics and Professor in Department of Physics and Astronomy, University of British Columbia and Dr. Rüdiger Voss, Senior Physicist, Head, International Relations Office, CERN, Geneva, Switzerland. Professor Bikash Sinha, Chairman, Board of Governors, presided over the function. In the eighth convocation, 590 B. Tech, 194 M. Tech., 52 MBA, 61 MCA, 23 M. Sc. and 19 PhD degrees were awarded.
- The Rajbhasha Samiti of the Institute organized various programmes over the year.

ANNUAL REPORT 2012-2013

1.0 INTRODUCTION

1.1 Vision Document

Vision

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

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

Objectives

1. To choose a fully inclusive growth path, carrying all the students, the faculty members and the staff with it
2. To focus on excellence and innovation
3. To attribute greater emphasis on post graduate education and research
4. To focus on inter-disciplinary research
5. To encourage the faculty to take up more sponsored projects and consultancy and increase internal resource generation
6. To become a major player in the endeavour to make India a most favoured destination for international students and global research
7. To collaborate with premier universities and organizations across the globe on research
8. To initiate undergraduate students to research very early in pursuance of the “*catch them young*” policy
9. To restructure the academic departments and to set up schools and centres to offer interdisciplinary post graduate and doctoral programmes
10. To reorient/ restructure the academic programmes in keeping with the developments and market forces
11. To revise the curricula and syllabi regularly
12. To initiate greater interaction with industries in the areas of collaborative projects and programmes, exchange of resource persons and training of students
13. To remain committed to responsibilities towards providing services to community, to make the people aware of crucial socio-technical and socio-economic problems and offer technical solutions in rural, urban and agricultural sectors

Action Plan

A. Research

1. To intensify research – Demand-driven research activities will be taken up in different thrust areas and required infrastructure will be set up to support such activities. Intake of Institute full-time research scholars will be increased as they play a vital role in sustaining research activities in an institution. Moreover, they will cater to the urgent requirement of faculty in the technical education sector. Freshly recruited young faculty members shall be provided with seed money for good quality research project proposals by the Institute. Funding from TEQIP-II, plan grant and different sponsoring agencies will be utilized for the enhancement of research activities. A sponsored research cell will be established.

The Institute will focus on the a few research areas where it would like to excel and lead the country, like Environment, Energy, Biotechnology, Corrosion, Structure, Water Resource Engineering, Power Systems, High Voltage Engineering, Microelectronics, Microwave, Machine Design, Thermal Engineering, Materials, Nanotechnology, Software Engineering, etc.

2. To initiate students to research early – All students, including undergraduate students will be encouraged to get engaged in research early. The students shall be financially supported for international research internship and for presenting papers in national and international conferences. They will also be associated with collaborative research projects.

B. Collaboration

1. Collaboration with academic institutions – Collaborations with various premier academic and research institutions in India and abroad will be enhanced. It will encompass faculty and students' exchange programmes, joint academic programmes and research. Joint research proposals shall be submitted to funding agencies.
2. Inter-NIT research groups – A special focus shall be placed on forming inter-NIT research groups in multi-disciplinary thematic areas. Joint projects, doctoral and post graduate research shall be carried out to reap synergistic benefits.
3. Enhanced interaction with industries – Collaborative research programmes, participation of experts from industries in academic decision-making, invited lectures, training programmes for industry personnel will be enhanced. Internship in industries shall be encouraged. Testing and consultancy by the faculty and staff members will be intensified. An Industry-Institute-Interaction cell will be established.

C. Teaching & Training

1. To strengthen existing B. Tech. programmes – The UG laboratories will be expanded and augmented. Teaching-learning process will be further modernized with teaching aids and learning resources. Online students' feedback system on the performance of the faculty should be introduced.
2. To strengthen existing PG Programmes – 16 existing M. Tech. Programmes will be strengthened by modernizing the PG laboratories. In TEQIP (Phase II) 36 PG laboratories will be modernized in different departments. More new laboratories will be set up. Further strengthening will be made from plan grants.
3. To start new academic programmes in emerging areas - 25 new academic programmes will be introduced. Skilled postgraduates will be produced in areas having market demand.
4. Revision of curricula and syllabi – The curricula and syllabi will be revised regularly in keeping with technological advances. External experts from industries and academia will be consulted in the endeavour.
5. Flexibility in academic programmes – More multi-disciplinary academic programmes will be encouraged.
6. Academic support to weak students – Finishing Schools, remedial teaching and special training on soft skill will be conducted for the weaker students.

7. Faculty and staff development programme – The faculty members will be encouraged to participate for refresher courses, training programmes and collaborative research programmes to premier institutions in India and abroad. They will also undertake pedagogical training. The staff members will also be trained in different areas. The entire training programme will be based on an exhaustive training need analysis carried out by the departments.
8. Continuing Education programme – More such programmes for the faculty members and staff of academic institutions and industry personnel will be organized regularly. A Continuing Education cell will be set up.
9. Institutional Management capacity enhancement – Responsible officials like Deans and Heads will be exposed to modern management techniques so that these tools may be used in education management.

D. Infrastructure Development

1. To strengthen central academic facilities – Various central academic facilities like computer centre, library, workshop, central instrumentation facility, etc. will be modernized. More text books shall be issued to the students.
2. Institute Automation – A comprehensive Institute Automation system will be set up to integrate all the activities of the Institute, to speed up the decision-making process and to move towards a paperless and transparent administration.
3. Campus Expansion – The present campus is now grossly inadequate in view of the recent and future expansion of the institute. It has become absolutely necessary to acquire additional land around the present campus for expansion. In case it is not available, land may be explored in and around Durgapur to set up a second campus.
4. Expansion and improvement of Infrastructure – Infrastructure needs urgent expansion to cope with rapidly increasing strength of students and faculty. Though additional facilities are being set up, it needs much more. Construction of more students' hostels, faculty quarters, and academic blocks housing classrooms, laboratories, faculty rooms and other supporting infrastructure is needed urgently. The entire Institute campus should be made wi-fi enabled. The infrastructure for health service should be expanded and improved. Departmental libraries should be strengthened. Audio system should be installed in large classrooms. Adequate facilities shall be provided to the staff members. The acute shortage of basic amenities like power and water must be overcome from additional sources.
5. Students' Amenities – Auditorium, Open Air Theater, Swimming Pool and additional playgrounds will be set up. The existing facilities of indoor games and other sports and gymnasium will be expanded.

1.2 Education System

National Institute of Technology (NIT) Durgapur is a leading Institute in technical education. It offers UG and PG programmes in various disciplines of engineering, technology, science and management. Doctoral programme is also offered in engineering, science, and humanities.

NIT Durgapur is a part of the erstwhile REC system where education and national integration were considered inseparable, with half the seats allocated to the students from the state while the rest were reserved for the students from other states. Seats are also reserved for students from backward communities as per the guidelines of the Government of India. The education system is holistic with equal importance being attached to academic as well as overall development of the students.

The Institute was granted academic autonomy in July 2003 and it awards its own degree. The Senate is the highest policy-making academic body of the Institute.

1.3 New Initiatives

NIT Durgapur successfully participated in the World Bank-funded Technical Education Quality Improvement Programme (TEQIP) as a lead institute and improved its academic infrastructure and quality of human resources. The Institute has started its activities in TEQIP-II as well. A new Centre of Excellence on “Advanced Materials” has been approved under TEQIP-II. Over the last few years NIT Durgapur gradually evolved from a teaching-centric institution to an institution focusing on both teaching and research. The faculty members were encouraged to intensify their research activities. This resulted in a rapid increase in research output, like publication in peer-reviewed journals and being selected for sponsored projects. The Institute also initiated collaborative research programmes with esteemed research and academic institutions like CERN, Geneva, Caledonian College of Engineering, Muscat Oman, National University of Singapore, and many other academic institutions all over the world and industries like Durgapur Steel Plant. Internship was arranged for the undergraduate students in CERN, Geneva, Germany (DAAD programme) and NUS Singapore. A number of seminars, conferences, workshops and short-term courses were organized and the faculty members were encouraged to visit premier institutions in India and abroad for participation in conferences, short-term courses and training programmes.

2.0 AN OVERVIEW

2.1 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 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 nine B. Tech. programmes and sixteen M. Tech. programmes. Besides, a three-year MCA programme and two-year MBA programme are also offered. The Institute has also introduced M. Sc. programmes in Physics, Chemistry and Mathematics with Computer Applications.

2.2 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 NH 2, and there is a military airport at Panagarh, only 20 km from Durgapur. The place is only an hour's drive from Tagore's Santiniketan and has quite a few tourist spots nearby. The climate is moderate.

2.3 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.

2.4 Administration

NIT Durgapur is an autonomous institution under the Government of India since July 2003. As per MOA, the Institute is headed by a Director and administered by a Board of Governors. It also has Finance Committee and Building and Works Committee. In the Board, there are representatives from the Government of India, the Government of West Bengal, industries, other institutions, and the faculty.

2.5. Academic Programmes:

National Institute of Technology Durgapur is an Institute of National Importance with a reputation cutting across international boundaries. It runs four-year Bachelor of Technology programmes in Bio-Technology, Chemical Engineering, Civil Engineering, Computer Science & Engineering, Electronics & Communication Engineering, Electrical Engineering, Mechanical Engineering, Metallurgical & Materials Engineering and Information Technology. Each academic year spreading over the period from 1st July to 30th June of the next year is divided into two semesters of about eighteen weeks.

It also offers four and six Semester M. Tech. Programmes. Total number of M. Tech. programmes on the offer is sixteen.

A three-year full time MCA programme has started from 2000.

A two-year full time MBA programme has started from 2004.

Two-year full time M. Sc. programme in Physics and Chemistry have started from 2009.

Two-year full time M. Sc. programme in Mathematics has started from 2010.

2.6. Programmes Offered:

2.6.A. Under-Graduate Programmes:

The Institute provides instruction in the following programmes leading to Eight Semester (Four Year) B. Tech. Degree (full time only).

<i>Departments</i>		<i>Degree Offered</i>	<i>Sanctioned Intake</i>
1	Bio-Technology	B. Tech.	96
2	Chemical Engineering	B. Tech.	67
3	Civil Engineering	B. Tech.	66
4	Computer Science & Engineering	B. Tech.	98
5	Electronics & Communication Engineering	B. Tech.	98
6	Electrical Engineering	B. Tech.	98
7	Information Technology	B. Tech.	97
8	Mechanical Engineering	B. Tech.	145
9	Metallurgical & Materials Engineering	B. Tech.	82
Total			847

In addition, 60 – 70 seats are filled up by foreign students nominated by the Government of India under various schemes. 50% of the seats are reserved for candidates from West Bengal. 3% of the seats are reserved for physically handicapped candidates. As per the reservation policy of Government of India 27, 15 and 7.5% of the total seats are reserved for OBC, SC and ST candidates, respectively.

2.6 B. Post-Graduate Programmes**(a) Full-time programmes**

The Institute offers 16 (sixteen) four-semester M. Tech. programmes, six-semester MCA, four semester MBA and 3 four-semester M. Sc. Programmes.

(b) Part-time programmes

The Institute offers six-semester part-time postgraduate programmes leading to M. Tech. degree in eight specializations as mentioned in the table hereunder.

Sanctioned intake of the Post-graduate programmes:**M. Tech.**

SL. NO.	Specialization (Department)	Full time Non-sponsored				Full time Sponsored	Part time	Total
		Open	SC	ST	OBC			
1	Advanced Materials Science & Technology (Physics)	10	03	01	04	05	00	23
2	Biotechnology (Biotechnology)	08	02	01	04	05	0	20
3	Chemical Engineering (Chemical Engineering)	05	03	01	04	05	05	23
4	Computer Science & Engineering (Computer Science & Engineering)	10	03	01	04	05	00	23
5	Corrosion Science & Technology (Chemistry)	05	03	01	04	05	05	23
6	Design & Production Engineering (Mechanical Engineering)	05	03	01	04	05	05	23
7	Electrical System (Electrical Engineering)	05	03	01	04	05	05	23
8	Environmental Science & Technology (Earth & Environmental Studies: Coordinating department)	08	02	01	04	05	00	20
9	Industrial Metallurgy (Metallurgical & Materials Engineering)	05	03	01	04	05	05	23
10	Information Security (Information Technology)	10	03	01	04	05	00	23

SL. NO.	Specialization (Department)	Full time Non-sponsored				Full time Sponsored	Part time	Total
11	Microelectronics & VLSI (Electronics & Communication Engineering)	10	03	01	04	05	00	23
12	Operations Research (Mathematics)	05	03	01	04	05	05	23
13	Physical Metallurgy (Metallurgical & Materials & Engineering)	05	03	01	04	05	05	23
14	Software Engineering (Computer Applications)	08	02	01	04	05	00	20
15	Structural Engineering (Civil Engineering)	05	03	01	04	05	05	23
16	Telecommunication Engineering (Electronics & Communication Engineering)	10	03	01	04	05	00	23
	TOTAL	114	45	16	64	80	40	359

Other Post-Graduate Programmes:

SL. NO.	Programme (Department)	Full time				Total
		Open	SC	ST	OBC	
1	Master of Business Administration (Management Studies)	46	14	7	25	92
2	Master of Computer Applications (Computer Applications)	46	14	7	25	92
3	M. Sc. (Physics)	10	3	2	5	20
4	M. Sc. (Chemistry)	10	3	2	5	20
5	M. Sc. in Mathematics with Computer Applications (Mathematics)	10	3	2	5	20
		122	37	20	65	244

Eligibility

- (i) Departments of Chemical, Civil, Electrical and Mechanical Engineering: B.E. / B. Tech in respective branch of Engineering; or equivalent AMIE (I), AMIChE, etc. with two years of professional experience.
- (ii) Department of Computer Science & Engineering: BE/ B. Tech in CSE, Information Technology, Electronics, Electrical Engineering; or equivalent AMIE (I) in respective branch with two years of professional experience.
- (iii) Department of Electronics & Communication Engineering: (i) Specialization in *Telecommunication Engg.*: B.E./ B. Tech. or equivalent degree in ECE. (ii) Specialization in *Microelectronics & VLSI*: B.E./ B. Tech. or equivalent degree in ECE/ CSE/EE/ Electronics & Instrumentation Engineering.
- (iv) Department of Information Technology: B.E./ B. Tech. in IT/CSE/ECE/EE or Instrumentation Engineering.
- (v) Department of Metallurgical & Materials Engineering: (i) Specialization in *Materials Engineering*: BE / B. Tech. in Metallurgical & Materials Engineering, Mechanical Engineering and M. Sc. in applied physics; or equivalent AMIE (I), AMIIM, etc. with two years of professional experience. (ii) Specialization in *Industrial Metallurgy*: B.E./ B. Tech. or equivalent in Metallurgical & Materials Engineering, Mechanical Engineering and Production Engineering; or equivalent AMIE (I), AMIIM, etc. with two years of professional experience.
- (vi) Department of Chemistry (Corrosion Science and Technology): M. Sc. in Chemistry (Pure/applied), M. Sc. in Biochemistry/Environmental Science with Chemistry as major subject in graduation or BE/ B. Tech. in Chemical Engineering; or AIC (I) with two years of professional experience.

- (vii) Department of Physics (Advanced Materials Science and Technology): M. Sc in Physics/ Applied Physics/ Electronics or BE/ B. Tech. in Metallurgical Engg. / Materials Engg./ Electronics & Communication Engg. /Mechanical Engg. /Electronics Engg. / Instrumentation Engg. with at least 55% marks or equivalent grade.
- (viii) Department of Mathematics (Operations Research): Degree in any branch of Engineering / Technology/ MCA / M. Sc or equivalent AMIE (I), IIM (I), etc. with two years of professional experience with Mathematics in graduation level.
- (ix) Department of Biotechnology: B. Tech degree in Biotechnology/ Bioinformatics/ Biochemical Engineering/ Food Technology/ Chemical Engineering/ Pharmacy having 65% marks from any recognized University/ Institute with Mathematics as a subject in 10+2 level.
- (x) Department of Earth & Environmental Studies (Coordinating department for Environmental Science & Technology): B. Tech./ B.E. in Chemical / Civil/ Mechanical/ Metallurgical / Biotechnology/ Leather Tech./ Food Tech. / Environmental / Pharmacy/ Agricultural / Mining/ Biochemical Engineering with 60% marks; M. Sc. in Environmental Sc./ Chemistry/ Physics/ Geology/ Bio-sciences/ Agricultural Sc. with 55% marks [with mathematics as one of the subject at least up to Higher Secondary level (10+2 Examination)].
- (xi) Department of Computer Applications (Software Engineering): B. Tech. in any discipline or MCA from any recognized university. Preference will be given to candidates having valid GATE score in CS code.

MCA programme

Admission to MCA programme is made through NIT MCA COMMON ENTRANCE TEST (NIMCET). Indian Nationals securing at least 60% marks in aggregate or 6.5 CGPA on a 10 point scale (55% marks or 6.0 CGPA on a 10 point scale in case of SC, ST) in (i) BSc / BSc (Hons) / BCA / BIT of minimum three years full-time or (ii) B E / B Tech or equivalent from a recognized University are eligible to appear for NIMCET.

MBA programme

Graduate (10+2+3 format) in any discipline with minimum 55% marks in graduation (5% relaxation for SC/ST & PD candidates). They must have valid CAT/ CMAT score.

M. Sc. Programmes:

Three-year regular B. Sc. (Hons./ Pass) with minimum 55% marks in the relevant subject. 5 % / 0.5 CGPA relaxation for SC/ST as per Government norms is applicable for all programmes.

2.7 Admission Procedure

2.7 A. Under-Graduate Programmes:

Students are admitted exclusively through All India Engineering Entrance Examination (AIEEE) conducted by Central Board of Secondary Education (CBSE), New Delhi. The Seat Distribution Matrix is guided by Ministry of Human Resource Development (MHRD), Government of India.

2.7 B. Post-Graduate Programmes:

The mode of admission is detailed hereunder.

Sl No	Types of Student	Mode of Admission
1	Full Time GATE (M. Tech.)	CCMT
2	Full Time self-sponsored Non-GATE (M. Tech.)	B. Tech./eqv results, Institute level test and viva-voce
3	Full Time Sponsored (M. Tech.)	B. Tech./eqv results, Institute level test and viva-voce
4	Part Time (M. Tech.)	B. Tech./eqv results, Institute level test and viva-voce
5	MCA	NIMCET
6	MBA	CAT/CMAT score and Institute Level GD/PI
7	M. Sc.	B.Sc. results, Institute level test and viva-voce

2.8 Students

The students come from all states of India. A large number of students also come from countries like Nepal, Bhutan, Bangladesh, Sri Lanka, Afghanistan, Mauritius, Zimbabwe, Mozambique, Vietnam, Mongolia, Ethiopia, Tanzania, Nigeria, Gambia, Kenya etc.

The students find the environment of the Institute conducive not only to exercise their intellectual capability but also to learn living in cultural diversity and religious heterogeneity. In this era of free market economy India is a part of global village unconfined to its territory that we see in text books of Geography. Our students researching in higher academic institutes and working in multinational companies have already made their marks in that global village.

The students of the institute have excelled not only in academics but also in every field one can think of. The students have received several prizes and awards in technical, cultural and sports festivals in various other premier institutes like IITs, ISM, etc. 80 - 90% of the students get employed through campus interview.

Extracurricular Activities:

i. Centre for Cognitive Activities

Centre for Cognitive Activities is the science club of the Institute. In its incumbency of 38 years, the club has produced opportunities and generated scope for the ignited minds to not only nourish and nurture their scientific knowledge and technical acumen but also the business aptitude from time to time the club has polished its facilities to keep in pace and in some way even move ahead of the existing colonies of science. Its members are responsible for making this centre the second largest in eastern India. The centre consists of 5 sections namely CORE, ROBOCELL, DESIGNING, WEB DEVELOPEMENT AND E-CELL. Every year the club organizes loads of periodic workshops and lectures by proficient professionals and eminent personalities. These may include robotics workshop and B-plan workshops by E-cell. ADOBE INDIA organizes workshops on web development, ethical hacking and Photoshop. The club is also responsible for organizing science exhibition and seminar by IEEE. Other events include a robotics fest called ROBOCITY, workshops and lectures on programming, coding, gaming etc. The main and the most awaited highlight of the year is 'Aarohan' the techno-management fest of the Institute. The 3-4 days of extravaganza speaks out the dauntless spirit of the youths. Plethora of events and competitions on robotics, programming, gaming-plan, marketing strategy etc. are topped with handsome prize money. These events are surrounded by guest lectures and summits.

ii. SAE- Society for Automotive Engineering (NIT Durgapur Chapter)

Shifting gears from a regular academic life, the chapter has empowered students to drive into faster lanes with the confluence of innovation, knowledge, application and skill under the same hood. The society organizes its unique auto fest "Motor Zundung" every year. Motor Zundung stands for the endeavor to appreciate raw talent and give budding technocrats a feel of real-time automotive acumen with a plethora of online gaming events, robotic events like Go-Drafting, Relay Race, Robowars and Dahi Hundi, non-robotic events including Auto Quiz, Schaffer, Jig for a Jigsaw and even a mini auto-expo, courtesy the flagship event- Transmission.

iii. IEEE Students' Chapter

The chapter was formed on 25th February 2009 and is one of the largest student chapters in Eastern India. It aspires to emanate an aura of technology and innovation which would enrich the environment with the vibe of rational and scientific thinking. An international conference is organized every year under the aegis of the chapter.

iv. GNU/Linux Users' Group

Established in the year 2003, GNU/Linux Users' Group, NIT Durgapur, spearheads the FOSS curriculum in the college premises. It is now a full-fledged association of more than 200 members, encompassing not only students of NIT Durgapur but also students from near-by institutes and free software hackers/activists from various places in India. The group works towards promoting the usage of Linux through various informative workshops, basic Linux classes and conducting courses all round the year. *Mukti*, the annual FOSS festival of NIT Durgapur, primarily aims at promoting the concept of free software through various contests, games, workshops, talks and a kaleidoscope of onsite and off-site events, Codecracker being a huge success.

v. Maths 'N' Tech club

Established in 2004, the Maths 'n' Tech Club was initially conceived with the idea of providing a stage for instilling in students a passion for mathematics and technology by underlining its merit and applicability through a plethora of brainy challenges. Maths n tech club launched their official website and conducted programmes like Hourglass, Knock knock, etc. *ANK*, the annual knowledge festival of the club was held during October 05-07, 2012.

vi. Music Club

The music club serves as a major platform for students who wished to showcase their musical talent in and around the campus. It has now spread its wings by conducting events such as the Music Quiz, Antakshari, etc. Recstacy over the last few years saw the club hosting "Rockophonix", a band competition where student music bands from Durgapur and Kolkata came to battle it out. One of the most momentous achievements has been the "NIT Idol held during Recstacy. The club also had its members compete in fests outside the campus, like "Springfest" at IIT Kharagpur.

vii. Chayanika

CHAYANIKA aims to patronize the sense of art and culture among the students of NIT Durgapur. It upholds the spirit of the students to participate and thereby exploring the vast cultural diversity that this country has to offer. The annual cultural programme 'ELIXIER' offers a plethora of cross cultural events for the students.

viii. PRAKRITI

PRAKRITI, the environmental club of NIT Durgapur conducts *ruNIT*, a mini marathon, *Greenart*, a poster making competition, environment related essay competition, awareness programme in nearby villages and plantation and cleaning drive in the campus.

ix. Enteract Club

The club not only takes charge of the entertainment but also undertakes the awareness drive through street plays, drama and short films. The club has organized plays on Independence day, Republic day, Teacher's day and street play for NSS. Besides, the club also excelled in students' festivals in other premier institutions, like IIT Kharagpur SPRINGFEST, IIT Delhi RENDEZVOUS, IIT Kanpur ANTARAGNI, ISM Dhanbad, etc.

x. Dance Club

The Dance Club was formed in the college in the year 2003-04. Various dance forms like B-BOYING, BREAKING, POPPING, STREET DANCE and CLASSICAL are included in the domain of the club. It performed in various events in the Institute and participated in festivals of other institutions.

xi. RADIO NITROZ

RADIO NITROZ is NIT Durgapur's very own Campus Radio Station.

xii. Literary Circle

Literary Circle of NIT Durgapur serves as a platform for the creatively inclined to express themselves in myriad ways, outside the rigors of an engineering students life. VERVE, the annual literary festival was organized by Literary Circle during September 28-30, 2012. It had a number of innovative events based on photography, movie making, debating, public speaking, creative writing etc. A book donation drive was also organized in association with *Mukti*, a socio economic project and BMEP to help needy students. Literary Circle published *Déjà Vu*, the bi-annual official newsletter of the Institute, *Episode*, the institute yearbook and *InNIT*, the monthly college newspaper. *NITMUN*, NIT Model United Nations, was organized in collaboration with the United Nations Information Centre for India and Bhutan during September 7-9, 2012.

xiii. Quiz Inc

Quiz Inc. organizes throughout the year quiz programmes like *The Quizzitch Cup*, *Recsquizzit*, Technology Quiz, etc.

xiv. Club Communion

It aims to develop the qualities of imagination, innovation and integration among the students, group discussion and public speaking.

xv. Student Gymkhana

The Gymkhana is the official students' representative body and the executive body is elected by the students. It interacts with the Institute authority in all matters related to the students. The sports and cultural activities of the students are also coordinated by them. The Students' Gymkhana organizes a four-day annual cultural festival *Recstacy* every year.

xvi. NSS

National Service Scheme, since its inception in 1969 by Central Government of India, has been working hard for the welfare of the society and a nation as a whole using the services rendered by the students of the Institute. This academic year is epoch making as NSS has been incorporated by the Institute in Compulsory Credit Course for B Tech 1st year students. With this course the total strength of NSS volunteers has reached up to 400. Apart from the general activities of NSS volunteers, 2012-13 witnessed the active involvement of the volunteers of NSS in the celebration of the Republic and the Independence Day of the nation. Two separate NSS troops (boys and girls) participated in the parade of these national festivals.

Blood Donation camp was organized on 30 January 2013. Prof and Mrs T Kumar, the first couple of the institute, were the first to donate their blood. Dr Shri Krishan Rai, In Charge NSS, along with 157 volunteers donated blood in this camp.

For rural/slum empowerment the Annual Camp was organized from 4-10 March 2013 at Ranchi Colony, adjacent to the institute boundary. Free medical camp was organized where almost 300 patients got free check up and medicine. In this endeavour the students got the full support of almost 20 doctors of Durgapur area. On 9-10 March volunteers worked whole day and gave several self help training to the inhabitants, such as soft toys making, paper eye glasses, items of decoration etc. *Jagrukta Rallies* on Child Labour, Dowry, RTI, etc were organized in and around the campus. Collection of unused materials from campus and distribution in Ranchi Colony and *Bihari Mode* was done this year during the annual camp.

xvii. NCC

The Institute NCC Unit has a senior Division Boys wing under 10 Bengal BN NCC Asansol West Bengal. This wing undertakes co-curricular credit course (EA-01 & EA-02) for first two semesters in B-Tech curriculum as well as participates in NCC scheduled programme on regular basis.

Students' Research Activities

It is quite remarkable that in recent years National Institute of technology, Durgapur has seen more than 125 students travelling widely to foreign universities for research internship or presenting papers in international conferences. The institutions include CERN Geneva, MIT, University of LUND, Sweden, University of Poitiers, France, University of Technology, Germany, Universität Stuttgart, University of Agder, Grimstad, Norway, American University of Armenia, National University Of Singapore, Nanyang Technological University, Singapore, Université Pierre et Marie Curie Paris, Tor Vergata University; Via del Politecnico, Rome, University of Massachusetts, University of Auckland, New Zealand, Hamburg University of Technology (TUHH), Technical University of Chemnitz, Germany, Institute of Technology, Turkey, Leibniz University of Hannover, Universiti Tun Hussein Onn Malaysia, Universitat De Barcelona, Kyoto University, State University of New York, Albany, University of Technology, Poland, National Dong Hwa University, Taiwan and other institutes. In 2012-13, 10 students visited premier institutions abroad for research internship, while 20 students presented papers in international conferences abroad. Many other did their internship in the leading technological institutes of India like IISC Bangalore, ISI Kolkata, BARC, CMERI, TIFR, DRDO, JNCASR, ISM, Texas Instruments, IITs and various other reputed corporate companies.

2.9 Examination & Evaluation

The Institute follows semester system of examination. The undergraduate programmes are of eight semester (four year) duration. The Institute has been upgraded to National Institute of Technology, Durgapur with Deemed University status and grade system of evaluation has been adopted for the undergraduate students who have been admitted in the year 2003 and onwards. The students are graded with Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA). The SGPA of a semester indicates the academic performance of the student in that semester and CGPA indicates the academic performance of the student from the beginning upto the current semester. They are conferred with the degree of Bachelor of Technology (B. Tech.) at the completion of the programme.

The postgraduate engineering programmes are of four semester duration for the full time students and six semester duration for the part time students and lead to degree of Master of Technology (M. Tech). All the students of these postgraduate programmes are evaluated by Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA).

The Master of Computer Applications (MCA) programme is of six semester duration and the students are evaluated by Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA). The Master of Business Administration (MBA) programme is of four semester duration and the students are evaluated by Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA).

The Master of Science (M. Sc.) programme is of four semester duration and the students are evaluated by Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA).

2.10 Placement

The Institute provides employment opportunities to the students through the Department of Training, Placement, and Students Welfare headed by a Professor, 598 (UG & PG) students have been placed in the academic session 2012-2013. In addition to that 111 (UG & PG) students got a 2nd job. Most of the global players, eg MICROSOFT, DIRECTI, ORACLE, AMDOCS, IOCL, BPCL, HPCL, C-DOT, DVC, VIZAG STEEL, WBSEDCL, WBPCL, RIL, NOVELL, TEJAS NETWORK, WIPRO, IBM, L&T, SAMSUNG, CESC, MAHINDRA & MAHINDRA, TATA STEEL, TATA MOTORS, TATA POWER HUL, LAFARGE, MARUTI, JSPL, HERO MOTOR, EXIDE, SIEMENS, ABB, ERICSSON, EVEREADY, SCHNEIDER ELECTRIC, ALSTOM, RAYMONDS, EXIDE, IDEA CELLULAR, FEDERAL BANK and many more were the recruiters in recent past who visited the campus for recruitment of the bright students.

2.11 Games and Sports:

The Institute lays emphasis on the promotion of sports and games amongst the students as an essential co-curricular activity and also promotes interaction between different NITs and other Engineering colleges of the country.

Department of Physical Training started Co-Curricular credit course (EA-01 & EA-02) in Physical Education & Sports/ NCC/NSS as a compulsory subject in B. Tech in first two Semesters.

The Department of Physical Training also provides training facilities to all students, staff and the family members of the Institute. It has excellent infrastructure facilities for both outdoor and indoor games. Students are trained in various games and sports by well experienced and qualified coaches. The Institute has three gymnasiums equipped with sufficient number of equipments and the playgrounds (The Lords & The Oval) always bubble with outdoor activities like football, cricket, basketball and athletics. Concrete court facilities are also available in tennis, basketball and badminton. Flood light facility is provided to all the outdoor games. The central playground (The Oval) accommodates a standard athletic track, an excellent pavilion and facilities for all athletic events.

2.12 Staff Position

The Staff position (both teaching and non-teaching) on date of the Institute is given in detail in items 11.5 (a), 11.6 (a) & 11.6 (c).

2.13 Rajbhasha Samiti

The Rajbhasha Samiti of the Institute issued directives from time to time for implementing and publishing Rajbhasha in the institute. It organised different activities such as Poem Recitation Competition, Short Speech Competition, Debate Competition, Essay Writing Competition, Drawing Competition etc. for students, faculties, staff and their family on the occasion of Independence Day, 15th August 2012 and republic Day, 26th January 2013. Participants from students, faculties, staff and their family participated in each activity with much fan and fare. First, Second, Third and Consolation Prize in cash for each competition and for each category of students, faculties, staff and their family were distributed along with the certificates for the respective award. All the participants for different competitions were also given the certificate for participation in respective competition.

The Samiti organised Hindi Pakhwara from 1st to 14th Sept. 2012. Hindi Pakhwara was inaugurated on the first day, 1st Sept. 2012 by the Director of the institute, Professor Tarkeshwar Kumar. During Hindi Pakhwara-2012, activities such as Noting-Drafting Competition, Poem Recitation Competition, Short Speech Competition, Debate Competition, Essay Writing Competition, Drawing Competition etc. for hindi as well as non-hindi speaking students, faculties, staff and their family were organised on different days. Participants from students, faculties, staff and their family participated in each activity with much fan and fare. First, Second, Third and Consolation Prize in cash for each competition and for each category of students, faculties, staff and their family were distributed along with the certificates for the respective

award during the Valedictory-cum-Closing Ceremony on the last day of the Pakhwara. All the participants for different competitions were also given the certificate for participation in respective competition.

It encouraged the executive members of Hindi Chatra Sangh, "DARPAN" by providing them T-Shirt with logo of "DARPAN". It also published fourth edition of "JAGRITI", Rajbhasha Magazine of the institute. Jagriti publishes original writings of all the communities of the institute.

Rajbhasha Samiti participates in the regular meeting of Town Official Language Implementation Committee (TOLIC) and helps in organising different activities by member office of TOLIC. It also sends participants to different activities organised by TOLIC.

Rajbhasha Samiti coordinated courses for Praveen, Prabodh, and Pragya for faculties and staff of the institute and helped the faculties and staff to get cash award as well as salary increment for successfully passing Praveen, Prabodh, and Pragya examination conducted by Deptt. of Official Language, Ministry of Home Affairs, Government of India.

2.14 Notable Achievements using Graphs, Charts, Diagrams:

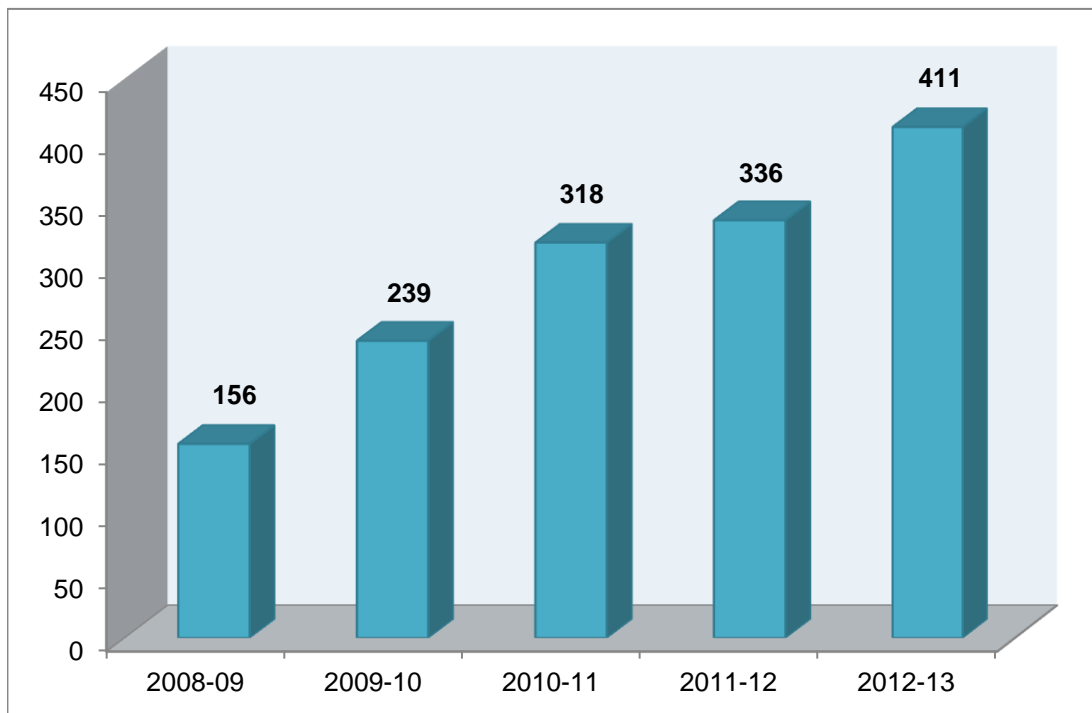


Fig. 1 Publication in journals in the last five years

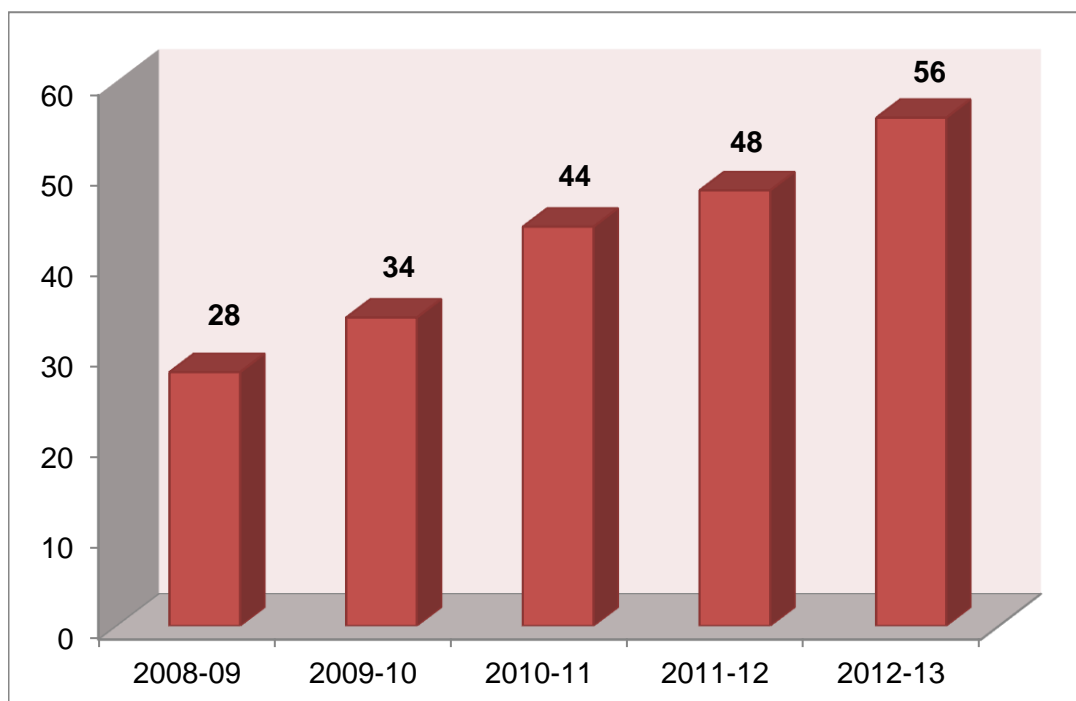


Fig. 2 Number of sponsored projects during the last five years

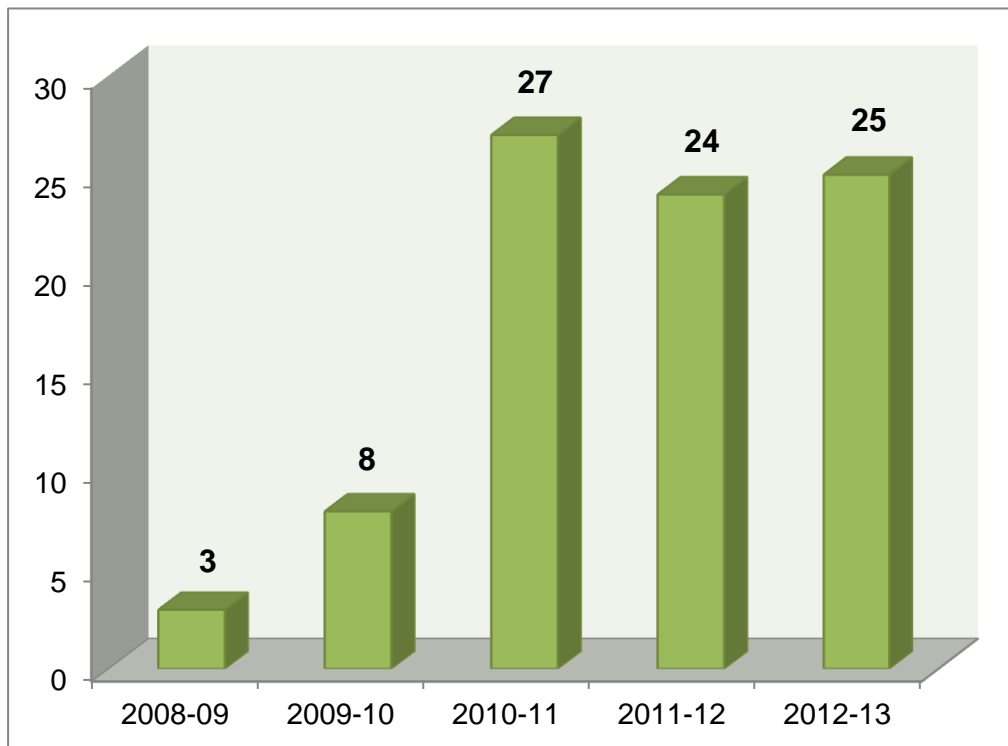


Fig. 3 Number of PhD degrees awarded during the last five years

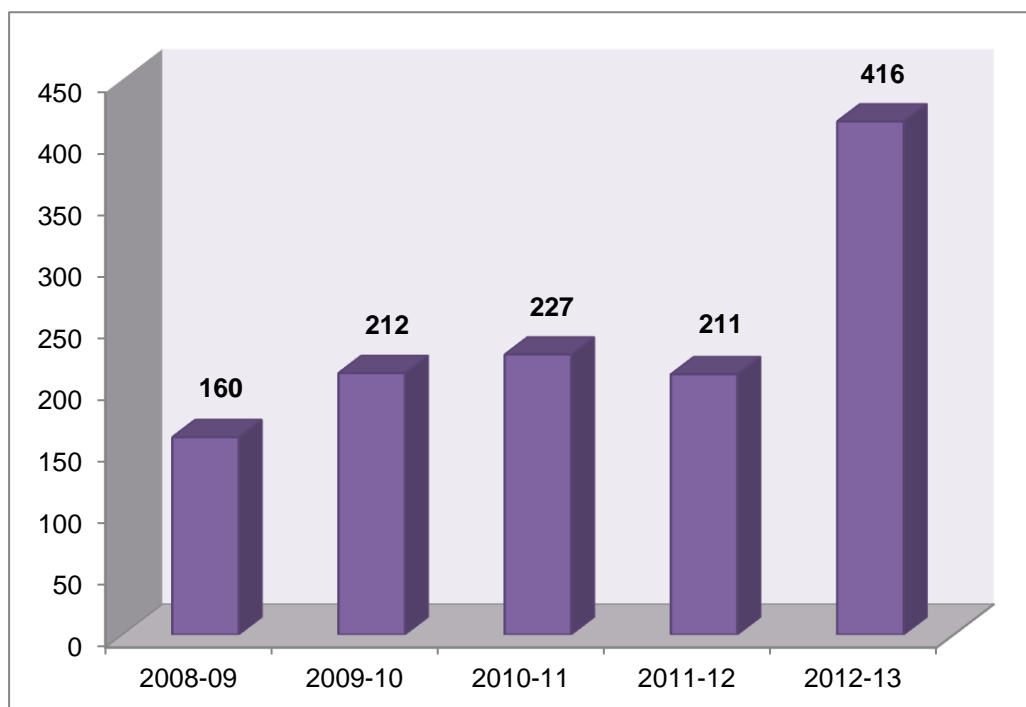


Fig. 4 Number of registered PhD scholars during the last five years

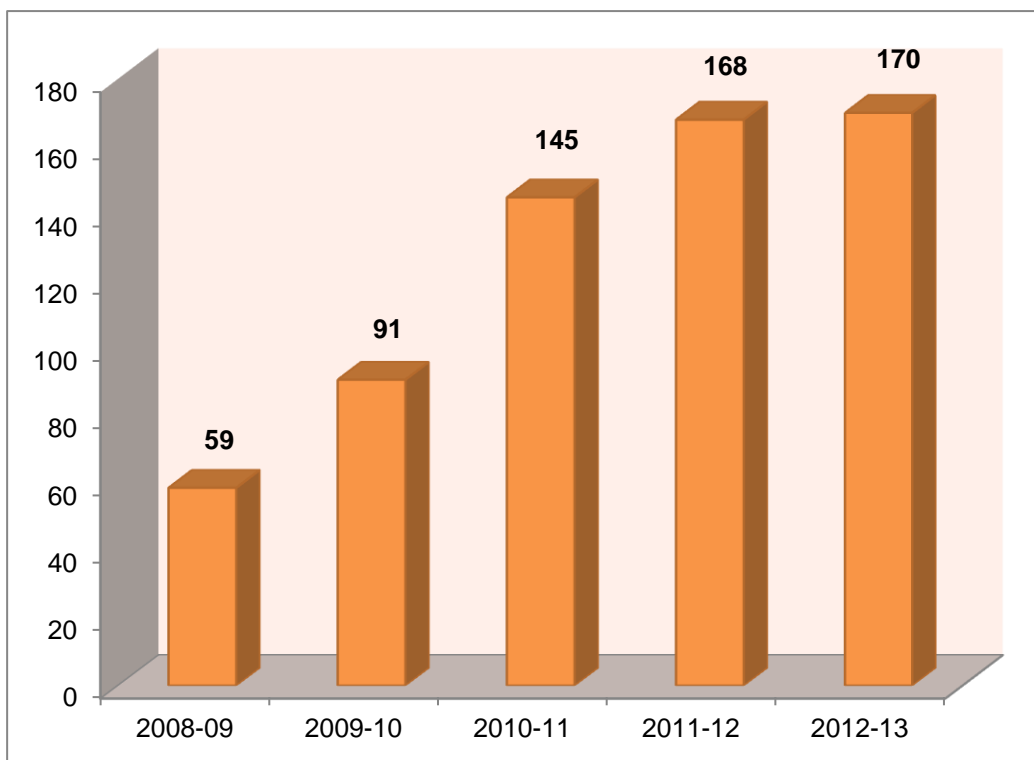


Fig. 5 Reviewers of journals/books during the last five years

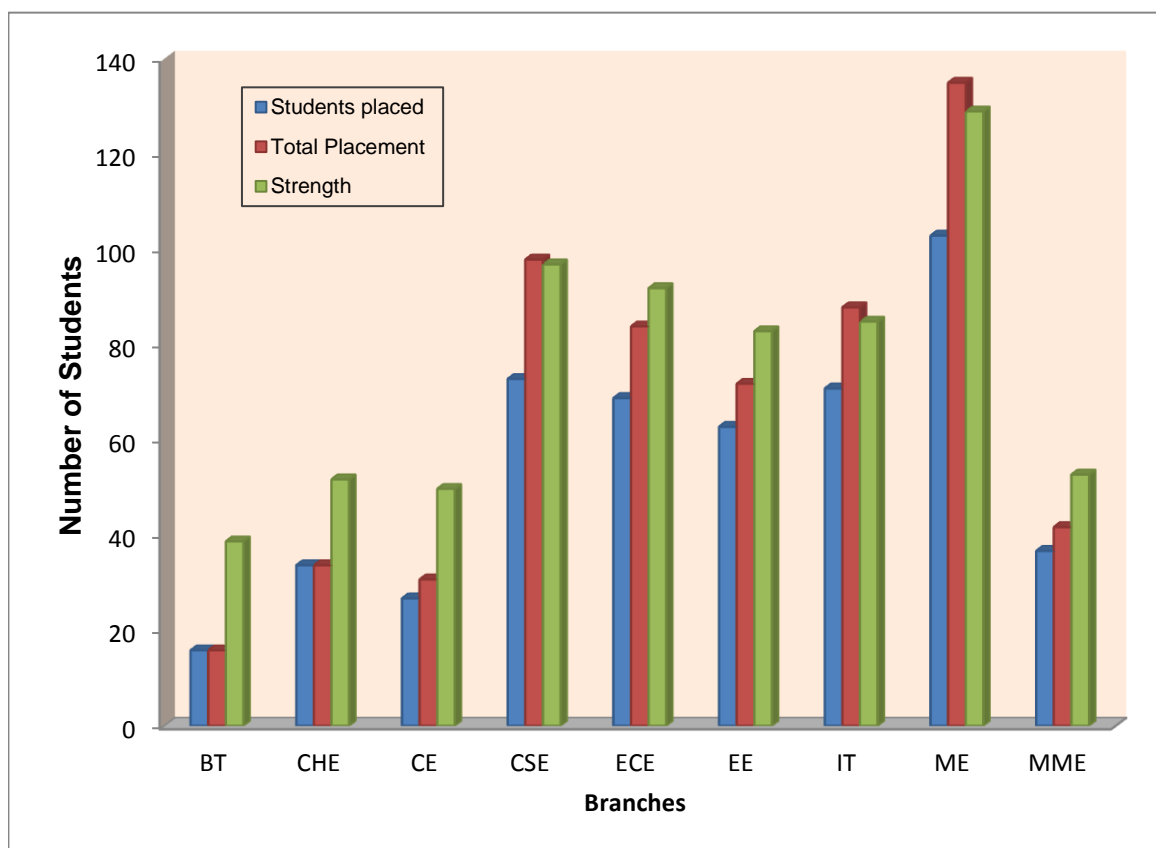


Fig. 6 Placement of B. Tech. students during 2012-2013

3.0 THE STAFF

3.1 Academic Staff (Teaching)

Department of Biotechnology

Sl. No	Name of the post	Name
01	Professor	Chattopadhyay Sudip, PhD Dey Apurba, PhD
02	Associate Professor	Aikat Kaustav, PhD Chaudhuri Surabhi, PhD Dasguptamondal Dalia, PhD Mukhopadhyaya Sudit Sekhar, PhD
03	Assistant Professor	Dutta Debjani, PhD Ghosh Monidipa, PhD Khannam Kazy Sufia, PhD Roy Barman Subhankar, PhD Saha Papita, PhD

Department of Chemical Engineering

Sl. No	Name of the post	Name
01	Professor	Ghanta Kartik Ch., PhD Gupta Parthapratim, PhD Haldar Subhamay, PhD Narayanan C. M., PhD Pal Parimal, PhD Sarkar Jyoti Prakash, PhD
02	Associate Professor	Dutta (Halder) Susmita, PhD Mondal Tamal, PhD Sadhukhan Anup Kr. PhD
03	Assistant Professor	Haldar Gopinath, PhD Mandal Mrinal Kanti, PhD Paruya Swapan, PhD Sikder Jaya, PhD

Department of Chemistry

Sl. No	Name of the post	Name
01	Professor	Nandi Murari Mohan, PhD
02	Associate Professor	Maji Milan, PhD Mukhopadhyay Bishnu Pada, PhD Patra Apurba Kr, PhD Saha Rajnarayan, PhD Sukul Dipankar, PhD
03	Assistant Professor	Adhikari Utpal, PhD Chakraborty Jitamanyu, PhD Moi Sankar Ch., PhD Panja Sujit Sankar, PhD

Department of Civil Engineering

SI. No	Name of the post	Name
01	Professor	Bhattacharjee Kamal, PhD Das. Amlan, PhD Dwivedi Vijay Kr., PhD Roy Purnendu, PhD Saha Showmen , PhD Singha Roy Dilip Kr., PhD
02	Associate Professor	Banik Atul Krishna, PhD Bhattacharyya Soumya, PhD Dutta Alope, PhD Nanda Radhikesh Prasad, PhD Samanta Amiya Kr. PhD
03	Assistant Professor	Das Diptesh, PhD Karmakar Somnath Pal Supriya Roy Pronab Samal. Nihar Ranjan, PhD Topdar Pijush, PhD

Department of Computer Applications

SI. No	Name of the post	Name
01	Assistant Professor	Changder Subhamoy, PhD Choudhury Prasenjit Das Subhrojit Saha Mousumi Sarkar Anirban, PhD
02	Assistant Professor (contractual)	Saha Sujoy Sharma Abhijit

Department of Computer Science & Engineering

SI. No	Name of the post	Name
01	Professor	Ghosh Debidas, PhD Sanyal Goutam, PhD
02	Associate Professor	De Tanmay, PhD Pal (Debroy) Tandra, PhD Roy Suchismita, PhD Sarkar Goutam, PhD
03	Assistant Professor	Guha Thakurta Parag Kr. Nandi Subrata, PhD Sadhu Sanjib Sen Bibhas
04	Assistant Professor (Contractual)	Bhattacharjee Sanghita Dalui Mamta

Department of Earth & Environmental Studies

Sl. No	Name of the post	Name
	Associate Professor	Adhikary Kalyan, PhD Gangopadhyay Aniruddha, PhD

Department of Electrical Engineering

Sl. No	Name of the post	Name
01	Professor	Dutta Swapan Kumar, PhD Ghosh Saradindu, PhD Ghoshal Sakti Prasad, PhD Roy Nirmal Kumar, PhD Thakur Sidhartha Sankar, PhD
02	Associate Professor	Acherjee Parimal , PhD Banerjee. Subrata, PhD Koley Chiranjib, PhD Mahato Sankar Narayan , PhD
03	Assistant Professor	Barman Jitesh Ch. Bhowmik Partha Sarathee Das Avinandan De Jayati, PhD Saha Tapas, PhD Sarkar Supriya

Department of Electronics and Communication Engineering

Sl. No	Name of the post	Name
01	Professor	Bhattacharjee Anup Kr., PhD Mahanty Goutam Kr., PhD
02	Associate Professor	Dey Asish Kr., PhD Ghatak Rowdra, PhD Kundu Sumit, PhD Mahapatra Rajat, PhD Maji Banshi Badan, PhD
03	Assistant Professor	Chandra Anirudha, PhD Dhar Roy Sanjoy , PhD Kar Rajib, PhD Majumder Aurpan Mal Ashis Kr., PhD Mondal Durbadal, PhD Sadhukhan Tapas
04	Assistant Professor (Contractual)	Mandal Sujit Kr.

Department of Humanities

Sl. No	Name of the post	Name
01	Professor	Chakraborty Baidyanath, PhD Sengupta Partha Pratim, PhD
02	Assistant Professor	Banerjee Joydeep, PhD Modak Arindam, PhD Rai Srikrishan, PhD

Department of Information Technology

Sl. No	Name of the post	Name
01	Associate Professor	Choudhury Subhrabrata Nandi Debasish, PhD
02	Assistant Professor	Chakraborty Baisakhi, PhD Das (Daptary) Dipanwita Dutta Animesh Howlader Joydeep Jana Nandadulal Majhi Subhankar Mitra Debasis, PhD Mukhopadhyay Sajal

Department of Management Studies

Sl. No	Name of the post	Name
01	Associate Professor	Bandopadhyay Goutam, PhD Dutta Avijan, PhD Roy Mousumi, PhD
02	Assistant Professor	Banerjee Neelotpal, PhD Dey Anupam, PhD Mondal Kaushik, PhD Pal Durba, PhD Sarkar Subhadip

Department of Mathematics

Sl. No	Name of the post	Name
01	Associate Professor	Basu Kajla, PhD Kar Samarjit, PhD Sarkar (Mondal) Seema, PhD
02	Assistant Professor	Bagchi Satya Dey Lakshmikanta, PhD Maitra Sarit, PhD Pal Anita, PhD Pal Pinaki, PhD
03	Assistant Professor (Contractual)	Panigrahi Goutam

Department of Mechanical Engineering

Sl. No	Name of the post	Name
01	Professor	Basak Indrajit, PhD Halder Biswajit, PhD Majumder M.C, PhD Saha Anup Kr., PhD
02	Associate Professor	Banerjee Neelotpal, PhD Biswas Arup Kr. Hui Nirmal Baran, PhD Layek Apurba, PhD Mitra Ambuj Kr Mukhopadhyay Sumit Mullick Amar Nath, PhD Pramanik. Achinta Kr, PhD Puri Asitbaran, PhD Sengupta Amitava
03	Assistant Professor	Bera Biswajit Das Asim De Jagannath Karmakar Sujit Khan Kallol, PhD Mitra Ranjan Kr. Patari Animesh Pramanik Shantanu Rana Subhash Ch. Roy Shibendu Shekhar , PhD

Department of Metallurgical & Materials Engineering

Sl. No	Name of the post	Name
01	Professor	Mitra Swapan Kumar, PhD Mondal Dipak Kumar, PhD
02	Associate Professor	Bhattacharya. Ashish, PhD Chakraborty Rajib Ghosh. Karuna Sindhu, PhD Maity Joydeep, PhD Roy Rabindranath
03	Assistant Professor	Bera Supriya, PhD Ghosh Madan Mohan, PhD Mondal Manas Pramanik Susanta Show Bijay Kr.
04	Assistant Professor (Contractual)	Mallik Manab

Department of Physics

Sl. No	Name of the post	Name
01	Professor	Meikap Ajeet Kr., PhD
02	Associate Professor	Chakraborty Amit Kr, PhD Kumbhakar Pathik, PhD
03	Assistant Professor	Basu Soumen, PhD Mandal Mrinal Kanti, PhD. Sahoo Sukdev, PhD

Further details of faculty position are given in Annexure 11.5(a) to 11.5(d).

3.2 Non-academic Staff (Non-teaching)

The non-academic Staff (non-teaching) of the Institute consists of competent officers, technical and administrative persons. The details of the non-academic staff position are given in Annexure 11.6(a) to 11.6(e).

3.3 Training Status

The Institute provides ample opportunities to the Faculty to attend Seminars, Conferences, Short-Term Programmes etc. in India and abroad. Details are given in Annexure 11.7(a) & 11.7(b).

3.4 Placement of Staff for Academic excellence

To encourage teaching and non-teaching staff, the Institute provides opportunities in the form of leave for higher studies/research and taking up research projects from outside agencies. Faculty members and staff of the Institute are also encouraged to attend summer and winter schools, seminar, workshops etc. on the emerging areas. Research papers are regularly published in national and international journals. The details of publications, doctoral programmes, research projects, etc. are given in Annexure 11.4(a) to 11.4(i).

4.0 TEACHING PROGRAMMES

4.1 Programmes Offered

The programmes offered by the Institute have already been mentioned in item number 2.6. For further elaborations item numbers 11.8 (a) and 11.8 (b) may kindly be referred to.

4.2 Programme-wise Enrolment with Gender, Caste Break-up

4.2 A1. Enrolment in B. Tech. Programmes during 2012-2013 Session (Genderwise):

Vide Annexure 11.8(b) 1.

4.2 A2. Enrolment in B. Tech. Programmes during 2012-2013 Session (Castewise):

Vide Annexure 11.8(b) 2.

4.2 B1. Enrolment in M. Tech. & M. Sc. Programmes, 2012– 2013 (Gender wise):

Vide Annexure 11.8(b) 3.

4.2 B2. Enrolment in M. Tech. & M. Sc. Programmes, 2012– 2013 (Caste wise):

Vide Annexure 11.8(b) 4.

4.2 C1. Enrolment in MCA Programme during 2012– 2013 Session (Gender wise):

Vide Annexure 11.8(b) 5.

4.2 C2. Enrolment in MCA Programme during 2012– 2013 Session (Caste wise):

Vide Annexure 11.8(b) 6.

4.2 D1. Enrolment in MBA Programme during 2012– 2013 Session (Gender wise):

Vide Annexure 11.8(b) 7.

4.2 D2. Enrolment in MBA Programme during 2012– 2013 Session (Caste wise):

Vide Annexure 11.8(b) 8.

4.2 E. Enrolment of Research Scholars for PhD work during 2012– 2013 (Full time & Part time):

Vide Annexure 11.8(b) 9.

4.3 Admission Statistics – UG/PG Programmes

The details of the admission statistics is given in Annexure – 11.8(c)1. to 11.8(c)5.

4.4 Students' Total Strength

Sl No	Name of the programme	Total Number of Students
1	Bachelor of Technology	3135
2	Master of Technology	569
3	Master of Computer Applications	231
4	Master of Business Administration	152
5	Master of Science	57
6	PhD	407
TOTAL		4551

4.5 The Hostels

Staying in hostels is mandatory for all undergraduate students of the Institute. Accommodations are provided to GATE-qualified PG students, too. The Institute has seven halls of residence for the male students of which five halls are of 250 seats capacity each, one is of 360 seats capacity and the other can accommodate 120 students. Three of these halls have single-seated rooms for senior students.

The Institute has also three halls of residence for female students two of which can accommodate 126 students each with one hostel having single-seated rooms and the 3rd Hostel has the capacity to accommodate 264 Girls students.

One boys' hostel with a capacity of 740 seats is under construction and likely to be handed over by June 2013. Capacity expansion of Boy's Hostel:-

Hall-1:- Is completed and students started residing in 64 rooms from July 2012..

Hall-2 :- Is in progress, likely to be completed shortly.

Hall-5- Is completed, handing over is in progress.

On completion of these expansion work (of 03 Hostels) will enhance the accommodation capacity of 504 seats.

4.6 Scholarships/Assistance

The Department of TPSW helps the students to avail several scholarships under various schemes which are listed in the annexure 11.9(a). Moreover, the Institute provides merit-cum-means scholarship to some of the needy students of the Institute.

4.7 Games and Sports

The Institute organized various intra NIT tournaments through out the year in the fields of football, volleyball, basketball, table tennis, cricket, chess, Tennis, Badminton and athletics.

In the year 2012-2013 Institute participated in the following Inter University & All India Inter NIT Games & Sports meet.

1. East Zone Inter University Chess Championship at Jadavpur University during November 03-05, 2012.
2. Inter Collegiate Sports Meet in Football, Volleyball, Basketball, Cricket, Athletics at IIT Kharagpur during October 12-14, 2012.
3. All India Inter NIT Sports Meet in Cricket, Kabaddi, Table Tennis, Tennis & Chess at NIT Tiruchirappalli during February 02-05, 2013.
4. All India Inter NIT Sports Meet in Hockey, Athletics, Swimming at NITK Surathkal during March 22-24, 2013.

- **Games and Sports Achievements 2012-2013.**

- i) Athletics Championship Winners (Men team) in All India Inter NIT Meet, organised by NITK Surathkal.

- ii) Won No of medals in All India Inter NIT Swimming Championship, organised by NITK Surathkal.
- iii) Won No of medals in Track & Field events (Women) in All India Inter NIT Sports Meet organised by NITK Surathkal.
- iv) Won No of medals in Track & Field events in Inter Collegiate Sports Meet organised by IIT Kharagpur.
- v) Confirmed 3rd Place in Hockey in All India Inter NIT Meet, organised by NITK Surathkal.

4.8 Awards

The details of the awards received by the students and the faculty are given in Annexure 11.9(b).

4.9 Examination Details

Written examinations are held at the end of every semester (generally of 3 hours duration) for the theory papers. B. Tech. examinations are arranged centrally by the Academic Section while the postgraduate examinations are being conducted by the respective departments from the academic year 2008-09, with partial support from the Academic Section, whenever necessary. The students are also continuously assessed through class tests, viva-voce and the class attendance. For the laboratory and sessional classes, the assessments are continuous and supported by viva-voce /examination at the end of the semester. The methods of the evaluation systems on such assessments are given below.

SGPA- CGPA System

All the subjects in a semester carry credit units depending on the contact hours per week and nature (lecture/ tutorial/ sessional/ laboratory) of the class. The full marks for all the subjects both theoretical and sessional/laboratory are 100. The percentage mark of a theoretical subject consists of 30% by continuous assessment, and 70% through end semester examination. The total mark obtained in a subject is converted to appropriate letter grade by the subject teacher(s) and dispatched for result compilation. In general, the number to grade conversion and the corresponding grade value is as follows:

90 and above: **Ex** (10); 80-89: **A** (9); 70-79: **B** (8); 60-69: **C** (7); 50-59: **D** (6); 40-49: **P** (5). Below 40 in theory subject or below 50 in sessional/ laboratory: **F** (0). Failure in Sessional / laboratory is required to repeat the semester through readmission. In case of absent in end-semester examination: **X** (0).

The product of the grade value and the credit unit of that particular subject is the grade point earned by the student in that subject. The total grade point (TGP) is the summation of all such grade points. Semester grade point average (**SGPA**) = **(TGP) / Total credit unit** of the semester, rounded up to second place of decimal. If a candidate cleared all the subjects, he is declared as passed in the grade sheet, otherwise supplementary. Supplementary candidate(s) will be allowed to appear in the supplementary examinations for the subject(s) in which he/she was failed. Fresh grade sheet is issued for such candidates with improved SGPA. The grade obtained by the candidates in the subject(s) for which he/she had appeared for the supplementary examinations are decreased by one step at the time of compilation of the supplementary examination results. Unsuccessful candidates in the supplementary examination are required to repeat the semester through readmission. Two such readmissions are permitted in the whole undergraduate studentship. The CGPA is also indicated in the grade sheet, which is the indicator of the student's continuing performance given by the ratio of **the total grade point scored** by the student up to the current semester and **the total credit unit of all the subjects** up to the current semester. Based on the CGPA at the end of the final semester the classes are awarded as follows: **CGPA ≥ 8.00** *First class with Distinction*; **8.00 > CGPA ≥ 6.50** *First class*; the rest of the passed candidates get *Second class*.

Similar system is followed for the M. Tech., M. Sc., MBA and MCA programmes. In some project based courses in MBA, the 70/30 ratio as indicated above is changed according to need as a special case.

The results of the end semester examinations (both Undergraduate and Postgraduate) are compiled centrally by the Examination Cell.

4.10 Training and Placement

The Institute provides industrial training and placement to the students through the Department of Training, Placement, and Students' Welfare. The students are given an insight of the corporate industry via various vocational training programmes facilitated by the department. The department believes that such an insight is quite crucial and helps the students in understanding the professional aspects along with the technical details of their probable future jobs. Along with training sessions (ranging between 3 to 5 weeks), the department also organises plant visits to various organizations in and around Durgapur. Apart from providing industrial training, the department also helps the students in preparing for campus recruitment drives by developing their communication and interpersonal skills through certain development programmes, which include conducting mock group interviews. It also takes care of inviting reputed firms from all over to hire students through their campus recruitment drives.

5.0 RESEARCH AND DEVELOPMENT ACTIVITIES

5.1 Ph.D. Programmes – Existing and Proposed

Existing:

Vide Annexure – 11.4(g) 1

Proposed:

Vide Annexure – 11.4(g) 2

5.2 Details of PhDs done so far

Vide Annexure - 11.4(h) 1

5.3 Proposed Plan for Research

Vide Annexure - 11.4(h) 2

5.4 Institute-Industry Collaboration during 2012-13

Department of Biotechnology

Collaborating Institute / Organization	Areas of collaboration	Collaboration Activities
Bharat Petroleum Corporation Ltd., Rajbandh, Durgapur	Petroleum sludge bioremediation	Research and Development
Dhuliajan and Jorajan Oil Fields (Assam), Oil India Ltd.	Oil associated microbiology for bioremediation	Research and Development
Digboi Refinery, Assam, IOCL	Oil sludge microbiology and Bioremediation	Research and Development
Guwahati Refinery, Assam IOCL	Oil sludge microbiology and Bioremediation	Research and Development

Chemical Engineering

Collaborating Institute / Organization	Areas of collaboration	Collaboration Activities
Dynotherm Ltd, Mumbai Prof.C.M.Narayan	Heat Transfer Augmentation	Variable Area Design for Waste Heat Boilers
Govt.of India-sponsored Red brick cluster Development Project by Prof. P.Pal jointly with Dr. M.Roy (DMS) & Prof. S.Saha (CE)	Small Industry Cluster Development	Socio-economic and environmental sustainability
Ministry of Environment and Forest Prof.C.M.Narayan	Petroleum Processing	Biochemical Utilisation of Petroleum Wax
Refractory Manufacturing Association of Asansol-Kulti Prof.P.Pal	Development of remedial measures for environmental pollution problems	Existing fuel pattern, pollution, alternate firing technique development

Collaborating Institute / Organization	Areas of collaboration	Collaboration Activities
Sameer Centre for Electromagnetics, Ministry of Communication and Information Technology Prof.C.M.Narayan	Heat Exchangers	Variable Area Design of Heat Exchangers and Condensers
Siemens Information Systems, Bangalore Prof. C. M. Narayan	Biomass Utilisation for Power Generation	Two Stage Fluidised Bed Gasification of Biomass
Synergy Biotech Ltd, Calcutta Prof. C. M. Narayan	Biofertilisers	Production of PROM (Phosphate-Rich Organic Manure)

Department of Civil Engineering

Collaborating Institute / Organization	Areas of collaboration	Collaboration Activities
Lund University, Sweden	Water Resources Engineering	Research and Projects
Water res. Dept., Govt. of Bihar, Patna, India	Water Resources Engineering	Research and Projects

Department of Computer Science and Engineering

Collaborating Institute / Organization	Areas of collaboration	Collaboration Activities
IBM	Enablement of Moodle Software to DB2	Remote Mentoring Project

Department of Electrical Engineering and Physics

Collaborating Institute / Organization	Areas of collaboration	Collaboration Activities
ALSTOM India Limited	Development of SIR Simulator	Sponsored Project
Central Mechanical Engineering Research Institute, Durgapur	Research on DGA, Gas Sensors	Joint Research

Department of Metallurgical & Materials Engineering

Collaborating Institute / Organization	Areas of collaboration	Collaboration Activities
Research and Development Division, Tata Steel, Jamshedpur (with Dr. S. Das)	Phase transformation in steel	Joint M. Tech. work

5.5 Innovations and Technology Transfer

Patent taken/filed during 2012-13

Department of Chemical Engineering

Title	Inventors	Application No.
System & Method of Acetic acid Production	Prof. Parimal Pal	185/KOL/2013

Department of Electrical Engineering

Title	Inventors	Application No.
System and Method of Stable Rotation of a Magnetically Levitated Ferromagnetic Body	Dr. Subrata Banerjee	1429/KOL/2012, 19.12.2012

Department of Information Technology

Title	Inventors	Application No.
An improved ultrasound imaging method/technique for speckle reduction/suppression in an improved ultra sound imaging system	Nandi D. & Mukhopadhyay S.	PCT/IN2011/000789

Department of Metallurgical & Materials Engineering

Title	Inventors	Application No.
Development of Hollow Briquettes and Their Characterisation	DR S.K Mitra & Mr S. Pramanik	1352/KOL/2012

5.6 Workshops/Seminars Organised by the Institute (2012-13)

Department of Chemical Engineering

SL. NO.	Name of Key Speaker(s)	Name of the Programme	Date of the programme
1	Dr. G. N. Halder (Coordinator) Dr. M. K.Mandal (Joint-Coordinator)	Exploration, Production and Refining of Petroleum (EPRP-2013)	January 7-11, 2013
2.	Prof. S. Sengupta, Sanfrancisco State University, USA (With Management & Civil Engg. Dept.)	Cluster Development of Small scale industries- Problems & Prospects	January 11-13, 2013
3.	Prof. Tamal Mandal Prof. Apurba Dey *	Design Clinic Workshop For Rice millers, Burdwan, W.B. India (Funded by NID, Ahmadabad), jointly with Department of Biotechnology	February 22-26, 2013
4.	Prof (Dr.) C. M. Narayan (Chief Coordinator)	All India Students' Engineering Congress – 2013	February 23-24, 2013

Department of Management Studies

SL. NO.	Name of Key Speaker(s)	Name of the Programme	Date of the programme
1.	Prof. S.Sengupta, Sanfrancisco State University, USA (With Chemical & Civil Engg. Dept.) * Chief Coordinator Dr. M. Roy	*Cluster Development of Small Scale Industries- Problems & Prospects	January 11-13 2013

Department of Mathematics

SL. NO.	Name of Key Speaker(s)	Name of the Programme	Date of the programme
1	Dr. S. Maitra, Dr. P. Pal and Dr. L. K. Dey(Conveners)	National Workshop on "Nonlinear Waves: Theory and Simulation"	January 14-18, 2013

Department of Metallurgical & Materials Engineering

SL. NO.	Name of Key Speaker(s)	Name of the Programme	Date of the programme
1	Dr.Dipak Mazumdar (IIT Kanpur)	Seminar on "Metallurgy of steel"	December 2012

DST-sponsored INSPIRE Programme - 2012

National Institute of Technology, Durgapur successfully organised Innovation in Science Pursuit for Inspired Research (INSPIRE) camp, fully sponsored by DST, Govt. of India during June 26- 30, 2012 to inspire young talents towards advanced studies and research in basic sciences. Two hundred and ten students from different schools of West Bengal participated in the programme which was inaugurated by Prof. Gautam Biswas, Director, Central Mechanical Engineering Research Institute, Durgapur. The valedictory function was chaired by Prof. R. N. Mukherjee, Director, IISER, Kolkata. Other highly qualified mentors; Academy Fellows, Bhatnagar awardees and scientists of national & international repute delivered their lecture related to scientific success stories and joys of innovation across all streams of science that in turn would stimulate their curiosity and attract them at an early age to pursue their career in science.

ANVESHAN: AIU Student Research Convention 2012-13 (East Zone)

ANVESHAN: AIU Student Research Convention 2012-13 (East Zone) was organized in the Institute in association with Indian Universities (AIU) during February 19-21, 2013. The primary objective of the convention is to inculcate research culture in our higher education institutions and provide a platform to the aspiring researcher students to showcase their innovative research work. Projects were invited from the students of the universities in the eastern zone in the areas of Agriculture, Basic Sciences, Engineering & Technology, Health Sciences and Allied Subjects, Pharmacy, Nutrition, etc. and Social Sciences, Humanities, Commerce and Law.

The inaugural Address was delivered by the Chief Guest of the programme, Prof. G. Biswas, Director, CSIR-CMERI Durgapur. Prof. T. Kumar, Director, National Institute of Technology Durgapur welcomed the gathering and spoke on the background of organizing this convention and the association of NIT Durgapur with AIU. A profile of activities of AIU and the evolution, growth and success of Anveshan was presented by Dr. S. Rama Devi Pani, Head, Research Division, AIU. Prof. S. K. Brahmachari, ex-Vice-Chancellor, Uttar Banga Krishi Viswavidyalaya, West Bengal delivered the keynote address.

Forty nine students participated in the convention along with 4 escorts from four states; Assam, Arunachal Pradesh, Bihar and West Bengal. 27 projects were presented in the convention in diverse areas like Molecular Biology, Nanoscience, Energy, Instrumentation, Robotics, Structures, Computer Science, Prosthesis, Pharmaceuticals, Geomorphology, Sustainable Development, etc.

Twelve eminent retired and present faculty members from premier educational institutions, scientists and engineers from research institutions and industries acted as Jury members for the convention. Prof. A. C. Ganguly, Director, Bengal College of Engineering & Technology, Durgapur and former Director-in-charge of NIT Durgapur delivered the valedictory address.

5.7 Collaboration with Academic and Research Institutions

CERN, Geneva:

The following students visited CERN, Geneva for collaborative research.

Amlan Kusum Mukherjee, a B. Tech. student of Department of Computer Science & Engineering - "FIRMWARE DEVELOPMENT TO USE THE CAEN V1495 MULTIPURPOSE BOARD FOR A SYNCHRONIZED LHC BUNCH PATTERN MEASUREMENT"

Manali Adhikari, a B. Tech. System student of Department of Electrical Engineering - "PRELIMINARY STUDY OF QUANTUM EFFICIENCY ENHANCEMENT IN GEM DETECTORS FOR ALICE UPGRADES"

Nikita Agarwal, a B. Tech. student of Department Computer Science & Engineering- "IMPLEMENTING NEW COMMANDS FOR THE JAVA ALIEN SHELL"

Shankha Nag, a B. Tech. student of Department of Metallurgical and Materials Engineering – "STUDY OF DIRECTIONALITY OF FUSED QUARTZ BAR FOR INSTALLATION IN THE MUON HALO DETECTOR"

Caledonian College of Engineering, Muscat, Oman:

An MOU was signed in 1st April, 2008 between CCEO (Caledonian College of Engineering, Muscat, Oman) and NIT Durgapur and the areas of cooperation are: corporate training, short courses and consultancy services, seminars, workshops and conferences, staff exchange programmes, exchange of students and research and development.

Till date, 14 faculty members of NIT Durgapur visited CCEO for delivering lectures in different departments. Four faculty members from CCEO visited NIT Durgapur.

Thirteen faculty members of CCEO registered for PhD programme at NIT Durgapur and four have already been awarded the PhD degree.

Department of Biotechnology

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
Anthropological Survey of India, Kolkata	Research on Cancer Biology	Kazy S.K., NIT Durgapur Sarkar B.N., ASI, Kolkata Kar M., CCWHRI, Kolkata	Research
Cancer Centre Welfare Home and Research Institute, Kolkata	Research on Cancer Biology	Kazy S.K., NIT Durgapur Sarkar B.N., ASI, Kolkata Kar M., CCWHRI, Kolkata	Research
Central Mechanical Engineering Research Institute (C.M.E.,R.I), Durgapur	Research on Ethanol Production from Water Hyacinth	Dey A., NIT Durgapur Chatterjee P.K., C.M.E.R.I , Durgapur	Joint Research
C.M.E.,R.I, Durgapur	Research on Environmental Biotechnology	Dey A., NIT Durgapur and Mondal B.N.,C.M.E.R.I Durgapur	Joint Research
C.M.E.,R.I, Durgapur	Research on Tissue Engineering Applications	Dey A., NIT Durgapur and Mondal B.N.,C.M.E.R.I Durgapur	Joint Research
C.M.E.,R.I, Durgapur	Biomimetics	Mukhopadhyay, S.S., NIT, Durgapur and Chatterjee D., CEMRI, Durgapur	Research
Curtin University, Malaysia Campus, Iri	Environmental Engineering	Saha Das P., NIT Durgapur Ghosh U, Curtin University	Joint Research Publication
Geological Survey of India, Kolkata	Research projects on subsurface sediment/ groundwater microbiology	Kazy S.K, NIT Durgapur; Sar P., IIT Kharagpur Pal T., GSI, Kolkata	Research

IARI, New Delhi	Research on microbial diversity	Kazy S K, NIT Durgapur Archana S, IARI	Research
IARI, New Delhi	Research on Production of Novel Enzymes	Dutta D., NIT Durgapur, Lata, IARI, New Delhi	Joint research
Indian Institute of Technology Guwahati	Project on petroleum Microbiology and bioremediation of oil spill/oil sludge	Kazy S K , NIT Durgapur Ghoshal A K , IIT Guwahati	Research
Indian Institute of Technology Kharagpur	Sponsored projects on subsurface sediment/ groundwater microbiology	Kazy S.K, NIT Durgapur; Sar P., IIT Kharagpur Gupta A.K., IIT Kharagpur	Research
Jadavpur University, Kolkata	Environment Engineering	Saha Das P., NIT Durgapur and Datta S., JU, Kolkata	Joint Research
Jadavpur University, Kolkata	Environment Engineering	Saha Das P., NIT Durgapur and Banerjee P K., JU, Kolkata	Joint Research
JNU, New Delhi	Plant Developmental Biology and Signal Transduction	Chattopadhyay S., NIT- Durgapur and Nandi A., JNU, New Delhi	Research
National Institute of Plant Genome Research, New Delhi	Plant Developmental Biology and signal transduction	Chattopadhyay S., NIT- Durgapur and Sinha KA. NIPGR, New Delhi	Research
National Institute of Technology Jalandhar	Research on Environmental Biotechnology	Dey A., NIT Durgapur and Jha M.K., NIT Jalandhar	Joint Research
National Institute of Technology Jalandhar	Research on Medical Textiles	Dey A., NIT Durgapur and Jha M.K. and Ghosh S., NIT Jalandhar	Joint Research
National Institute of Technology Jalandhar	Research on Environmental Biotechnology	Dey A., NIT Durgapur and Jha M.K. and Bansal A., NIT Jalandhar	Joint Research
Punjab Technical University	Bioinformatics	Dey A., NIT Durgapur and Singh A., BCET Gurdaspur	Joint Research
School of Tropical Medicine, Kolkata	Research on <i>Candida</i> infection in HIV patient	Dutta D., NIT Durgapur, Basak S., School of Tropical Medicine, Kolkata, Guha S.K., School of Tropical Medicine, Kolkata	Joint research

Department of Chemical Engineering

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
Calabria University, Italy	Membrane Technology	Pal P.	Collaborative research & publication
CALEDONIAN College of Engineering, Sultanate of Oman	Biomass Utilisation	Narayanan C.M.	Joint PhD programme
East China University, Shanghai	Biofuels, Green Fuels	Narayanan C.M.	Collaborative research
Heritage Institute of Technology, Kolkata	Waste Water Treatment	Dutta S.	Collaborative Research & Publication in Elsevier Sc.
IIT Hyderabad	Nano-biocatalyst development	Mandal M. K.	Collaborative research & publication

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
IIT Kharagpur	Pyrolysis & Combustion of Coal & Biomass	Sadhukhan A. K. Gupta P.	Collaborative Research & Publication in Elsevier Sc.
Lappeenranta University of Technology, Finland	Membrane Technology	Pal P.	Collaborative research & publication in Elsevier Sc
Mahatma Gandhi University, Kottayam	Biomaterials and Biopolymers	Narayanan C.M.	Collaborative Research and PG projects
Royal Institute of Technology, Stockholm, Sweden	Membrane Distillation	Pal P.	Collaborative research & publication
University of Calcutta	Waste Water Treatment	Dutta S.	Collaborative Research & Publication in Elsevier Sc.
University of Miami, USA	Large-Scale Optimization of Industrial Processes	Paruya, S.	Exchange of ideas through visits Joint guidance for students Joint publications Joint proposals for funding

Department of Chemistry

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
Central Institute of Mining & Fuel Research, Dhanbad	Molecular Complex Formation Between Coal Asphaltene and different acceptor molecules	Panja S.S and Ghosh A. K.	Spectroscopic study of Molecular Complex Formation Between Coal Asphaltene and different acceptor molecules.
Calodian College of Engineering, Muscat, Oman	Corrosion Chemistry	Feroz S., Das S.B. and Saha R.N.	Jointly supervising Ph.D. student
Civil Engineering Department North Dakota State University, USA.	Water and Wastewater Treatment	Bezbaruah A. N. Saha R.N.	Research on "Synthesis of Advanced Nano-materials and their Application for the Reduction of Environmental Contaminants"
Department of Chemistry University of California, Davis, CA 95616, USA	Crystal structure determination	Olmstead M.M. Patra A.K.	Single crystal X-ray Diffraction studies on the metallo-ligand complexes
Department of Inorganic Chemistry, Indian Association for the Cultivation of Science, Kolkata, India	Crystal structure determination	Mitra Partha Patra A.K.	Single crystal X-ray Diffraction studies on the metal complexes with supporting tridentate Schiff base ligand
Dept. of Chemistry, Cotton College, Assam	Development of natural fibre reinforced polyester composite material	Choudhury S. Panja S. S.	Jointly supervising Ph.D student
Dept. Of Environmental Science, The University of Burdwan, West Bengal	Water and Wastewater Treatment	Datta J. K., Gupta S. and Saha R. N.	Jointly supervised the Ph.D students in the areas on Environment management.
Microbiology Research Unit, Parasitology Research Laboratory, Department of Zoology, The University of Burdwan, West Bengal, India	Biological activities of the synthesized metal complexes	Chandra Goutam	Antibacterial and other biological studies on synthesized metal complexes of various Schiff base and amide ligands

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
Vienna University of Technology, Vienna, Austria, Europe	Kinetics and inorganic reaction mechanism	Linert Wolfgang Moi S.C.	Substitution kinetics in 4d ⁸ and 5d ⁸ metal ion system and their mechanism, Bioactivity and speciation study

Department of Civil Engineering

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
Faculty of Engg. & Technology, Jadavpur University	Concrete Technology	Samanta A. K.	Joint Ph.D. Supervision
Lund University, Lund Sweden	Water Resources Engineering	Dwivedi V.K.	Research and Exchange
National Institute of Hydrology Roorkee, India	Water Resources Engineering	Dwivedi, V.K.	Research and Projects

Department of Earth and Environmental Studies

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
Geological Survey of India, Kolkata	Slope stability study of Landslide Prone areas of eastern Himalaya	Adhikari K. Pal S. Bhattacharyya S.	Research

Department of Electrical Engineering

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
C.M.E.,R.I., Durgapur	Research on DGA, Gas Sensors	Roy N.K.	Joint research
C.M.E.,R.I., Durgapur	Control Systems	Banerjee, S. Saha S	Joint research
IIT Kharagpur	Maglev, AMB Control of DC EMLS	Banerjee, S. Pal J	Joint research
Indian Institute of Technology, Chennai	Online monitoring of Transformer	Roy N. K. Sarathi R.	Joint Research
ISM, Dhanbad	1.Optimization applied to DGS Power Systems 2. Optimization applied to ELD, Unit Commitment, OPF, AGC, PSS and Renewable Energy Sources of Power Systems	Ghoshal S.P.	Joint research
University of South Australia, Australia	ICT enabled High Voltage Laboratory	Roy N.K. Nafalski A.	Joint research

Department of Electronics & Communication Engineering

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
Brno University of Technology, Brno, Czech Republic	Localization via UWB	Chandra A.	Joint research
Dept. of Information Engg. Universita Degli Study the Parma (University of Parma), Italy	Wireless Sensor Networks Cognitive Radio Networks	Kundu S.	Joint research
School of EECE, Newcastle University UK	Electronic Devices	Mahapatra R.	Joint research
Universidade Tecnológica Federal do Paraná, Curitiba, Brazil	Green Communication with Wireless Relays	Chandra A.	Joint research
Université catholique de Louvain, Louvain-la-neuve, Belgium	Filter bank based Multicarrier Communication	Chandra A.	Joint research

Department of Information Technology

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
CoreEI Technologies(I) Pvt. Ltd.	Awareness Program	Chakraborty B. Howlader J.	Workshop organization
University of Genova, Italy	Multi Agent Based Modelling and Simulation	Animesh Dutta NITD Vivian Mascardi, Univ of Genova	Research
University of Southampton, UK.	Multi Agent Based Modelling and Simulation	Animesh Dutta NITD Sarvapali D. Ramchurn, Univ of Southampton.	Research

Department of Management Studies

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
Lappeenranta University of Technology, Finland	Water resource Management, Knowledge management	Roy M.	Research Publication, mutual visits, exchange of ideas
The Royal Institute of Technology, Stockholm	Common property resource management	Roy M.	Research publication, mutual visits for delivering lectures on the subject.

Department of Mathematics

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
Celadonain College of Engineering, Oman, Muscat	Reliability Theory	Pal Anita, Rizwan S.M	Joint Research
Department of Mathematics, Jadavpur University	Functional Analysis	Dey L.K., NIT Durgapur and Das P.	Joint Research

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
Department of Mathematics, Kalyani University	Block Design Theory	Bagchi S., NIT Durgapur and Basu M.	Joint Research
Dept. of Agricultural Statistics, Bidhan Chandra Krishi Viswavidyalaya, Kalyani	Statistical Analysis	Sarkar (Mondal) S., NIT Durgapur, Mazumdar D.	Joint Research
Dept. of Mathematics, Vidyasagar University	Soft Computing, Operations Research	Kar S. NIT Durgapur and Maiti M.	Joint Research
Dept. of Mathematics, Vidyasagar University	Computational Graph theory	Pal Anita., NIT Durgapur and Pal M.	Joint Research
Uncertainty Theory Lab, Tsinghua University, China	Research on Uncertainty Theory	Kar S. NIT Durgapur and Boarding L., China	Joint research

Department of Mechanical Engineering

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
C.M.E.,R.I, Durgapur	Robotics	Roy S. S.	Joint PhD guidance

Department of Metallurgical and Materials Engineering

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
C.M.E.,R.I, Durgapur		Mr A Chowdhury, (CMERI) Mitra S.K	Joint M-Tech Work
C.M.E.,R.I, Durgapur	Development of Ti-Zr based alloys for metal hydride application	Mr. M Das, Bera S.	B. Tech. summer project
C.M.E.,R.I, Durgapur	Metal injection moulding process to manufacture near net shape steel component	Ghosh K. S. Mondal D. K.	Joint PhD work
C.M.E.,R.I, Durgapur	Al alloy and its composites	Mr. P Das Bera S.	M. Tech. work
C.M.E.,R.I, Durgapur	Effect of particle size and volume fraction of dispersoids on electrical and mechanical properties of ceramic oxide dispersed Cu based composites	Dr. D Ghosh Bera S.	M. Tech. work
C.M.E.,R.I, Durgapur		Dr B.N. Mondal, Pramanik S	Joint M-Tech Work
Defence Metallurgical Research Laboratory, Hyderabad	Processing and Characterization of W- Bulk Metallic Glass (Fe Based) Composite.	Show B. K.	Joint M.Tech work
Indian Institute of Technology, Kharagpur	Development of TiC reinforced aluminium based metal matrix composite	Maity J.	Joint PhD work
Jadavpur University	Transient liquid phase diffusion bonding of aluminium based metal matrix composites	Dr. T.K. Pal (JadavpurUniversity) and Dr. J. Maity (NIT Durgapur)	Joint research
National Institute of Secondary Steel Technology	Research on pellets usage in steel making	Mitra S. K. Ray R.N. Pramanik S.	Joint research

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
National Metallurgical Laboratory, Jamshedpur	TWIP Steel	Dr. S. Ghosh Chowdhury Bera S.	Collaborative research work
NML Jamshedpur	Studies on the different sources of MgO on the properties of Fluxed Iron Ore Pellets	DR J Pal, Pramanik S	Joint M-Tech Work
School of Materials Science and Engg., BESU, Shibpur	Al-based intermetallic dispersed composites	Dr. Arijit Sinha Bera S.	M. Tech. work

Department of Physics

Collaborating Institute / Organization	Areas of Collaboration	Faculty Members Involved	Collaboration Activities
Banaras Hindu University	Nanocomposites	Basu S	Joint Research
Burdwan University,	Ferrite Nano Composites	Meikap A. K.	Joint Research/Joint Ph.D Guidance
Burdwan University	Electronics and Communication	Mandal M. K.	Joint Research
CGCRI-CSIR, Kolkata	Structural Properties of Nanocomposites	Meikap A. K.	Joint Research
CMERI-CSIR, Durgapur	Optical Properties of Nanocomposites	Meikap A. K.	Joint Research/Joint Ph.D Guidance
CMERI, Durgapur	Multiferroics materials	Basu S.	Joint Research
DIATM, Durgapur	Nuclear Physics	Sahoo S.	Joint Research
EMPA, Swiss Federal Laboratories for Materials Science & Technology	Graphene-epoxy nanocomposites	Chakraborty, A. K.	Joint research
IACS, Kolkata	Nanomaterials, Multiferroics	Basu S.	Joint Research
National Institute of Technology, Raipur	Condensed Matter Physics	Sahoo S.	Joint Research
Open University, Milton Keynes, UK	Graphene supercapacitors	Chakarabarty, A. K.	Joint research
Regional Institute of Education, Bhubaneswar (NCERT)	Physics Education & General Physics.	Sahoo S.	Joint Research
University of Liverpool	Photoemission studies of nanostructured materials	Chakraborty, A.K.	Joint research
University of Ottawa, Canada	Polymer Composites	Meikap A. K.	Joint Research
Utkal University, Bhubaneswar	High Energy Physics phenomenology	Sahoo S.	Joint Research

6.0 THE COUNCIL, BOG AND OTHER COMMITTEES

6.1 Institute's Council

Vide Annexure - 11.1

6.2 Board of Governors

Vide Annexure - 11.2

6.3 Finance Committee

Vide Annexure - 11.3 (a)

6.4 Building and Works Committee

Vide Annexure - 11.3(b)

6.5 Other Committees

Senate

Vide Annexure - 11.3(c)

7.0 CONCESSIONS FOR SC, ST AND HANDICAPPED STUDENTS

7.1 Concessions Provided for Students

The Department of Training, Placement, and Students' Welfare helps the students get Railway Concessions during their vacations.

8.0 FINANCIAL STATUS

8.1 Analysis of Plan and Non-Plan Grants (2012-2013)

Plan (General Component) Grants	– Rs. 4050.00 Lakhs
Non-Plan (Recurring) Grants	– Rs. 4600.00 Lakhs

8.2 Sources of Funds

Entire Recurring and Non-Recurring Grants are borne by Govt. of India

8.3 Expenditure Position for Last Three Years

(Rupees in Lakhs)

Plan head Expenditure		Non-Plan head Expenditure	
2009-10	4700.08	2009-10	4713.64
2010-11	3584.70	2010-11	4974.79
2011-12	4474.32	2011-12	5171.32

Plan head Expenditure in 2012-13 (unaudited) – Rs 2395.27 Lakhs

Non-Plan head Expenditure in 2012-13 (unaudited) – Rs 6329.71 Lakhs (including depreciation)

9.0 CENTRAL FACILITIES AND SERVICES

9.1 Computer Centre

List of Servers and Desktop Computers:

- HP Blade server system:-
 - Management Server: Model HP Proliant ML350 Intel Xeon CPU
 - Second Intel server: Model HP Proliant ML350, Intel Xeon CPU
 - Eight numbers of blade: Model HP BL20p
- HP Blade holder
 - HP Storage: Modular Smart Array 1000 SCSI array of 146.8 GB x 10
 - Redundant power supply system
- SUN FIRE V240 Server and 11 SUN Workstations
- IBM SERVER System
 - IBM Server p5: Type : 9113-550
 - Storage EXP-PLUS320, Type 2104-TS4 with 4 nos. of disks IBM U320 73.4 GB
- HCL SERVER for ARC-GIS, Intel Xeon, 2GB RAM
- HP, DELL & Lenovo Desktop PCs

List of Software:

- Adobe Director 10 users (license on blade server 1)
- ANSYS 5 users license server on blade8 (win2K3)
- ASPEN PLUS 5 users network license and single in standalone (license on Intel Server)
- AUTODESK Mechanical, Civil 40, 10 users license server on blade8 (win2K3)
- CATIA (license server on blade management server)
- DB2 UDB Enterprise server (AIX Platform) on IBM Server
- FLUENT & FLOWLAB-20 & 25 users
- IBM rational Rose Suit (Windows Platform) 10 users
- LABVIEW 5 users
- MATLAB (license on blade management server)
- Maya users (license on blade server 1)
- Open Inventor 3D object oriented developer tool kit 5 users
- Oracle 10g Enterprise Edition with DW tools (Windows) 20 users
- Oracle Developer Suit 10g (Windows) 25 users
- Pro Engineer (license on Intel server)
- SPSS (Windows) 10 users
- SPSS Clemantine (Windows) 25 users
- Web Sphere Application Server (AIX Platform) on IBM Server
- Web Sphere Studio Application Developer (AIX Platform) on IBM Server

Peripherals:

- A0 Colour Plotter: HP Design Jet 500 PS; Model: C7770C
- A0 Plotter: HP Design jet 430, Model: C4714A
- HPDeskjet3745: Model C9025A
- A0 Scanner: Vidar Nova XP36
- A3 Scanner: Epson GT15000
- HP Scan jet 3770 Model: A5191L
- HP Heavy-duty Network Printer

Internet Services:

Campus wide network covering all departments, hostels, faculty quarters, and staff club has been completed with about 6 kms Fiber Optic Cable as a backbone with about 4500 CAT-6 UTP points. Three ISP's have been providing 300 MBPS bandwidth, distributed throughout the campus by 24x7.

9.2 Workshop

The Department of Workshop of the Institute has eight engineering shops in different sheds, namely, (1) Machine Shop, (2) Fitting Shop, (3) Electrical Shop, (4) Carpentry & Pattern Shop, (5) Black Smithy Shop, (6) Welding Shop, (7) Sheet Metal Shop, (8) Foundry Shop, imparting training to UG & PG students of different semesters in accordance to UG & PG Curricula which include Workshop classes for all branches of engineering at different levels. The Workshop has been modernised by utilizing the grants provided to it under MODROBS & TEQIP scheme. Students from different Departments and particularly from Mechanical Engineering Branch utilize the workshop facilities for their Project & Thesis works. It has developed one Laboratory, where students can learn manufacturing, assembling, testing & repairing of air conditioners.

9.3 Library

The library as one of the important central facilities of the Institute supports the study, teaching, research, and development programmes of the Institute. It is housed in an independent building having three floors on a plinth area of 1000 sq. mtrs. The library has a collection of 1, 44,458 volumes, which includes text books, reference books & bound volumes of Journals, Standards etc. The library subscribes to about 150 current Journals. Library operations have been automated with the help of an integrated library software package, LIBSYS-4. The book database is accessible through OPAC (Online Public Access Catalogue). It has a good collection of electronic resources in its Digital Library. It is an open access library and remains open from 8:30a.m. to 10:30 p.m. on weekdays and from 9 a.m. to 5 p.m. on Saturdays and Sundays. Library has introduced wi-fi Internet access facility in the reading halls.

The library has a good IT infrastructure. It has also some Audio-Visual equipment like Colour TVs, VCPs, Video Cameras, Direct Projectors, Multimedia Projectors, etc.

The library is an institutional member of DELNET (Developing Library Network), American Center Library, Kolkata, NPTEL (National Programme on Technology Enhanced Learning), and Current Science Association, Bangalore. It is also a beneficiary Member of INDEST-AICTE (Indian National Digital Library in Engineering, Science & Technology) Consortium, which provides Desktop Access to high quality e-resources (online journals) like IEL Online (IEEE/IEE Electronic Library), Springer Verlag's Link, Proquest, ACM journals, ASCE, ASME, Nature Magazine, Indian Standards (Intranet version) and ASTM journals & Standards etc. The library also subscribes to Science Direct (Elsevier) online journals. It has a good collection of Learning Resources, like Robot Simulation Software, Mechatronics Simulation Software, Pneumatics and Electro Pneumatics Simulations Software and Microcontroller Design & Simulation Software. It has also a collection of several thousand e-books on Computer Science (Published by Springer) available through website.

Total collection of books, journals, etc. and the annual expenditure are as detailed below:

(i) Total Collection	General Book	88691
	Book Bank	32288
	Bound Vol. of Journals	7744
	SC/ST	934
	ISI	5072
	Gift	4000
	Misc.	1485
	TEQIP Books	4244
Total	1,44,458	
(ii) No. of Journals Subscription	Foreign (e-journals through INDEST-AICTE Consortium)	
	Indian	86
	Gift	35
	Total	121
(iii) No. of Books Catalogued, Classified and Processed	General	11,689
	Book Bank	4,333
	Total	16,022

(iv) Expenditure Incurred by the Library during 2012-13	BOOKS (In Rs.)	
	General Books	88,71,505.00
	Book Bank	16,21,583.00
	Binding works	42,300.00
	JOURNALS/MAGAZINES (in Rs.)	
	Indian	2,29,974.00
	Foreign	e-journals through INDEST
	Magazine	21,937.00
	DELNET Membership	7,500.00
	LIBSYS AnnualSupport and Software Dev	88,942.00

9.4 Laboratories

All departments have well equipped laboratories which cater to the hands on training to the under graduate as well as postgraduate students. The laboratories are also regularly used for carrying out projects and research works. List of the laboratories of various departments are given in Annexure– 11.13.

9.5 Hospital, Post Office, Shopping Centre

The Institute has a medical unit-cum-hospital with outdoor and indoor (10 beds) facilities. It is served by two full-time general physicians and supported by part-time specialist physicians; one cardiologist (twice a week), one pediatrician (once a week), one gynecologist and obstetrician (once a week), one ENT (once a week), one ophthalmologist (once a week) and one dentist (once a week). All faculty members, staff members and their families as well as the students are benefited from the medical unit. The medical unit provides 24 hours emergency service with a well equipped ambulance at its disposal. Inside the campus there is a Post Office catering to the needs of residents of the campus.

There is a shopping complex inside the campus which includes a ration shop, a milk booth, one book shop and some shops providing essential commodities.

9.6 Physical Facilities

The Institute has branches of State Bank of India, Canara Bank and SBI ATM in the campus. The Institute also has two canteens and one cafeteria near the students' hostels. Three playgrounds and gymnasium are used regularly by the students and residents of the campus. For the recreational facilities of the faculties and staff there are two clubs namely, Faculty Club and Staff Club. The clubs regularly organise cultural programmes, games and sports for the members. A higher secondary school is also located in the campus.

9.7 Games & Sports Facilities

The Institute has Students Activity Centre (SAC) housed in an indoor auditorium, where all the indoor games like badminton, table tennis and chess are played round the year. Three gymnasiums (Separate for boys, girls and guests) have 12 to 16 station exercise machine such as multi-station gym with latest equipments. In the central playfield, The Oval, all major tournaments and matches are played in games like football, cricket, athletics etc. Besides there is one more football ground called The Lords adjacent to the hostels. There is one concrete tennis and basketball court each and two volleyball court with flood light facilities. All the hostels have their own volleyball & concrete Badminton courts with indoor games facilities like Table Tennis & Carrom boards.

9.8 Other Facilities like Hostels, Messes, Staff Quarters

The Institute has seven boys' hostels and three (including the new 264 seated) hostels for girls' students. Five of the boys' hostels are of the capacity of 250 each and the capacity of sixth and seventh hostels is 120 and 360, respectively. Two of the girls' hostels are of capacity of 126 each and the third one has the capacity for 264 girls students. Each hostel has a separate mess, managed and run by the members of the mess committee comprising of the students under the supervision of the Mess Managers/Matrons and overall guidance of the Wardens of the respective hostels. The Institute provides different categories of residential quarters to the faculty, staff and administrative personnel on licence fee basis.

One multi-storeyed accommodation (G+8) for faculty members is completed consisting of 32 numbers of quarters. The construction of Prof. S. N. Ray memorial building is completed and the interior decoration along with allied works will be taken up shortly. The construction of an academic block is in its mid stage. Expansion and renovation work of Institute Medical Unit cum Hospital is completed. Widening of Road and construction of Drainage network is completed. Construction of New Market Complex is also completed. Construction of Chemistry Laboratory-cum-Biotechnology Department and VIP Guest House is in progress.

Site preparation work of 1500 capacity Auditorium and International students Hostel is in progress. Institute is likely to augment its electrical supply source through DVC shortly. Institute is expecting to receive the said power supply by June 2013.

10. NOTABLE ACHIEVEMENTS

10.1 Past Achievements

- The Institute, since starting off in 1960 with only four branches of Engineering for UG studies and a handful of buildings and quarters, has made tremendous overall development and achieved the status of Institute of National Importance. Some major achievements are listed below:
- In all, 9 B. Tech. programmes in Engineering, 16 M. Tech. programmes, 3 M. Sc. programmes, MCA and MBA programmes are running successfully.
- Many students have won national and international recognition as teachers, industrialists and entrepreneurs in various leading organisations.
- A large number of new laboratories have come up over the years for UG and PG students, Research Scholars and the faculty members of the Institute.
- The Institute was elevated to the National Institute of Technology with Deemed University status.
- NIT Durgapur was declared “Institute of National Importance” by the Government of India.
- The Institute successfully participated in the World Bank assisted TEQIP as a lead institution,
- Many faculty members have achieved distinction in the field of research by way of publishing papers in peer-reviewed journals and also received best paper awards. Many of them also have the honour of acting as reviewers of international journals.
- The Institute is a QIP Centre for M Tech programmes for faculty members of the polytechnic institutes and PhD programmes for all faculty.
- The Institute was recognised by AICTE as a continuing Education Centre under C-NANCE scheme.
- Under the Centre of Excellence Scheme of the MHRD, Govt. of India, state-of-the-art research laboratories have been set up with modern equipment.
- Many faculty members have served outside organisations and Institutes in the capacity of advisors, consultants and experts of various technical committees.
- NIT Durgapur implemented reservation for OBC students (27%) completely.
- Collaborative activities are in progress with CERN Geneva, NUS Singapore, Caledonian College of Engineering Muscat and a number of premier universities abroad. Faculty exchange, visits of delegation, students’ internship and collaborative research have been taken up.
- The Ministry of Steel, GOI, has instituted a Ministry of Steel Chair Professor and has been sponsoring five scholarships to UG students.
- NIT Durgapur mentored NIT Arunachal Pradesh and GKCIT, Maldah.

10.2 Achievements during the Year

- The new Vision document of the Institute was approved.
- The Institute has been actively participating in the activities of TEQIP-II, a World Bank assisted programme for improvement in quality of technical education and research.
- The Institute was selected for establishing a Centre of Excellence on “Advanced Materials” involving Departments of Physics and Metallurgical & Materials Engineering under TEQIP-II with a proposed budget of Rs 5 crores.

- The curricula of all B. Tech. programmes were revised. Extra-curricular Activities were introduced as credit courses in the first and second semesters.
- Collaborative activities are in progress with CERN Geneva, NUS Singapore, Caledonian College of Engineering, Muscat and a number of premier universities abroad. Faculty exchange, visits of delegation, students' internship and collaborative research have been taken up.
- Forty nine sponsored projects worth more than 20.94 crores are being executed by the faculty members presently while seven such projects has been completed successfully during this year.
- The faculty members of the Institute have publication and acceptance of 411 papers in peer-reviewed journals and also published 260 papers in proceedings of national and international conferences in 2012-13.
- Faculty members acted as reviewers for 170 peer-reviewed journals and books.
- Four hundred and seven research scholars are carrying out research for PhD degree.
- Twenty five scholars were awarded PhD degree by the Institute in 2012-13.
- 598 students have been placed through in-campus interviews in the session 2012-2013. In addition, 111 students got their second job.
- In 2012-13 four pre-final year students did the summer internship at CERN, Geneva. Altogether, 10 students participated in summer internship abroad in different premier universities all over the world. 20 students presented papers in international conferences abroad.
- The Institute organized "INSPPIRE" programme, sponsored by DST. Two Hundred and ten school students participated in the programme where eminent scientists from different parts of the country addressed them.
- ANVESHAN: AIU Student Research Convention 2012-13 (East Zone) was organized in the Institute in association with Indian Universities (AIU) during February 19-21, 2013. Forty nine students participated in the convention from various states. 27 projects were presented in the convention in diverse areas like Molecular Biology, Nanoscience, Energy, Instrumentation, Robotics, Structures, Computer Science, Prosthesis, Pharmaceuticals, Geomorphology, Sustainable Development, etc.
- Four more workshop/short-term courses and one students' congress were organized.
- The eighth Convocation of the Institute was held on November 10, 2012. Professor Sushanta Dattagupta, Vice Chancellor, Visva Bharati, Santiniketan delivered the Convocation Address as the Chief Guest. The Guests of Honour were Dr. Nigel S. Lockyer, Director, TRIUMF, Canada's National Laboratory of Particle and Nuclear Physics and Professor in Department of Physics and Astronomy, University of British Columbia and Dr. Rüdiger Voss, Senior Physicist, Head, International Relations Office, CERN, Geneva, Switzerland. Professor Bikash Sinha, Chairman, Board of Governors, presided over the function. In the eighth convocation, 590 B. Tech, 194 M. Tech., 52 MBA, 61 MCA, 23 M. Sc. and 19 PhD degrees were awarded.
- The Rajbhasha Samiti of the Institute organized various programmes over the year.

Annexure –11.1 Institute’s Council**NIT COUNCIL (as per statute)**

- 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
- 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**

Annexure-11.2 Board of Governors (as per NIT Act, 2007 (29 of 2007))

Sl. No.	Nomination Under	Name and Designation of nominated Member	Serve as
01.	Section 11 Clause (a)	Prof. Bikash Sinha Homi Bhabha Professor, Department of Atomic Energy and Director (Retd.) Saha Institute of Nuclear Physics, 1/AF, Bidhan Nagar, Kolkata – 700 064	Chairman
02.	(b)	Prof. T. Kumar Director, NIT, Durgapur	Ex-Officio Member
03.	(c)	Special Secretary/ Additional Secretary/ Joint Secretary Dealing with Technical Education, Department of Higher Education, Ministry of Human Resource Development, Shashtri Bhawan, New Delhi – 110 001	Member
04.	(c)	Financial Adviser, Department of Higher Education, Ministry of Human Resource Development, Shashtri Bhawan, New Delhi – 110 001	Member
05.	(d)	Prof. Siddhartha Datta Pro vice-Chancellor, Jadavpur University, Kolkata – 700 032 (W.B.)	Member
06.	(d)	Dr. Sajal Dasgupta Director of Technical Education, Govt. of West Bengal Bikash Bhawan, Salt Lake, Kolkata	Member
07.	(e)	Prof. Avijit Chakrabarti Professor, Saha Institute of Nuclear Physics, 1/AF, Bidhan Nagar, Kolkata – 700 064	Member
08.	(e)	Dr. (Ms.) Nabanita Das Professor, Advanced Computing & Micro-electronics Unit, Indian Statistical Institute, 203, B. T. Road, Kolkata – 700 108	Member
09.	(f)	Prof. M. C. Majumder Professor, Dept. of Mechanical Engineering, NIT, Durgapur Nominee of Senate	Member
10.	(f)	Dr. Dipankar Sukul Associate Professor, Dept. of Chemistry, NIT, Durgapur Nominee of Senate	Member
11.	Section 18 Clause (2)	Col. (Retd.) P. S. Sandhu Registrar, NIT Durgapur	Secretary

Annexure-11.3(a) Finance committee

- | | | |
|----|--|---------------------|
| 1. | Prof. Bikash Sinha
Chairman, Board of Governors
NIT, Durgapur | Ex-Officio Chairman |
| 2. | Prof. T. Kumar
Director, NIT, Durgapur | Ex-Officio Member |
| 3. | Joint Secretary (TE), Govt. of India
Ministry of Human Resource Development,
Dept. of Higher Education
Shashtri Bhawan, New Delhi – 110 001 | Member |
| 4. | Joint Secretary, Integrated Finance Division
Govt. of India
Ministry of Human Resource Development,
Dept. of Higher Education
Shashtri Bhawan, New Delhi – 110 001 | Member |
| 5. | Prof. Siddhartha Datta
Provice-Chancellor, Jadavpur University
Kolkata – 700 032 (W.B.)
Representative of BOG | Member |
| 6. | Prof. M. C. Majumder
Professor, Dept. of ME, NIT, Durgapur
Representative of BOG | Member |
| 7. | Col. (Retd.) P. S. Sandhu
Registrar, NIT, Durgapur | Member Secretary |

Annexure-11.3(b) Building and Works committee

1.	Prof. T. Kumar Director, NIT Durgapur	Ex-Officio Chairman
2.	Director (Integrated Finance Department) or Nominee of Integrated Finance Department, MHRD, New Delhi	Member
3	Nominee of Technical Education, MHRD, New Delhi	Member
4	Shri Partha Gangopadhyay, Superintending Engineer, Survey & Design Division , Public Works Department (PWD), India Exchange Place, Kolkata – 700 073 Representative of PWD (Civil)	Member
5	Shri Satyaki Sen, Director, M.N.Dastur & Co. (Pvt.) Ltd., Faraday House, P – 17, Mission Row Extension, Kolkata – 700 013 Nominee of BOG	Member
6	Shri Ujjal Mitra, Superintending Engineer (Electrical) P&A, Office of The Chief Engineer (Electrical), ER, Central Public Works Department (CPWD), 234/4, Acharya J.C.Bose Road, Nizam Palace, Kolkata – 700 020 Representative of CPWD (Electrical)	Member
7	Shri Arun Kumar Bhadra, Superintending Engineer (Electrical), PWD, Electrical Circle- IV, Purta Bhavan, Salt Lake, Kolkata 700 091 Representative of PWD (Electrical)	Member
8	Shri S.L. Meena, Superintendent Engineer, Kolkata Central Circle-II Central Public Works Department (CPWD), 234/4, Acharya J.C. Bose Road, Nizam Palace, Kolkata-700 020 Representative of CPWD (Civil)	Member
9	Dr. S. Haldar Prof. of Chemical Engg. & Dean (Planning & Development), NIT Durgapur	Member
10	Col. (Retd.) P. S. Sandhu, Registrar, NIT Durgapur	Ex-Officio Member Secretary

Annexure-11.3(c) List of Senate members as on 31/03/2013

NAME	E-MAIL ADDRESS	TELEPHONE
Prof. T Kumar Director and Chairman-Senate	director@admin.nitdgp.ac.in	9434788001
NOMINATED MEMBERS		
Sri S Chatterjee Managing Director Innovative Heat Handling Pvt. Ltd. CG-106, Salt Lake City, Kolkata – 700 091	samiran45@gmail.com	9831016604
Prof A K Chakrabarti Saha Institute of Nuclear Physics 1/AF, Bidhannagar, Kolkata – 700 064	abhijit1960@gmail.com	9831055624
Dr M Dutta Prof and HOD, Deptt. Of Humanities BESU, Shibpur, Howrah- 711 103	madhumatidutta@yahoo.co.in	9836853402
BIO-TECHNOLOGY		
Prof A Dey	apurbadey2003@yahoo.co.in	9933369705
Prof S Chattopadhyay, HOD	sudipchatto@gmail.com	9679266581
CHEMICAL ENGINEERING		
Prof S Halder Dean – Planning and Development	shaldar_nitd@yahoo.co.in	9434788004 9434011865
Prof P P Gupta Dean – Research and Consultancy	parthagupta2000@yahoo.com	9732047359
Prof P Pal	parimal_pal2000@yahoo.com	9434469750
Prof C M Narayan	cmn_recld@yahoo.co.in	9732051861
Prof J P Sarkar Dean – Administration	jp_sarkar@yahoo.co.in	9734734316/ 9333314987/ 9434788010
Prof K C Ghanta, HOD	kcghanta@yahoo.com	9474543416/ 9434788020
CHEMISTRY		
Prof M M Nandi	murarimohan_nandi@yahoo.co.in	9434536820
Dr B P Mukhopadhyay, HOD	bpmk2@yahoo.com	9434788031
CIVIL ENGINEERING		
Prof S Saha	saha_soumen31@yahoo.co.in	9434788008
Prof D K Singha Roy	dsr_rec_dgp@yahoo.com	9434788039
Prof K Bhattacharya	kamal_goutam1960@yahoo.co.in	9732264594
Prof A Das	adas_wrpm@yahoo.com	0343-2547383
Prof P Ray	pramnitd@yahoo.com/ purnendu.ray@nitdgp.ac.in	9474051287/ 9434788037
Prof V K Diwivedi, HOD	vkdwivedi10725@yahoo.co.in	9800765341
COMPUTER APPLICATIONS		
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Annexure - 11.4(a) Ongoing sponsored projects**Department of Biotechnology**

Title of the Project	Investigator(s)	Sponsoring Organisation	Amount (in Rs)	Starting Year
Application potential of grapheme and grapheme oxide for treatment of dye-stuff effluents	Aikat, K. Das (Saha), P. (Calcutta University)	The Institution of Engineers, India	1.5 lakhs	2012
Investigation of functional overlap between ZBF1/MYC2 and ZBF2/GBF1 in Arabidopsis seedling development and light regulated gene expression	Chattopadhyay S.	DST-SERC	38 lakhs	2010
Investigation of functional interrelations of bZIP transcription factors: ZBF2/GBF1, HY5 and HYH of light signalling pathways in <i>Arabidopsis thaliana</i>	Chattopadhyay S.	JC Bose National Fellowship (DST)	68 lakhs	2011
Investigation of of cross talk between MAP kinase and light signalling pathways in Arabidopsis thaliana	Chattopadhyay S. and Sinha KA, NIPGR, New Delhi	DST-SERB	39 lakhs	2012
Assessment on the reduction of toxic organics and other pollutants present in Industrial wastewater using soil and flyash as liner materials: Batch and Continuous Column Studies	Das (Saha), P.	DST-SERC Fast Track Project for Young Scientist	12 lakhs	2012
Development of a Green Technology for Improvement of Paper Quality and to Minimize the Generation of Genotoxic Effluents	Dasguptamandal D., Dey A., Mandal T.	DBT	26 lakhs	2012
Over-riding drug resistance in visceral leishmaniasis by combinatorial therapy with sub-optimal dose of HMG-CoA reductase inhibitor, Statin and trivalent Chromium complex, involving Src-family tyrosine kinase	Ghosh M.	Rapid Grant for Young Investigators (RGYI) scheme, DBT	25.06 lakhs	2011
"Assessment of Microbial Communities and their Biodegradation Potentials in Petroleum Contaminated environments in Assam"	Kazy S.K., NIT Durgapur Ghoshal A.K. IIT Guwahati	DBT	~ 68 lakhs	2012
Studying Fanconi Anemia; A rare disorder: for understanding the Mitochondrial role in genomic instability and cancer	Mukhopadhyay S.S.	DBT	75.72 lakhs	2012
Functional genomics of G-protein coupled receptors (GPCRs) of <i>Magnaporthe oryzae</i>	Roy Barman S.	DST-SERC Fast Track Project for Young Scientist	23.4 lakhs	2012
Investigation of genetic and molecular interrelations of SHW1 and COP1 in <i>Arabidopsis</i> seedling development	Srivastava A. Chattopadhyay S.	DST-SERC Fast Track Project for Young Scientist	23 lakhs	2010

Department of Chemical Engineering

Title of the Project	Investigator(s)	Sponsoring Organisation	Amount (in Rs)	Starting Year
DST-FIST	All faculty of the department	DST, Govt. of India	145.6 Lakh	2008
Study on Micro-porous Characteristics of activated carbon for PSA system employing Activated carbon-Nitrogen working pair	Halder G. N.	DST-Govt of India	13.5 lakhs	2010
Grafting of the Fire Retardant Polymer on Rice (Oryza Sativa) straw for Enhancing the Durability of Hay-roofed Houses in the Poor people Dominated Backward Rural Areas	Halder G. N. Hazra, B. N. Mandal, M.K.	DST-Govt of West Bengal	5.23 lakhs	2012
Capturing Oscillations of Void Fractions in Boiling Natural Circulation Loop using Laser Doppler Anemometry and Impedance Probe	Paruya S. Sarkar J. P. Gupta P.	DST, Govt. of India	33.02 lakhs	2010

Department of Chemistry

Title of the Project	Investigator(s)	Sponsoring Organisation	Amount (in Rs)	Starting Year
A study on the differential binding and recognition of mononuclear-metal ions at different sites of Metallo-apoprotein by MD-Simulation methods	Mukhopadhyay B.P.	Department of Science and Technology (DST), Govt. Of India	10.67 lakhs	2011
Bioinformatics Study on the Recognition and Dynamic of the water Molecules in the Human Inosine Monophosphate Dehydrogenase (IMPDHII) and Inhibitor Design	Mukhopadhyay B.P.	Department of Biotechnology (DBT), Govt. Of India	22.644 lakhs	2010
A study on the corrosion inhibition properties and adsorption characteristics of some recognitive biomolecules on the metals	Sukul D.	DST-SERC	23.65 lakhs	2011

Department of Civil Engineering

Title of the Project	Investigator(s)	Sponsoring Organisation	Amount	Starting Year
DST-FIST	Dept. of Civil Engineering	DST, Govt. of India	50 lakhs	2007
Development of Decision Support System for water resource management and flood mitigation of river Kosi system lying in India and Nepal	Dwivedi V.K.	Swedish Research Council, Sween	240 thousand Swedish kroner	2010

Department of Computer Science and Engineering

Title of the Project	Investigator(s)	Sponsoring Organisation	Amount (in Rs)	Starting Year
DST-FIST	GuhaThakurta, P. Roy, S. Sanyal, G. Sen, B.	DST, Govt. of India	54 Lakhs	2010

Department of Electrical Engineering

Title of the Project	Investigator(s)	Sponsoring Organisation	Amount (in Rs)	Starting Year
Optimal allocation of FACTS Devices and their coordinated operation for power flow control and enhancement of voltage stability using soft computing technique	Acharjee P.	DST-SERC Fast Track Project for Young Scientist	10.38 lakhs	2009
DST-FIST	All faculty of the department	DST, Govt. of India	108 lakhs	2009
Development of DC electromagnetic levitation systems–suitable for specific industrial applications	Banerjee S. Saha T.K.	DST, SERC	26.83 lakhs	2010
Developing suitable pedagogical methods for various classes, intellectual calibers and research in e-learning	Dutta S. (ChE) Ghosh S. (EE) Koley C. (EE) Kumbhakar P. (PH) Mandal T. (ChE) Mandal M. K. (PH) Paruya S. (ChE) Roy N. K. (EE) Sarkar J. P.(ChE) Bhattacharya P. (JU)	National Mission Project on Education through ICT MHRD, Govt. of India	15 lakhs	2009
Application of Non-linear Robust Control Strategies for Air-Flow Control	Koley C.	DST - SERC Fast Track Project for Young Scientist	19 lakhs	2010
Upgradation of ICT enabled High Voltage Laboratory, NIT Durgapur	Roy N. K. Ghosh S. Koley C.	National Mission Project on Education through ICT MHRD, Govt. of India	7 Lakhs	2010
Development of Personalised and Performance based E-Learning tool for existing E-resources	Roy N. K.	Department of Information and Communication Technology, GOI, Delhi	99.95 Lakhs	2013
Development of SIR Simulator	Saha T. K.	ALSTOM India Limited	10 lakhs	2012

Department of Electronics and Communication Engineering

Title of the Project	Investigator(s)	Sponsoring Organisation	Amount (in Rs)	Starting Year
DST-FIST	All faculty of the department	DST, Govt. of India.	108 lakhs	2011
Development of Antennas for Ultrawideband Pulse Based Wireless Communication and Imaging Systems	Ghatak R.	DST Fast Track for Young Scientist	16.86 lakhs	2010
Establishment of national MEMS design center.	Mahapatra R. (Co ordinator)	ADA NPMASS	Software tools	2009
Synthesis of Satellite Footprint Patterns from Planar Array Antennas by Combination of Particle Swarm Optimization and Fast Fourier Transform	Mahanti G. K. as Co-PI	ISRO and KCSTC, IIT,Kharagpur	10 Lakhs	January 2011

Department of Information Technology

Title of the Project	Investigator(s)	Sponsoring Organisation	Amount (in Rs)	Starting Year
Information Security Education and Awareness Project	Choudhury S.	Dept. of Information Technology, Ministry of Information and Communication, Govt. of India.	21 lakhs	2006
Institute of Open Technology and Application	Choudhury S.	Ministry of Information Technology, Govt. of West Bengal	10 lakhs	2008
Development of Personalized and Performance based E-Learning tool for existing E-resources	Dutta A.	Dept. of Information Technology, Ministry of Communication and Information Technology, Govt. of India.	78.021 lakhs	2013

Department of Management Studies

Title of the Project	Investigator(s)	Sponsoring Organisation	Amount (in Rs)	Starting Year
Red brick cluster development project	Roy M.	Govt. of W.B.	4.0 lakh	2010

Department of Mathematics

Title of the Project	Investigator(s)	Sponsoring Organisation	Amount (in Rs)	Starting Year
Hybrid modelling of uncertainty analysis in environmental risk assessment	Kar Samarjit	BRNS, DAE	16.51 lakhs	2013
L(h,k)-labelling on intersection graphs	Pal Anita	DST, Govt. of India	8.72 lakhs	2012

Department of Mechanical Engineering

Title of the Project	Investigator(s)	Sponsoring Organisation	Amount (in Rs)	Starting Year
Design and Development of Adaptive Motion Planners for Multiple Mobile Robots	Hui, N. B.	DST, New Delhi	14 lakhs	2009

Department of Metallurgical and Materials Engineering

Title of the Project	Investigator(s)	Sponsoring Organisation	Amount (in Rs)	Starting Year
DST-FIST	MME Dept.	DST, Govt. of India	117 lakhs	2009
Development of ceramic particle dispersed Aluminum alloy composite	Bera S.	DST	19.2 lakhs	2012
MD-Stochastic Model Based Design and Development of Nanofluids for Advanced Heat Transfer Applications	Ghosh M M	DST	17.70	2013

Department of Physics

Title of the Project	Investigator(s)	Sponsoring Organisation	Amount (in Rs)	Starting Year
DST-FIST	All faculty of the department	DST, Govt. of India	82.00 Lakhs	2012
Development and Characterizations of Multiferroics nanomaterials	Basu S.	DST - SERC Fast Track Project for Young Scientist	21.24 Lakhs	2010
Design and exploration of nanocrystalline multiferroic materials	Basu S.	BRNS,DAE, Govt. of India	34.88 Lakhs	2011
Development of polymer nanocomposites of graphene nanoplatelets	Chakraborty, AK	DST - SERC Fast Track Project for Young Scientist	23 Lakhs	2011
Centre of excellence in Advanced Materials – TEQIP-II	Chakraborty, AK and Mondal, DK (MME) (joint PIs)	MHRD	500 Lakhs	2013
Design and Applications of Ring Oscillators in Communication Systems	Mandal M. K.	DST - SERC Fast Track Project for Young Scientist	12.48 Lakhs	2011
A Study on Electron Dephasing Scattering Rate in Disordered Alloys and A15 Compounds at Low Temperature	Meikap A. K. Basu S. Mandal M. K.	DST-SERB	36.07 Lakhs	2013

Annexure - 11.4(b) Projects completed during 2012-13**Department of Biotechnology**

Title of the Project	Investigator(s)	Sponsoring authority
Characterization and optimization of pigment production from an isolated bacterial strain	Dutta D. and Chaudhuri S.	UGC
Assessment of microbial diversity and community structure and their role in arsenic transformation and mobilization in arsenic contaminated groundwater of West Bengal.	Kazy S. K., NITD; Sar P., Gupta A.K., IIT, Kharagpur.	DBT (RGYI scheme)

Department of Chemical Engineering

Title of the Project	Investigator(s)	Sponsoring authority
Production of Lactic acid in Membrane-integrated Hybrid Reactor system – A Green Technology Approach	Prof. P.Pal	DST, Govt. of India

Department of Chemistry

Title of the Project	Investigator(s)	Sponsoring authority
Modification of sperm plasma membrane structure and function using exogenous lipid and its application in cryopreservation	Chakrabarty J.	DST-SERC Fast Track Project for Young Scientist
Rhodamine-based new fluorescence probe for biologically important metal ions.	Panja S.S.	DST-SERC Fast Track Project for Young Scientist

Department of Electrical Engineering

Title of the Project	Investigator(s)	Sponsoring authority
Control System Design Using Periodic Feedback Compensation: A Practical Implementation	Dey J.	DST FAST TRACK

Department of Electronics and Communication Engineering

Title of the Project	Investigator(s)	Sponsoring Organisation
SMDP (Phase II) on VLSI	All faculty of the department	Ministry of Communication and Information Technology, Govt. of India

Annexure–11.4(c) i. Research papers published in peer-reviewed journals during 2012-13**Department of Biotechnology**

1. Bajpai S., Gupta S.K., Dey A., Jha M.K., Bajpai V., Joshi S., Gupta A., 2012. Application of Central Composite Design approach for removal of chromium (VI) from aqueous solution using weakly anionic resin: modeling, optimization, and study of interactive variables, *Journal of Hazardous Materials*, 227-228,436-444.
2. Basak B., Bhunia B., Dutta S., Dey A., 2013. Enhanced biodegradation of 4-chlorophenol by *Candida tropicalis* PHB5 via optimization of physicochemical parameters using Taguchi Orthogonal Array approach. *International Biodeterioration & Biodegradation*, 78, 17-23.
3. Basak B., Bhunia B., Mukherjee S., Dey A., 2013. Optimization of physicochemical parameters for phenol biodegradation by *Candida tropicalis* PHB5 using Taguchi Methodology, *Desalination and Water Treatment* DOI:10.1080/19443994.2013.770638.
4. Bhunia B., Basak B., Bhattacharya P., Dey A., 2012. Process engineering studies of alkaline protease production, *Journal of Microbiology and Biotechnology*, 22, 1758-1766.
5. Bhunia B., Basak B., Bhattacharya P., Mondal T., Dey A., 2013. Effect of pH and temperature on stability and kinetics of novel extracellular serine alkaline protease (70 kDa), *International Journal of Biological Macromolecules*, 54,1-8.*
6. Bhunia B., Basak B., Dutta S., Bhattacharya P., Dey A., 2013. Process engineering studies to investigate the effect of temperature and pH on kinetic parameters of alkaline protease production, *Journal of Bioscience and Bioengineering*, 115, 86-89.
7. Bhunia B., Dey A., 2012. Statistical approach for optimization of physicochemical requirements on alkaline protease production from *Bacillus licheniformis* NCIM-204, *Enzyme Research*, 2012, 905804.
8. Chakraborty S., Chowdhury S., Saha P. D., 2013. Artificial neural network (ANN) modelling of dynamic adsorption of crystal violet from aqueous solution using citric acid modified rice (*Oryza sativa*) straw as adsorbent, *Clean Technologies and Environmental Policy*, 15, 255-264.
9. Chakraborty S., Das P., Dey A., 2013. Insight into equilibrium kinetics and isotherm Studies on Sorption of Alizarin Red S Dye onto Ca (OH)₂ Modified Fly Ash, *Chemical Engineering*, 58, 14985-14988.
10. Chatterjee D., Ghosh S., Pal U., Mukhopadhyay S.S., 2012. Redox Reaction of [RuIII(hedrata)(Pz)Cmplex with Biochemically Important Reductants:Kinetic,Mechanistic and Antimicrobial Studies, *European Journal of Inorganic Chemistry*,12,678-683.
11. Chatterjee D., Banerjee P., Bose J.C., Mukhopadhyay S.S., 2012. Peroxydisulfate activity activation by [RuII(tpy)(pic)(H₂O)]⁺. Kinetic, Mechanistic and anti-microbial activity studies. *Dalton's Trans.* 41, 2698-8.
12. Choudhary S, Islam E., Kazy S.K., Sar P., 2013. Uranium and other heavy metal resistance and accumulation in bacteria isolated from uranium mine wastes, *Journal of Environmental Science and Health, Part A*, 47, 1–16.
13. Chowdhury S., Saha P. D., 2013. Artificial neural network (ANN) modeling of adsorption of methylene blue by NaOH-modified rice husk in a fixed-bed column system, *Environmental Science and Pollution Research*, 20, 1050-1058.

14. Das P., Bhattacharya P., Sinha K., Chowdhury S., 2013. Biosorption of Congo red and Indigo carmine by nonviable biomass of a new *Dietzia* strain isolated from the effluent of a textile industry, *Desalination and Water Treatment*, 1–8.
15. Das P., 2013. Mathematical Modelling of the Reduction of safranin onto chemically modified rice husk in Stirred tank reactor using Response Surface Methodology and Artificial Neural Network, *Bioremediation Journal*, 17, 52-60.
16. Das P., Dutta S., 2012. Mathematical modelling of biosorption of safranin onto rice husk in a packed bed column using artificial neural network analysis, *Desalination and Water Treatment* 41,308-314.
17. Ganguly A., Chatterjee P.K., Dey A, 2012. Studies on ethanol production from water hyacinth—A review, *Renewable and Sustainable Energy Reviews*, 16(1),966-972.
18. Ganguly A., Gupta A., Das S., Dey A., Chatterjee P.K., 2012. Enzymatic hydrolysis of water hyacinth substrate by cellulase, xylanase and β glucosidase: Experiments and optimization, *Journal of Biobased Materials and Bioenergy*, 6,1-9.
19. Ghosh A., Saha Das P., 2012, Optimization of copper adsorption by chemically modified flyash using response surface methodology modeling, *Desalination and Water Treatment* 49, 218-226.
20. Goswami, G., Chakraborty, S., Chaudhuri, S., Dutta, D., 2012. Optimization of Process Parameters by Response Surface Methodology and Kinetic Modeling for Batch Production of Canthaxanthin by *Dietzia maris* NIT-D (Accession Number : HM151403), *Bioprocess and Biosystems Engineering*, 35 (8).
21. Kumar, A., Bhunia,B., Dasgupta, D., Mandal, T., Dey. A., Datta,S., Bhattacharya, P., 2013 Optimization of culture condition for growth and phenol degradation by *Alcaligenes faecalis* JF339228 using Taguchi Methodology, *Desalination and water treatment*,51, 16-18.*
22. Midha V., Jha M.K., Dey A., 2012. Sulfide oxidation in fluidized bed bioreactor using nylon support material, *Journal of Environmental Sciences*, 24, 512-519.
23. Mondal S., Bardhan R., Mondal B., Dey A., Mukhopadhyay S.S., Roy S., Guha R., Roy K., 2012. Synthesis, characterization and in vitro cytotoxicity assessment of hydroxyapatite from different bioresources for tissue engineering application, *Bull. Mater. Sci.*, 35, 683–691.
24. Mondal S., Mondal B., Dey A., Mukhopadhyay S.S., 2012. Studies on Processing and Characterization of Hydroxyapatite Biomaterials from Different Bio Wastes. *Journal of Minerals and Materials Characterization and Engineering*, 20, 55-57.
25. Mukherjee S., Basak B., Bhunia B., Dey A., Mondal B., 2013. Potential use of polyphenol oxidases (PPO) in the bioremediation of phenolic contaminants containing industrial wastewater, *Reviews in Environmental Science and Biotechnology*, 12, 61-73.
26. Padmapriya, K., Dutta, A., Chaudhuri, S., Dutta, D., 2012. Microwave Assisted Extraction of Mangiferin from *Curcuma amada*, *3Biotech*, 2 (1).
27. Pranaw, K., Singh, S., Dutta, D., Ganguly, S., Saxena, A.K., Lata., 2012. Role of Environmental Factors in Phase Shift of *Xenorhabdus* sp. SGchamp: An Endo-symbiont of *Steinernema thermophilum*, *Annals of Plant Protection Sciences*, 20 (2).
28. Prasad, V.B.R., Gupta, N., Nandi, A., Chattopadhyay, S., 2012. *HY1* genetically interacts with *GBF1* and regulates the activity of the Z-box containing promoters in light signaling pathways in *Arabidopsis thaliana*. *Mechanism of Development*, 129, 298-307.

29. Prasad, V.B.R., Kumar V.S., Nandi, A., Chattopadhyay, S., 2012. Functional interconnections of HY1 with MYC2 and HY5 in Arabidopsis seedling development. *BMC Plant Biology*, 12, 37.
30. Saha Das P., Chakraborty S., Das S., 2012. Optimization of adsorption of hazardous crystal violet by chemically treated rice husk using central composite response surface methodology, *Archives of Environmental Science*, 6, 57-61.
31. Saha Das P., Sengupta R., Saha J., Banerjee P. K., 2012. Assessment on the water quality characteristics of River Ganga at Kolkata Region, India using Water Quality Index and ANN simulation method, *Archives of Environmental Science*, 6,34-41.
32. Sarkar A., Kazy S. K., Sar P, 2013. Characterization of arsenic resistant bacteria from arsenic rich groundwater of West Bengal, *Ecotoxicology*, 22, 363-376.
33. Sarkar N., Aikat, K., 2012. Alkali pretreatment of rice straw and enhanced cellulase production by a locally isolated fungus *Aspergillus fumigatus* NITDGPKA3. *Journal of Microbiology and Biotechnology Research*, 2, 717-726.
34. Sarkar N., Aikat K., 2012. Cellulase and Xylanase Production from Rice Straw by a Locally Isolated Fungus *Aspergillus fumigatus* NITDGPKA3 under Solid State Fermentation – Statistical Optimization by Response Surface Methodology. *Journal of Technology Innovations in Renewable Energy*. 1, 54-62.
35. Sarkar N., Aikat K., 2013. Kinetic study of acid hydrolysis of rice straw. *ISRN Biotechnology Volume 2013*, Article ID 170615, <http://dx.doi.org/10.5402/2013/170615>.
36. Sarkar N., Ghosh S.K., Bannerjee S., Aikat K, 2012. Bioethanol production from agricultural wastes: an overview. *Renewable Energy*. 37, 19-27.
37. Singh A., Ram H., Abbas N., Chattopadhyay S. 2012. Molecular Interactions of GBF1 with HY5 and HYH During Light-mediated Seedling Development in *Arabidopsis thaliana*. *Journal Biological Chemistry*, 287, 25995-26009.
38. Singh S.K., Bansal A.,Jha M.K., Dey A., 2012. An integrated approach to remove Cr (VI) using immobilized *Chlorella minutissima* grown in nutrient rich sewage wastewater. *Bioresource Technology*, 104, 257-265.
39. Sinha K., Chowdhury S., Saha Das P., Datta S., 2013. Modeling of microwave-assisted extraction of natural dye from seeds of *Bixa orellana* (Annatto) using response surface methodology (RSM) and artificial neural network (ANN), *Industrial Crops and Products* (Elsevier Science B.V.), 41, 165-171.
40. Sinha K., Das P., Datta S., 2012. Extraction of blue floral dye from Butterfly Pea for using as dye in Textile Industry, *Research Journal of Textile and Apparel*, 16, 34-38.
41. Sinha K., Das P., Ramya V., Datta S., 2012. Improved extraction of natural blue dye from Butterfly Pea using microwave assisted methodology to reduce the effect of synthetic blue dye, *International Journal of Chemical Technology*, 4, 57-65.

* Repeated in other departments

Department of Chemical Engineering

1. Bera, A., Ojha, K., Kumar T., Mandal, A. 2012. Water Solubilization Capacity, Interfacial Compositions and Thermodynamic Parameters of Anionic and Cationic Microemulsions. *J of Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 404, 70-77,
2. Bera, A., Kissmathulla S., Ojha, K., Kumar, T., Mandal, A. 2012. Mechanistic Study of Wettability Alteration of Quartz Surface Induced by Nonionic Surfactants and Interaction between Crude Oil and Quartz in Presence of Sodium Chloride Salt, *Energy & Fuels Journal*, 26, 3634-3643.
3. Bhunia B., Basak B., Mandal T., Bhattacharya P., Dey A., 2013. Effect of pH and temperature on stability and kinetics of novel extracellular serine alkaline protease (70kDa), *International Journal of Biological Macromolecules*, 54,1-8.*
4. Chakraborty S. , Roy M., Pal P., 2013. Removal of Fluoride from Contaminated Groundwater by Cross flow Nanofiltration: Transport modeling and Economic evaluation, *Desalination*, 313, 115-124.*
5. Ghosh S., Haldar S., Shubhaneel,N., Ganguly A., Chatterjee P. K., 2012. Kinetic Study of the Acid Hydrolysis of *Parthenium hysterophorus* L. for xylose yield in the Production of Lignocellulosic Ethanol, *IOSR Journal of Pharmacy and Biological Sciences*, 3, 35-41.
6. Ghosh S., Haldar S., Ganguly A., Chatterjee P.K., 2013. Review on *Parthenium hysterophorus* as a potential energy source, *Journal of Renewable and Sustainable Energy Reviews*, 20, 420-429.
7. Ghosh S., Das K., Sinha S., Das S., Ganguly A., Haldar S., Chatterjee P.K., 2013. Effect of Particle Size on the Hydrolysis of *Parthenium Hysterophorus* L. for the Production of Ethanol, 2, 26..
8. Karmakar M., Haldar S., Chatterjee P. K., 2012. Fluidization Behaviour of Binary Mixtures Using Sand and Biomass, *International Journal of Emerging Technology & Advanced Engineering*, 2.
9. Kumar A., Bhunia B., Dasgupta D., Mandal T., Dey, A., Datta S., Bhattacharya P., 2013. Optimization of culture condition for growth and phenol degradation by *Alcaligenes faecalis* JF339228 using Taguchi Methodology, *Desalination and water treatment*, 51,16-18.*
10. Kumar A., Roy Z., Halder G.N., Sarkar S.C., 2012. A Simple Calorimeter to measure Specific heat of Activated carbon Prepared from Coconut shell for Pressure Swing Adsorption Refrigeration System, *Canadian Journal of Chemical Engineering*- 9999 (2), 1-9.
11. Kumar R., Pal P., 2013. Membrane-integrated Hybrid Bioremediation of Industrial wastewater: A Continuous Treatment and Recycling Approach, *Desalination and Water Reuse*, 1, 6-38.
12. Kumar R., Pal P., 2013. Removal of phenol from coke-oven wastewater by cross-flow nanofiltration membranes, *Water Environment Research, Water Environment Federation (USA)*, 85, 447-455.
13. Kumar R., Pal P., 2012. Response surface-optimized Fenton's pre-treatment for chemical precipitation of struvite and recycling of water through downstream nanofiltration, *Chemical Engineering Journal* 210 , 33-44.
14. Kumar R., Pal P., 2013. Turning hazardous waste into value-added products: production and characterization of struvite from ammoniacal waste with new approaches, *Journal of Cleaner*, 43, 59-70.
15. Kumar, T., Bera, A., Mandal, A. 2012. Physicochemical Properties of Microemulsions and Their Uses in Enhanced Oil Recovery, *WASET Journal*, 64, 1114-1119.
16. Pal P., Kumar R., 2012. Treatment of Coke Wastewater: a critical review for evolving a sustainable management strategy , *Separation and Purification Review*, 41, 1-96.
17. Pal P., Dey P. , 2013. Process intensification in lactic acid production by three stage membrane integrated hybrid reactor system, *Chemical Engineering and Processing*, 64, 1-9 .

18. Pal P., Manna A.K., Linnanen L., 2013. Arsenic Removal by Solar-Driven Membrane Distillation: Modeling and Experimental Investigation with a New Flash Vaporization Module, *Water Environment Research (USA)*, 85, 63-76.
19. Narayanan C.M., 2012. A Computational Algorithm for the Analysis of Freeze Drying Processes with Special Reference to Food Products / Materials, *International J. of Chemical and Petrochemical Technology*, 2, 37 – 46.
20. Narayanan C.M., 2012. Production of Phosphate Rich Biofertiliser Using Vermicompost and Anaerobic Digester Sludge – A Case Study, *Advances in Chemical Engineering and Science*, 2, 187 – 191.
21. Narayanan C.M., Samui E, Chatterjee A., Das S., 2012. A Parametric Study of Performance Characteristics of Upflow Anaerobic Sludge Blanket Bioreactors, *Research J. of Chemical Sciences*, 2, 12 – 20.
22. Narayanan C. M., 2012. Biotechnological Innovations, *Process India*, 2, 48 – 51.
23. Narayanan C. M., Banerjee A., 2013. Computer Aided Analysis, Simulation and Optimisation of Thermal Sterilization Processes, *Recent Patents on Biotechnology*, 7, 47 – 60.
24. Narayanan C.M., De M., 2013. Studies on Kinetics of Synthesis of Phosphatic Biofertiliser (PROM) from Rock Phosphate Ore, *International J. Chemical Eng. Research*, 5, 09 – 18.
25. Nayak J., Pal P., 2013. Transforming waste cheese-whey into acetic acid through a continuous membrane- integrated hybrid process, *Industrial & Engineering Chemistry Research*, 52 , 2977–2984.
26. Roy Z., Anupam K., Halder G.N., 2013. Approaches towards replacement of halogenated refrigerants – A review, *Journal of Nature Science and Sustainable Technology*, 7, 5-25.
27. Shubhaneel N., Ghosh S., Haldar S., Ganguly A., Chatterjee P. K., 2013. Acid Catalyzed Auto-Hydrolysis of Parthenium Hysterophorus L. for Production of Xylose for Lignocellulosic Ethanol, *International Journal of Emerging Technology and Advanced Engineering*, 3.

* Repeated in other departments

Department of Chemistry

1. Bairagya H.R., Mukhopadhyay B.P., 2012. An insight to the dynamics of conserved water-mediated salt bridge interaction and interdomain recognition in Himpdh isoforms. *J Biomol. Struct. Dyn.*
2. Bairagya H.R., Mukhopadhyay, B.P.; 2012. Protein folding: challenge to chemistry. *J Biomol. Struct. Dyn.* 2013 Jan 9.
3. Chakrabarty, B., Bairagya H.R., Mishra D.K., Chatterjee P.K, Mukhopadhyay B.P., 2013. Insight towards the conserved water mediated recognition of catalytic and structural Zn(+2) ions in human Matrix Metalloproteinase-8 enzyme: A study by MD-simulation methods. *Bioinformation*, 9,126-133.
4. Chatterje, S.K., Ro, S., Barma, S.K., Maji R.C., Olmstead M.M., Patra A.K., 2012. Shuttling of Nickel Oxidation States in N₄S₂ Coordination Geometry versus Donor Strength of Tridentate N₂S Donor Ligands. *Inorg. Chem*, 51, 7625-7635.
5. Ghosh B., Mukhopadhyay B.P., Bairagya H.R., 2012. Effect of amino acids on bioleaching of chalcopyrite ore by *Thiobacillus ferrooxidans*. *African Journal of Biotechnology* 11, 1991-1996.
6. Ghosh G.K., Misra K., Baskim M., Linert W., Moi S.C., 2013. Kinetics and mechanism of interaction of thioglycolic acid with di- μ -hydroxobis(1,10-phenanthroline) dipalladium (II) ion in aqueous solution. *Journal of Solution Chemistry*, 42, 526.
7. Ghosh G.K., Misra K., Linert W., Moi S.C., 2013. Interaction of Glutathione With *Cis*-(2-Aminomethylpyridine)diaqua platinum(II) Perchlorate in Aqueous Medium: Their Kinetics and

Mechanism Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry, 43,714–721.

8. Gupta S., Nayek S., Saha. R. N., 2012 Major ion chemistry and metal distribution in coal mine pit lake contaminated with industrial effluents: constraints of weathering and anthropogenic inputs. *Environment and Earth Science*, published online on 28 March .
9. Gupta S., Satpati S., Saha R.N. and Nayek S.; Spetial and Temporal variation of pollutant in industrial wastewater containing natural stream. *International Journal of Environment and Engineering*, Indersons, 5.
10. Mahata S., Nandi M.M., Mondal B., 2012. Preparation of High solid loading titania suspension in gelcasting process by boiling rice extract as binder. *Ceramics International*, 38, 909-918.
11. Mishra D.K., Mukhopadhyay B.P., Bairagya H.R., 2012. Molecular Modeling of Inosine 5'-Monophosphate Dehydrogenase-II (Human) Structure using Md-Simulation Method *International Journal of Pharma And Bio Sciences* 3(4): (B) 102 – 120.
12. Nandi T.K, Bairagya H.R, Mishra D.K, Mukhopadhyay B.P, Banerjee, 2012. A Structural and Putative Functional Role of Conserved Water Molecular Cluster in the X- ray structures of Plant ThiolProteases:AMolecular Dynamics Simulation Study" *Journal of Chemical Crystallography* 42,1105-1118.
13. Nandi T.K., Bairagya H.R.,Mukhopadhyay B.P., Mallik P.,Sukul D., Bera A.K., 2012. Conserved water mediated H-bonding dynamics of catalytic His 159 and Asp158 : An insight to possible acid – base coupled mechanism in plant thiol protease. *Journal Molecular Modeling* 18, 2633-2644.
14. Ranjana Banerjee, R., Nandi M.M., 2012. Inhibition effect of imidazoline and hydropyrimidine derivatives on the corrosion of brass in 0.6 M aqueous sodium chloride solution. *Journal of Indian Chemical. Society*, 89, 229-238.
15. Roy C., Chakrabarty J., Patel H.B., 2012. Development and validation of a stability indicating binary RP-UPLC method for determination of itraconazole in capsules dosage form. *International Journal of Analytical and Bioanalytical Chemistry*, 2, 165-174.
16. Roy C., Chakrabarty, J., Rao S., Modi P.B., Vairale A., 2012. Residue determination fo Clindamycin phosphate and Tretinoin on the surface of manufacturing equipment by RP-HPLC, *Journal of Pharmacy Research*, 5, 3665-3669.
17. Roy C., Pate, H.B., Chakrabarty J., 2012. Stability Indicating RP-HPLC Method Development and Validation for Determination of Process Related Impurities and Degradation Products of Tazarotene in Tazarotene Topical Formulation. *Indo American Journal of Pharmaceutical Research*, 3, 1400-1413.
18. Sikdar A., Roy S., Haldar K., Sarkar S., Panja S.S. 2013. Rhodamine-Based Cu²⁺ -Selective Fluorosensor: Synthesis, Mechanism, and Application in Living Cells, *Journal of Fluorescence*, 23, 495–501.

Department of Civil Engineering

1. Karmakar S., 2012. Response of a T-beam reinforced concrete two lane bridge under blast loading, *International Journal of Earth Science and Engineering*, Vol.05, No. 06(01), 1708-1714.
2. Nanda R.P., Agarwal P., Shrikhande M., 2012. Base isolation by geosynthetic for brick masonry buildings, *Journal of Vibration Control*, 18, 903-910.

3. Nanda R.P., Agarwal P., Shrikhand, M., 2012. Suitable friction sliding materials for base isolation of masonry buildings, *Journal of Shock and Vibration*, 19, 1327-1339.
4. Nanda R.P., Shrikhande M., Agarwal P., 2012. Effect of ground motion characteristics on the pure friction isolation system. *Earthquakes and Structures*, 3, 169-180.
5. Samanta S., Nanda R.P. 2012. Retrofitting of soft-storey buildings using brick infill and steel bracings, *The IUP Journal of Structural Engineering*, 5, 61-73.
6. Singha Roy, D. K., Sil A., 2012. Effect of Partial Replacement of Cement by Silica Fume on Hardened Concrete, *International Journal of Emerging Technology and Advanced Engineering*, 2, 472-475.

Department of Computer Applications

1. Banejee S., Sarkar A., 2012. Evaluation of Object Oriented Requirements Engineering Frameworks: A Study. *International Journal of Computer Applications, Foundation of Computer Science, USA*, 51(18), 1 – 6
2. Choudhury P., Nandi S., Debnath N C. 2012. A publish/subscribe system using distributed broker for SOA based MANET applications. *Journal of Computational Methods in Sciences and Engineering*, 129-138.
3. Das S., Kumar M., Ghosh D. Enhancement of forensic capabilities of the linux kernel via file timestamp preservation, *JCMSE*, 12 (1), 79-89.
4. Ganguly R., Sarkar A. 2012. Evaluations of Conceptual Models for Semi-structured Database System. *International Journal of Computer Applications, Foundation of Computer Science, USA*, 50 (18) 5 – 12.
5. Pal A., Pal A., Choudhury P. 2012. Mitigating Black Hole Attacks in AODV Routing Protocol Using Dynamic Graph. *Mappana Journal of Sciences*, 11(4) 65-76.*
6. Sarkar A., Debnath N. C. 2012. Business Object Oriented Requirements Engineering Framework. *Journal of Computational Methods in Science & Engineering, IOS Press, Amsterdam, The Netherlands*, 12 (1) 39 – 51.

* Repeated in other departments

Department of Computer Science & Engineering

1. Banerjee, S., Sanyal, G., 2012. Identification of Facial Gestures using Principal Component Analysis and Minimum Distance Classifier, *IJCA*.
2. Banerjee, I., Bhattacharyya, S., Sanyal, G., 2012. Text Steganography through Quantum Approach with SSCE Code, *International Journal of Information Processing*, 6 (3).
3. Banerjee, I., Bhattacharyya, S., Sanyal, G., 2012. Text Steganography Using Quantum Approach in Regional Language with Revised SSCE, *International Journal of Computer Network and Information Security*, 8.
4. Bhattacharjee, S., Bandyopadhyay, S., 2013. Lifetime Maximizing Dynamic Energy Efficient Routing Protocol for Multi hop Wireless Networks. *Journal on Simulation Modelling Practice and Theory*, 32 (15).
5. Bhattacharyya, S., Sanyal, G., 2012. Audio Steganalysis of LSB Audio Using Moments and Multiple Regression Model, *International Journal of Advances in Engineering & Technology*.
6. Das, R. L., Prasad, B.K., Sanyal, G., 2012. HMM based Offline Handwritten Writer Independent English Character Recognition using Global and Local Feature Extraction, *IJCA*.

7. Guhathakurta, P.K., Basu, S., Goswami, S., Bandyopadhyay, S., 2012. A New Approach on Cluster based Call Scheduling for Mobile Networks, *Journal of Advances in Information Technology*, 3 (3).
8. Hossain, A., Sanyal, G., October 2012. A New Improved Tactic to Extract Facial Expression based on Genetic Algorithm and WVDF, *International Journal of Advanced Information Technology*, 2 (5).
9. Hossain, A., Sanyal, G., 2012. Object Tracking Podium on Region Covariance for Recognition and Classification, *International Journal of Emerging Technologies in Computational and Applied Sciences*, 1 (2).
10. Hossain, A., Samanta, D., Sanyal, G., 2012. Eye Diseases Detection Based on Covariance, *International Journal of Computer Science, Information Technology & Security*, 2 (2).
11. Pradhan, A. K., Araiyeer, S., Barat, S., De, T., 2013. Efficient Multicast Routing and Wavelength Assignment Using Traffic Grooming, *International Journal of Future Computer and Communication*, 2 (3).
12. Ray, M. K., Choudhary, P., De, T., 2013. Ad hoc Wireless Sensor Positioning Approach with Energy Optimization, *Journal of Advances in Computer Networks*, 1(2).
13. Roy, S., Chakrabarti, P.P., dasgupta, P., 2012. SAT based Timing Analysis for Fixed and Rise/Fall Gate Delay Models, *Elseviers Integration: The VLSI Journal*, 45 (4).
14. Samanta, D., Sanyal, G., 2012. SAR image classification using fuzzy c-means, *International Journal of Advances in Engineering & Technology*, 4 (2).
15. Samanta, D., Sanyal, G., 2012. Classification of SAR Images based on Entropy, *International Journal of Information Technology and Computer Science*, 4 (10).
16. Samanta, D., Sanyal, G., 2012. An Approach of Segmentation Technique of SAR Images using Adaptive Thresholding Technique, *International Journal of Engineering Research and Technology*, 1 (10).
17. Samanta, D., Sanyal, G., 2012. Statistical approach for Classification of SAR Images, *International Journal of Soft Computing and Engineering*, 2 (2).
18. Sarker, G., 2012. A Back Propagation Network for Face Identification and Localization, *International Journal of Computer, Information Technology and Engineering*, 6 (1).
19. Sarker, G., 2012. An Unsupervised Learning Network for Face Identification and Localization, *International Journal of Computer, Information Technology and Engineering*, 6 (2).
20. Sarker, G., Roy, K., 2013. An RBF Network with Optimal Clustering for Face Identification, *International Research Journal*, 1 (1).
21. Shome, R., Manchanda, S., Guhathakurta, P.K., 2012. Handoff Implementation with Finite Bounce for Load Balance in Clustered Mobile Networks, *International Journal of Scientific and Engineering Research*, 3 (6).

Department of Earth and Environmental Studies

1. Chakraborty B., Adhikari K., Gangopadhyay A., 2012. Assessment of groundwater condition in and around Durgapur region, India. *Ecol. Env. & Cons.*, 18(3), 613-621.
2. Chakraborty B., Adhikari K., Sadhu K., Gangopadhyay A. 2012. Hydrochemistry of aquifers associated as a function of underground mining of Gondwana Coal: Eastern fringe of Raniganj Coalfield, India. *Int. JI. of Research in Chemistry and Environment*, 2 (4), 310-322.
3. Karmakar S., Brahmachari K., Gangopadhyay A., Roychowdhury S., 2012, Recycling of different available organic wastes through vermicomposting. *E-Journal of Chemistry*, 9(1).

4. Sadhu K., Adhikari K., Gangopadhyay A., 2012. Assessment of heavy metal contamination of soils in and around Open Cast Mines of Raniganj Area, India, *Int. JI. of Environmental Engineering Research* 1(2), 77-85.

Department of Electrical Engineering

1. Banerjee S., Bhaduri R., 2012. Performance of Classical Controllers for an Electromagnetic Levitation System- a Comparative Study. *J. Inst. Eng. India Ser. B* 93(2):91–99.
2. Bhaduri R., Banerjee S., Sarkar M.K., 2012, Genetic Algorithm Based Optimization of Controller Parameters for an Electromagnetic Levitation System, *Advanced Materials research*, Trans Tech Publications. 403-408, 3900-3908.
3. Biswas P.K., Bannerjee S. 2012, Analysis of U-I and U-U type rail and actuator used in electromagnetic levitation system using FEM Software, *International Journal of Emerging Technology and Advanced Engineering*, 2(5), 32-40.
4. Biswas P.K., Bannerjee S. 2012, ANSYS Simulation Based Comparative Study between Different Actuators and Guide-ways used in DC Electromagnetic Suspension Systems, *International Journal on Electrical Engineering and Informatics*, 4(2), 217-230.
5. Chatterjee A, Sarkar R, Roy N. K., Kumbhakar P. 2012. Online monitoring of transformers using gas sensor fabricated by nanotechnology. *European Transaction on Electrical Power*, *
6. Chatterjee A., Bhattacharjee P., Roy N.K. 2012. Mathematical model for predicting the state of health of transformers and service methodology for enhancing their life. *International Journal of Electrical Power and Energy Systems*, 43(1), 1487–1494.
7. Chatterjee A., Bhattacharjee P., Roy N.K., Kumbhakar P. 2013. Usage of nanotechnology based gas sensor for health assessment and maintenance of transformers by DGA method. *International Journal of Electrical Power and Energy Systems*, 45(1), 137-141.*
8. Goswami, Kar R., Mandal D., Ghoshal S.P. 2012. Particle Swarm Optimization with Constriction Factor and Inertia Weight Approach Based Synthesis of Concentric Circular Antenna Array with Non-isotropic Elements. *ACEEE International Journal on Communication*, 3(1), 5-9.*
9. Goswami, Kar R., Mandal D., Ghoshal S.P., Bhattacharjee A.K.. 2012. Application of Bio-Inspired Optimization Technique for Finding The Optimal set of Concentric Circular Antenna Array With Central Element Feeding. *ACEEE International Journal on Information Technology*, 2(2), 6-10.*
10. Mahato, S.N., Singh, S.P., Sharma, M.P. ?? Dynamic behavior of a single-phase self-excited induction generator using a three-phase machine feeding single-phase dynamic load, *International Journal of Electrical Power & Energy Systems*.
11. Mandal D, Iqbal Md. Asif, Kar R., Ghoshal S.P. 2012. Non-Uniform Concentric Circular Antenna Array Design Using IPSO Technique for Side Lobe Reduction. *Procedia Technology*, 6, 856 – 863.*
12. Mandal D, Kumar H., Kar R., Ghoshal S.P. 2012. Thinned Concentric Circular Antenna Array Synthesis using Particle Swarm Optimization. *Procedia Technology*, 6, 848 – 855.*
13. Mandal S., Mukherjee P., Sengupta D., Kar R., Mandal D., Ghoshal S. P. 2012. Design of Optimal Linear Phase FIR High Pass Filter using Improved Particle Swarm Optimization. *ACEEE International Journal on Signal & Image Processing*, 3(1), 5-9.
14. Mondal S., Ghoshal S.P., Kar R., Mandal D. 2012. Design of Optimal Linear Phase FIR High Pass Filter using Crazyness based Particle Swarm Optimization Technique. *Journal of King Saud University – Computer and Information Sciences*, Elsevier, 24, 83–92.*
15. Mondal S., Ghoshal S.P., Kar R., Mandal D. 2012. Differential Evolution with Wavelet Mutation in Digital FIR Filter Design. *Journal of Optimization Theory and Applications*, 155(1), 315–324.*

16. Mondal S., Ghoshal S.P., Kar R., Mandal D. 2012. Optimal Linear Phase FIR Low Pass Filter Design using Crazyness based Particle Swarm Optimization Algorithm. *Journal of Electrical Engineering*, 12(1).*
17. Mondal S., Ghoshal S.P., Kar R., Mandal, D. 2012. Crazyness based Particle Swarm Optimization Algorithm for FIR Band Stop Filter Design. *Journal of Swarm and Evolutionary optimization*, 7, 58-64.*
18. Mondal S., Ghoshal S.P., Kar R., Mandal, D. 2012. Novel Particle Swarm Optimization for Low Pass FIR Filter Design. *WSEAS Transaction on signal processing*, 8(3), 111-120.*
19. Saha S., Kar R., Mandal D., Ghoshal S.P. 2012. IIR Filter design with Crazyness based Particle Swarm Optimization Technique. *International Journal of Electrical and Electronics Engineering*, 6, 74-81.*
20. Saha S.K., Ghoshal S. P. , Kar R., Mandal D. 2012. Improved Particle Swarm Optimization with Wavelet Mutation: Application to Linear Phase FIR Filter Design. *International Journal of Hybrid intelligent Systems (IJHIS)*, 9(4), 211-227.*
21. Saha S.K., Kar R., Mandal D., Ghoshal S.P. 2012. A novel seeker optimization algorithm: application to the design of linear phase FIR filter. *IET Signal Process*, 6(8), 763–771.*
22. Saha S.K., Kar R., Mandal D., Ghoshal S.P. 2012. Optimal IIR Filter Design using Novel Particle Swarm Optimization Technique. *NAUN International journal of circuits, systems and signal processing*, 6(2),151-162.*
23. Saha S.K., Kar R., Mandal D., Mukherjee, V., Ghoshal, S.P. 2013. "IIR system identification using opposition-based BAT", *International Journal on Bio-Inspired Computing*, 5(2) 99-132.*
24. Saha S.K., Kar R., Mandal D., Ghoshal S.P. 2012. Bacteria Foraging Optimization Algorithm for Optimal FIR Filter Design. *International Journal on Bio-Inspired Computing*, 5(1) 52-66.*
25. Sarkar M.K, Banerjee S., Ghoshal S.P., Saha T.K., 2012, Adaptive Fuzzy gain scheduling scheme for GSA based sub-optimal PID and Lag-Lead control of a DC attraction type levitation system, *Int. Journal of Automation and Control*, 6 (2), 174-192.
26. Vasundhara, Mandal D., Kar R., Ghoshal S.P., "Digital FIR Filter Design Using Hybrid Random Particle Swarm Optimization with Differential Evolution," *International Journal of Computational Intelligence Systems*.

* Repeated in other departments

Department of Electronics and Communication Engineering

1. Agarwal, P., Yadav, H., Maheshwari, V., Sharma, S., Kar, R., 2012. Analytical Delay Metric For On-Chip RLCG Interconnect For Generalised Input, *Journal of Electron Devices*, 16, 1315-1320.
2. Ahmad, A., Behera, A. K., Mandal, S. K., Mahanti, G. K., Ghatak, R., 2013. Synthesis of Flat Top Power Pattern in Linear Antenna Arrays using Differential Evolution Algorithm, *International Journal of Electronics and Communication Technology (IJECT)*,4, Spl. Issue – 1, 197-199.
3. Bandyopadhyay, P. K., Biswas, A., Bandyopadhyay, P. K., Mandal, D., Kar, R., 2013. FPGA based high frequency noise elimination system from speech signal using Xilinx system generator, *Journal of Electron Devices*, 17, 1423-1426.
4. Bandyopadhyay, S., Chatla, A. B., Maji, B., 2012. Antenna Array Synthesis by Implementing Non – Uniform Spacing Using Tsukamoto Fuzzy Logic Controller, *IRNet Transactions on Computer Science and Engineering*, 1(1), 117-123.
5. Bandyopadhyay, S., Mistri, H., Chattopadhyay, P., Maji, B., 2013. Antenna Array Side Lobe reduction by Implementing Non- Uniform Amplitude Using Tsukamoto Fuzzy Logic Controller, *International Journal of Electronics and Communication Engineering Technology (IJECT)*, 4, 58-61.

6. Basu, B., Mahanti, G. K., 2012. Thinning of concentric two-ring circular array antenna using fire fly algorithm, *Scientia Iranica, Transactions D: Computer Science & Engineering and Electrical Engineering*, 19(6), 1802-1809.
7. Basu, B., Mahanti, G.K., 2012. Beam reconfiguration of linear array of parallel dipole antennas through switching with real excitation voltage distribution, *Annals of Telecommunication*, 67(5-6), 285-293.
8. Behera, A. K., Ahmad, A., Mandal, S. K., Mahanti, G. K., Ghatak, R., 2013. Differential Evolutionary Algorithm for Synthesizing Sum and Difference Pattern in Linear Antenna Arrays with Reduced Design Cost of Feed Network, *International Journal of Electronics and Communication Technology (IJECT)*,4, Spl. Issue – 1, 200-202.
9. Bhowmick, A., Roy, S. D., Kundu, S., 2012. Performance of Spectrum Sensing Scheme Using Double Threshold, *International Journal of Energy, Information and Communications IJEIC, SERSC* , 3(2), 75-84.
10. Chakraborty, M., Adhikary, R, Karmakar, P., Kandar, D., Maji, B.. 2012. Design of Demonstrator of an Adaptive Steerable Antenna System For Removal of Interference, Clutter, Jammer Based on AWG & VSA, *International Journal of Engineering Science and Technology (IJEST)*, 4, No.10, 4367-4372.
11. Chandra, A., Bose, C., 2012. Series solutions for $\pi/4$ -DQPSK BER with MRC, *International Journal of Electronics (Taylor & Francis)*, 99(3), 391-416.
12. Chandra, A., Bose, C., Bose, M. K., 2012. Performance of order-L post detection switch and examine combiner in Hoyt fading, *IEICE Communications Express*, 1(3), 131-136.
13. Chandra, A., Bose, C., Bose, M. K., 2012. Symbol error probability of non-coherent M-ary frequency shift keying with postdetection selection and switched combining over Hoyt fading channel, *IET Communications (IET)*, 6(12), 1692-1701.
14. Chandra, A., Bose, C., Bose, M. K., 2013. Performance of non-coherent MFSK with selection and switched diversity over Hoyt fading channel, *Wireless Personal Communications*, 68(2), 379-399.
15. Chatterjee, A., Mahanti, G. K., Chatterjee, A., 2012. Design of A Fully Digital Controlled Reconfigurable Switched Beam Concentric Ring Array Antenna Using Firefly and Particle Swarm Optimization Algorithm, *Progress In Electromagnetics Research B*, 36, 113-131.
16. Chatterjee, A., Mahanti, G. K., Mahato, B. C., 2012. Side lobe reduction of a scanned and broadside central element fed concentric ring array antenna with fixed first null beamwidth using novel particle swarm optimization, *International Journal of Signal and Imaging Systems Engineering, Inderscience*, 5(4), 290 - 294.
17. Chatterjee, A., Mahanti, G.K., 2012. Differential Evolution and Genetic Algorithm for Side lobe Reduction of A Concentric Ring Array Antenna by Radial Variation of Amplitudes With Fixed and Variable First Null Beamwidth, *International Journal on Electrical Engineering and Informatics*, 4(1), 1-14.
18. Chhotray, S. K., Maheshwari, V., Bansal, A., Kar, R., Mandal, D., Bhattacharjee, A. K., 2012. Crosstalk aware Bandwidth Modelling for VLSI RC Global Interconnects using $2-\pi$ Model, *Procedia Technology*, 6, 832 – 839.
19. De, A., Bhattacharjee, A. K., Chanda, C. K., Maji, B., 2012. Entropy Maximization, Stationary Wavelet and DCT based Segmentation, De-noising and Progressive Transmission Technique for Diseased MRI Images, *Applied Mechanics and Materials*, 197, 229-234.
20. De, A., Bhattacharjee, A.K., Chanda, C. K., Maji, B., 2012. Hybrid Particle Swarm Optimization with Wavelet Mutation based Segmentation and Progressive Transmission Technique for MRI Images, *International Journal of Innovative Computing, Information and Control*, 8(7), 5179 - 5197.
21. Dhar Roy, S., Kundu, S., Ferrari, G., Raheli, R., 2012. Cognitive Radio CDMA Networking with Spectrum Sensing, *International Journal of Communication Systems (IJCS)*, DOI: 10.1002/dac.2421.

22. Goswami, B., Kar, R., Mandal, D., Ghoshal, S. P., 2012. Particle Swarm Optimization with Constriction Factor and Inertia Weight Approach Based Synthesis of Concentric Circular Antenna Array with Non-isotropic Elements, *ACEEE International Journal on Communication*, 3(1), 5-9.*
23. Goswami, B., Kar, R., Mandal, D., Ghoshal, S. P., Bhattacharjee A. K., 2012. Application of Bio-Inspired Optimization Technique for Finding The Optimal set of Concentric Circular Antenna Array With Central Element Feeding, *ACEEE International Journal on Information Technology*, 2(2), 6-10.*
24. Kandar, D., Kalpana, R. A., Revathy, J., Prasana, S. P., Chakraborty, M., Guchhait, A., Maji, B., 2012. Development of MIMO – WIMAX based Communication System for Transportation Network, *International Journal of Information Technology & Knowledge Management (IJITKM)*, 5(2), 357-359.
25. Kandar, D., Prasana, S. P., Revathy, J., Kalpana, R. A., Guchhait, A., Adhikari, A., Maji, B., 2012. Intelligent Clutter Rejection for Vehicular RADAR, *International Journal of Information Technology & Knowledge Management*, 5(II), 353-356.
26. Kumar, B., Maheshwari, V., Dhukariya, D. C., Kar, R., 2013. Analytical modeling of crosstalk noise and delay for high speed on-chip global RLC VLSI interconnects, *Journal of Electron Devices*, 17, 1452-1456.
27. Maheshwari, V., Gupta, S., Kar, R., Mandal, D., Bhattacharjee, A. K. 2012. Modelling of Crosstalk and Delay for Distributed RLCG On-Chip Interconnects For Ramp Input, *ACEEE International Journal on Information Technology*, 2(2), 1 - 5.
28. Maheshwari, V., Gupta, S., Satyanarayan, V., Kar, R., Mandal, D., Bhattacharjee, A. K., 2012. Estimation of RC Global Interconnect Slew in 0.18 μ m Technology using Inverse Gamma Distribution Function, *International Journal of Information and Electronics Engineering (IJIEE)*, Singapore, 2(2), 264-268.
29. Maheshwari, V., Gupta, S., Satyanarayana, V., Kar, R., Mandal, D., Bhattacharjee, A. K., 2012. Inverse Gamma Distribution based Delay and Slew Modelling for On- Chip VLSI RC Interconnect for Arbitrary Ramp Input, *ACEEE International Journal on Control System and Instrumentation*, 3(2), 31 - 34.
30. Maheshwari, V., Kar, R., Mandal, D., Bhattacharjee, A. K., 2012. Delay Metric for On-Chip RLCG Coupled Interconnects for Ramp input, *Journal of Electronic Devices*, 14, 1122-1127.
31. Maheshwari, V., Singh, J., Sharma, R. P., Pathak, S., Kar, R., 2012. An Explicit Approach for Delay Evaluation for On-Chip RC Interconnects using Beta Distribution Function using Three Moments, *IUP Journal of Electrical and Electronics Engineering*.
32. Mandal, D., Iqbal, Md. A., Kar, R., Ghoshal, S. P., 2012. Non-Uniform Concentric Circular Antenna Array Design Using IPSO Technique for Side Lobe Reduction, *Procedia Technology*, 6, 856 – 863.*
33. Mandal, D., Kumar, H., Kar, R., Ghoshal, S. P., 2012. Thinned Concentric Circular Antenna Array Synthesis using Particle Swarm Optimization, *Procedia Technology*, 6, 848 – 855.*
34. Mandal, R., Mandal, S. K., Ghatak, R., Mahanti, G. K., 2013. Reduction of Side Lobe Level and Sideband Level in Uniformly Excited Time-Modulated Planar Arrays using Differential Evolution Algorithm, *International Journal of Electronics and Communication Technology (IJECT)*, 4, Spl. Issu – 1, 203-206.
35. Mandal, S. K., Mahanti, G. K., and Ghatak, R., 2013. Differential evolution algorithm for optimizing the conflicting parameters in time-modulated linear array antennas, *Progress In Electromagnetics Research B*, 51, 101-118.
36. Mondal, S., Ghoshal, S. P., Kar, R., Mandal, D., 2012. Crazyness based Particle Swarm Optimization Algorithm for FIR Band Stop Filter Design, *Journal of Swarm and Evolutionary optimization*, 7, 58 - 64.*

37. Mondal, S., Ghoshal, S. P., Kar, R., Mandal, D., 2012. Design of Optimal Linear Phase FIR High Pass Filter using Craziness based Particle Swarm Optimization Technique Journal of King Saud University – Computer and Information Sciences, 24, 83–92.*
38. Mondal, S., Ghoshal, S. P., Kar, R., Mandal, D., 2012. Differential Evolution with Wavelet Mutation in Digital FIR Filter Design, Journal of Optimization Theory and Applications, 155(1), 315–324. *
39. Mondal, S., Ghoshal, S. P., Kar, R., Mandal, D., 2012. Novel Particle Swarm Optimization for Low Pass FIR Filter Design, WSEAS Transaction on signal processing, 8(3), 111-120.*
40. Mondal, S., Ghoshal, S. P., Kar, R., Mandal, D., 2012. Optimal Linear Phase FIR Low Pass Filter Design using Craziness based Particle Swarm Optimization Algorithm, Journal of Electrical Engineering, 12(1).*
41. Mukherjee, S., Maheshwari, V., Kar, R., Mandal, D., Bhattacharjee, A. K., 2012. Analytical Crosstalk Modelling of On-Chip RLC Global Interconnects with Skin Effect for Ramp Input, Procedia Technology, 6, 814 – 821.
42. Nallagonda, S., Dhar Roy, S., Kundu, S., 2012. Performance Evaluation of Cooperative Spectrum Sensing Scheme with Censoring of Cognitive Radios in Rayleigh Fading Channel, Wireless Personal Communications, DOI 10.1007/s11277-012-0756-6.
43. Nallagonda, S., Dhar Roy, S., Kundu, S., 2012. Performance of Cooperative Spectrum Sensing in Log-normal Shadowing and Fading under Fusion rules, International Journal of Energy, Information and Communications IJEIC, SERSC, 3(3).
44. Panda, S., Banerjee, A., Maji, B., Mukhopadhyay, A. K., 2012. Power and delay Comparison in between Different types of Full Adder Circuits, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), 1(3), 168-172.
45. Panda, S., Bhadra, S., Maji, B., Mukhopadhyay, A. K., 2012. Comparative study of Power, Delay and Noise of Logic Gates between CMOS and GaAs MESFET, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), 1(1), 7-10.
46. Panda, S., Dash, S., Maji, B., Mukhopadhyay, A. K., 2012. Comparative Thermal Noise Analysis of Double Gate MOSFET Using Si and GaAs substrate and SiO₂, Si₃N₄ – SiO₂, SiO₂ – Al₂O₃ as Oxide Layer, International Journal of Research and Reviews in Computer Science(IJRRCS), 3(3), 1616-1621.
47. Panda, S., Maji, B., Mukhopadhyay, A. K., 2012. Study of Influence of Channel Length Variation in Nano Range on Power & Delay of 3T DRAM Cell, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), 1(2), 60-63.
48. Panda, S., Maji, B., Mukhopadhyay, A. K., 2012. Thermal Noise Modelling & Analysis of SG MOSFET, International Journal of Emerging Technology and Advanced Engineering (IJETA), 2(11).
49. Rajkumar, P., Kar, R., Bhattacharjee, A. K., Dharmasa, H., 2012. A Comparative Analysis of Steganographic Data Hiding within digital Images, International Journal of Computer Applications, 53 (1), 1-6.
50. Saha, S. K., Ghoshal, S. P., Kar, R., Mandal, D., 2012. Improved Particle Swarm Optimization with Wavelet Mutation: Application to Linear Phase FIR Filter Design, International Journal of Hybrid intelligent Systems (IJHIS), 9(4), 211-227.*
51. Saha, S. K., Kar, R., Mandal, D., Ghoshal, S. P., 2012. A novel seeker optimization algorithm: application to the design of linear phase FIR filter, IET Signal Process, 6(8), 763–771.*
52. Saha, S. K., Kar, R., Mandal, D., Ghoshal, S. P., 2013. Bacteria Foraging Optimization Algorithm for Optimal FIR Filter Design, International Journal on Bio-Inspired Computing, 5(1), 52-66.*

53. Saha, S. K., Kar, R., Mandal, D., Mukherjee, V., Ghoshal, S. P., 2013. IIR system identification using opposition-based BAT, *International Journal on Bio-Inspired Computing*, 5(2), 99-132.*
54. Saha, S., Kar, R., Mandal, D., Ghoshal, S. P., 2012. IIR Filter design with Crazyness based Particle Swarm Optimization Technique, *International Journal of Electrical and Electronics Engineering*, 6, 74-81.*
55. Saha, S.K., Kar, R., Mandal, D., Ghoshal, S. P., 2012. Optimal IIR Filter Design using Novel Particle Swarm Optimization Technique, *NAUN International journal of circuits, systems and signal processing*, 6(2), 151-162.*
56. Saheb, S. M., Bhattacharjee, A. K., Dharmasa, Kar, R., 2013. An Integrated Approach to Enhance TCP Fairness in HCCA Scheduler for 802.11e Wireless LANs, *Journal of Advances in Information Technology*, 4(1), 51-57.
57. Saheb, S. M., Kar, R., Bhattacharjee, A. K., Dharmasa, H., 2012. An enhanced HCCA based adaptive scheduler for delay sensitive traffic in IEEE 802.11e networks, *IET Networks*, UK, 1(4), 281-288.
58. Sha, R., Ghatak, R, and Mahapatra, R., 2013. Impact of beam thickness and air gap on the performance of cantilever MEMS switch, *IJECT*, 4 207.
59. Spargo, C., Furnival, B., Mahapatra, R., Goss, J., Wright, N., Horsfall, A., 2012. Identification of slow states at the SiO₂/SiC interface through sub-bandgap illumination, *Materials Science Forum*, 801, 717-720.

* Repeated in other departments

Department of Humanities & Social Sciences

1. Chakraborty, T., Banerjee, J., 2012. Gender, Race and Ethnicity in Indo English Fiction, *Humanities and Social Sciences Review*, 1(3).
2. Chakraborty, T., Banerjee, J., 2012. Myth folklore and socio cultural ethos in the novels of Shashi Deshpande, *Folklore and Transformative Reflections, Assumptions and Resumptions of Indian Writers in English*, 306-329.
3. Chattaraj (Chakraborty), T., Banerjee, J., 2012. Indian Culture and Language: The Globally Reputed Phenomena, *The Asian Conference on Language Learning Osaka, Japan*, 109-117.
4. Chakravartula, C. M., Sengupta, P. P., 2012. Internal Marketing in E-business Environment: A Managerial Communication Perspective, *International Journal of Work Innovation*.
5. Guha Roy, S., Banerjee, J., 2012. The War of the Worlds in Jhumpa Lahiri's A Temporary Matter, *Muse India*, 43.
6. Guha Roy, S., Banerjee, J., 2012. Conflicting Facets in Jhumpa Lahiri's Story Unaccustomed Earth, *Journal of Teaching and Research in English Literature*, IV(1).
7. Guha Roy, S., Banerjee, J., 2012. Conflicting ideas in The God of Small Things, Arundhati Roy's 'The God of Small Things', *Roman Critical Context Series*, 23-32.
8. Hazra, S., Sengupta, P. P., 2012. Heritage Tourism: Exploring the Opportunity of Mining Areas—A Case Study of Jharkhand, India, *AJRSH*, 2(5).
9. Hazra, S., Sengupta, P. P., 2012. Cultural Diversity and Its Impact on Jharkhand's Socio-Economic Development, *Asian Journal of Multi-disciplinary Research*, 1(3).
10. Hazra, S., Sengupta, P. P., 2013. Mining Heritage Tourism and Its Impact on Economic Development:

A Study of Jharkhand, India, South Asian Academic Research Journal.

11. Mandal, A., Modak, A., 2013. The Waste Land—Eliot's magnum opus—a Janus, Contemporary Discourse, 4(2).
12. Mandal, A., Modak, A., 2013. The Love Song of J. Alfred Prufrock: A Postmodern Poem with a Postmodern Hero, The Criterion, 4(1).
13. Mukherjee, A., Modak, A., 2012. Etruscan Places—A New Dimension in Travel Literature, Contemporary Discourse, 3(2).
14. Mukherjee, M., Sengupta, P. P., 2012. An Analysis of the Newspaper Publishing Industry—Can It Survive the Onslaught of the Digital Media? Zenith International Journal of Business Economics and Management Research, 2(12).
15. Rai, S. K., Gupta, P., Autumn 2011-Spring 2012. Origin of 'inner-diaspora' in Corporate Culture (With special reference to Bhou and One Night@Call Center), Impressions of Eternity, 3(4).
16. Rai, S. K., Gupta, P. 2012. Salman Rushdie's Shame: A Postcolonial Study, International Journal on Multicultural Literature (IJML), 2(2).

Department of Information Technology

1. Babu Ramesh, T. K., Jana, N. D., 2012. An Optimized way for Static Channel Allocation in Mobile Networks using Genetic Algorithms, International Journal of Computer Applications, 45(19), 48-52.
2. Choudhury, S., Nair, V., Mal, A. K., 2012. Routing scheme for OBS networks, IEEE/OSA Journal of Optical Communication and Networking, 4(10), 799-811.
3. Das, D., Kundu, A., Talluri, P., 2012. Simulation of a Swarm Based Painting Algorithm, International Journal on Advanced Computing, Scientific and Engineering Research, IJSER, 3(6).
4. Dutta, A., Dasgupta, R., Bhattacharya, S., 2012. Modelling of VoIP Based Tele Teaching System: A Petri Net Based Approach, International Journal of Computer Science Issues. 9(5), 152-163.
5. Dutta, A., Pal, K., Dasgupta, R., Bhattacharya, S., 2012. Multipoint Multimedia Synchronization: A Petri Net Based Approach, INFOCOMP Journal of Computer Science, 11(2), 28-42.
6. Dutta, S., Choudhury, S., Dutta, A., 2012. A Survey of Multicasting in Optical Burst Switched Networks: Future Research Directions, International Journal of Computer Applications, 42(4), 37-41.
7. Dutta, S., Choudhury, S., Dutta, A., 2012. Cost-Throughput Analysis of a Modified TCP for Optical Burst Switched Networks, International Journal of Computer Applications, Year: 2012, 60(16), 1-7.
8. Jha, M. K., Pakhira, D., Chakraborty, B., 2013. Diabetes Detection and Care Applying CBR Techniques, International Journal of Soft computing and Engineering, 2(6).
9. Mandal, M. K., Dutta Banik, G., Chattopadhyay, D., Nandi, D. 2012. An Image Encryption Process based on Chaotic Logistic Map, IETE Technical Review, 29(5).
10. Mukhopadhyay, S., Ghosh, D., Debnath, N. C. 2012. A study of ticket marketing for selling multiple tickets in Dynamic environment us-ing online mechanism Design, IFRSA's International Journal of Computing (IJC), 2(4), 755–766.
11. Mukhopadhyay, S., Ghosh, D., Debnath, N. C., 2012. A new framework for an efficient ticket booking scheme based on mechanism design, Journal of Computational Methods in Science and Engineering (JCMSE), 12, 13–27.

12. Mukhopadhyay, S., Ghosh, D., Debnath, N. C., 2013. An online strategyproof mechanism for dynamic spectrum allocation in Cognitive Radios, International Journal of mobile and Adhoc Network. (IJMAN), 3(1).
13. Sudip, R., Mitra, D., Bhattacharya, B. B., Chakrabarty, K., 2012. Congestion-aware Layout Design for High-throughput Digital Microfluidic Biochips, ACM Journal of Emerging Technologies in Computing, 8(3), 17:1-17:23.
14. Upadhyay, P. D., Dutta, A., 2012. A Conceptual Graph Petri Net Model based Multi Agent System, International Journal of Computer Applications, Published by Foundation of Computer Science, New York, USA ,45(12), 10-17.

Department of Management Studies

1. Banerjee, M., Banerjee, N., 2012. An empirical study on factors influencing consumers' trust in E-tailers – evidence from India, International Journal of Business and Social Research, 2 (7), 46 – 61.
2. Banerjee, N., Sah, S., 2012. A Comparative Study of Customers' Perceptions of Service Quality Dimensions between Public and Private Banks in India, International Journal of Business Administration, 3 (5), 33-44.
3. Bhattacharyya, S., Bandyopadhyay, G., 2012. Urban Local Bodies in India: Financial Control For Better Financial Performance, Theoretical and Empirical Research in Urban management, 7(3), 24.
4. Bhattacharyya, S., Bandyopadhyay, G., 2012. Financial Management and Control for Small Indian Urban Local Bodies, IMFO, pp. 14.
5. Bhattacharyya, S., Bandyopadhyay G., 2012. Urban Local Bodies in India-Service Level benchmarking, IMFO, Summer 2012, pp.12.
6. Bhattacharyya, S., Bandyopadhyay, G., Expenditure and Budgetary Control in Urban Local bodies in India – Developing Prism Model, International Journal of Government Financial Management, pp.16.
7. Chakraborty, S., Roy, M., Pal, P., 2013. Removal of Fluoride from Contaminated Groundwater by Cross flow Nanofiltration: Transport modeling and Economic evaluation, Elsevier Science, 313, 115-124.*
8. Datta, S., Dutta, A., Choudhury, S., 2012. Cost-Throughput Analysis of a Modified TCP for Optical Burst Switched Networks, International Journal of Computer Applications, Published by Foundation of Computer Science, New York, USA. ISBN: 973-93-80871-06-4, 60(16), 1-7.
9. Dinkar, Bandyopadhyay, G., Mukherjee, R.N. 2012. Role of Manpower in IT Companies, Journal of Business Studies Quarterly (JBSQ), 4(2), 28-60.
10. Dutta, A., Bandyopadhyay, G., Sengupta, S., 2012. Prediction of Stock Performance in the Indian Stock Market Using Logistic Regression, 7 (1), 105-136
11. Mandal, K., Banerjee, C., 2012. An Empirical Identification of Performance gap in engineering education program from the perspective of Stakeholder, International Journal of Trade, Economics & Finance, August, 3(4), 281-292.
12. Mandal, K., Banerjee, C., 2012. Hospitality Management Education: A study based on exploratory factor analysis,SAJOSPS, 12(2), 89-94.

13. Mandal, K., Roy, K., 2012. A study on effect of Industry Type & Perception of Power in Distribution Channel using Randomized Block Design, *International Journal of Trade, Economics & Finance*, 3(3), 233-238.
14. Nandi Majumdar, M., Dutta, A., 2012. Influence of Strategic Reward Systems on Job Performance: An Investigative Study on Indian Telecom Sector, *Review of HRM*, 1(3), 158-177.
15. Nandi Majumdar, M., Dutta, A., 2012. An impact of QWL on Job Performance-A Case study on Indian Telecom Industry, *International Journal of Arts & Sciences* 6 (5) Page 655-675.
16. Roy, M., Chakraborty, S., 2013. Developing a sustainable water resource management strategy for a fluoride-affected area: a contingent valuation approach, *Journal of Clean Technology and Environmental Policy*, (DOI) 10.1007/s10098-013-0624-4.
17. Siddhanta, S., Banerjee, N., 2012. An Econometric Measurement of the Impact of Marketing Communication on Sales in the Indian Cement Industry, *European Journal of Business and Management*, 4 (8), 65 – 75.

* Repeated in other departments

Department of Mathematics

1. Basu, M., Ghosh, D. K., Bagchi, S., 2012. Another Construction of Resolvable Designs of Order p^2 , *South Asian Journal of Mathematics*, 2, 201-204.
2. Bhowmick, S. K., Pal, P., Roy P. K., Dana, S. K., 2012. Lag synchronization and scaling of chaotic attractor in coupled system, *Chaos* 22, 023151.
3. Chen, X. Kar, S., Ralescu, D. A. 2012. Cross entropy measure of uncertain variables, *Information Sciences*, 201, 53-60.
4. Choudhury, P., Pal, A., Gupchup, A., Budholiya, K., 2012. A Game Theoretic Approach to Thwart Selfishness Attack in MANET, *Advanced Materials Research*, 433-440, 3944-3948.
5. Das, A., Banerjee, D. K., Basu, K., 2012. Model E-Learning Web Portal Targeting to Enhance GER of Higher Education in West Bengal, *International Journal of Information and Education Technology (IJET)*, 2(1), 43-47.
6. Das, D., Kar, M. B., Roy, A., Kar, S., 2012. Two-warehouse production model for deteriorating inventory items with stock-dependent demand under inflation over a random planning horizon, *Central European Journal of Operations Research*, 20(2), 251-280.
7. Das, D., Roy, A., Kar, S., 2012. A multi-item inventory model for two-stage production system with imperfect processes using Differential evolution and Credibility measure, *International Journal of Operations Research*, 9(2), 87-99.
8. Ghosh, D. Pal, A., 2012. Using Fuzzy cognitive maps and Fuzzy relation equation to estimate the peak hours of the day for transport systems, *CIIT International journal of Fuzzy systems (ISSN 0974-9721)*, 4(2), 64-70.
9. Ghosh, D., Dey, L.K., 2013. A new upper bound on the parameters of quasi-symmetric designs, *Information Processing Letters*, 113, 444-446.

10. Jaiswal, J. K., Dey, A., Pal, A., 2013. Fuzzy graphs in fuzzy automata models, International Journal of Engineering. Science and Mathematics(IJESM) ISSN: 2320-0294, 2(1), 22-40.
11. Kar, M. B., Kar, S., 2012. A multi-item inventory model with random replenishment intervals, fuzzy costs and resources under Possibility and Necessity Measure, Turkish Journal of Fuzzy Systems, 3(2), 81-97.
12. Khan, N., Pal, M., Pal A., 2012. L(2,1)-Labelling of Cactus Graphs. Mapana J. Sci., 11(4), 15-43.
13. Kundu, P., Kar, S., Maiti M., 2013. Multi-objective multi-item solid transportation problem in fuzzy environment, Applied Mathematical Modeling, 37, 2028-2038.
14. Kundu, P., Kar, S., Maiti, M., 2012. Multi-objective solid transportation problems with budget constraint in uncertain environment, International Journal of System Sciences, 10.1080/00207721/2012.748944.
15. Mukherjee, S., Basu, K., 2012. Solution of a class of Intuitionistic Fuzzy Assignment problem by using similarity measures, Knowledge-Based Systems, 27, 170-179.
16. Mukherjee, S., Kar, S., 2012. Application of Fuzzy mathematics and grey systems in education, Journal of King Saud University – Computer and Information Sciences, 24, 157-163.
17. Nandi, P. K., Gorain, G. C., Kar, S., 2012. A note on stability of longitudinal vibrations of an inhomogeneous beam, Applied Mathematics, 3(1), 19-23.
18. Nandi, P. K., Gorain, G. C., Kar, S., 2012. Boundary stabilization of torsional vibration of a solar panel, Application of Applied Mathematics, 7 (1), 455-463.
19. Padmavathi, N., Rizwan, S. M., Pal, A., Taneja, G., 2013. Probabilistic analysis of an evaporator of a desalination plant with priority for repair over maintenance, International Journal of Scientific and statistical computing (IJSSC), 4(1).
20. Padmavathi, N., Rizwan S. M., Pal, A., Taneja, G., 2012. Reliability Analysis of an Evaporator of a desalination plant with online repair and emergency shutdowns, Aryabhatta Journal of Mathematics and Informatics, 4(1), 1-12.
21. Pal P., Kumar, K., 2012. Role of uniform horizontal magnetic field on convective flow, Eur. Phys. J. B 85: 201.
22. Pal, A., Pal, A., Choudhury, P., 2012. Mitigating black hole attacks in AODV routing protocol using Dynamic Graph, Mapana J. Sci., 11(4), 65-77.*
23. Pal, P., Kumar, K., Maiti, P., Dana, S. K., 2013. Pattern dynamics near inverse homoclinic bifurcation in fluids, Phys. Rev. E 87, 023001.
24. Panigrahi, G., Ghosh, B., Basu, K., 2012. A Two Way Assessment of Tourism Websites to Increase Their Effectiveness, Journal of Hospitality Management and Tourism 3(4), 64-68.
25. Pathak, S., Kar, S., Mondal, S. S., 2012. Fuzzy production inventory model for deteriorating items with shortages under the effect of time dependent learning and forgetting: A possibility/necessity approach, OPSEARCH, 10.1007/s12597-012-0102-5.
26. Paul, S., Pal, M., Pal, A., 2013. An Efficient algorithm to solve L(0,1)-Labelling problem on Interval Graphs, Advance Modeling and Optimization, 15(1), 31-43.

27. Saha, A., Roy, A., Kar, S., Maiti, M., 2012. Multi-item two storage inventory models for breakable items with fuzzy cost and resources based on different defuzzification techniques, *OPSEARCH*, 49(2), 169-190.

* Repeated in other departments

Department of Mechanical Engineering

1. Adhwarjee D. K., Banerjee N., Majumder M. C., Nandan M., 2012. The Assembly Line Balancing Problem and its Solution Using "C" Language. *International Journal of Engineering Science and Technology (IJEST)*, Vol. 4 No.08: 3709-3711.
2. Agarwal S., Mahapatra A., Roy S. S., 2012. "Dynamics and Optimal Feet Force Distributions of a Realistic Four-legged Robot", *International Journal of Robotics and Automation*, Vol. 1 (4), 223-234.
3. Banerji D, Ray R, Basu J, Basak I, 2012. Autonomous Navigation by Robust Scan Matching Technique, *Intl JI of Innovative Technology and Creative Engineering*, V2, n10, 8-13.
4. Bhattacharya C., Banerjee N., Sarkar S. K., 2013. Economics of Removal of Coal Moisture in Thermal Power Generation with Waste Heat Recovery. *International Journal of Engineering Technology and Advanced Engineering Volume 3, Special Issue 3: ICERTSD2013*, 22-28.
5. Biswas A. K., Raman A. K., Mullick A. N., 2012. A Numerical Simulation of Turbulent Flow through a Curved Duct, *Mapana Journal of Sciences*, Vol. 11, No. 3, 169 – 178.
6. Biswas A. K., Sinha P. K., Mullick A. N., Majumdar B., 2012. CFD Investigation through a Constant Area Curved Duct, *International Review of Mechanical Engineering*, Vol. 6, No. 7, 1654 – 1660.
7. Biswas A. K., Sinha P. K., Mullick A. N., Majumdar B., 2012. Flow Investigation in a Constant Area Curved Duct, *International Journal of Engineering Research and Applications*, Vol. 2, Issue 6, 1232 – 1236.
8. Chatterjee A., Mahapatra A., Majumder S., Bsak I. 2012. Trajectory based Recovery of Index Finger Articulated Pose during Palmar Grasp. *Intl JI of Computer Applications*.V 49, n 14, 6-12.
9. De J., Banerjee N., 2012. Analysis, Modelling and Simulation of Machine Tool Feed Axis Drive, *Caledonian Journal of Engineering*, Jan-June 2012, 22-28.
10. Karmakar, S., Kolar, A.K., 2013. Thermodynamic analysis of high-ash coal-fired power plant with carbon dioxide capture, *International Journal of Energy Reserch* 37(6), 512-526.
11. Mitra A. Banerjee N., Khalane H. A., Sonawane M. A., Joshi D. R., Bagul G.R., Simulation and Analysis of Full Car Model for various Road profile on a analytically validated MATLAB/SIMULINK model. *IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE)* 22-33.
12. Mohammad Imtiyaz Ahmed, Biswas D.K., Roy S.S., 2012. Gait Analysis of Eight Legged Robot, *International Journal of Mechanical and Industrial Engineering*, Vol. 2 (1), 65-72.
13. Pramanik S., Das, M.K., 2013. Numerical characterization of a planar turbulent offset jet over an oblique wall, *Computers & Fluids*, 77: 36–55.
14. Pramanik, S., Das, M. K., 2012. Numerical simulation of a turbulent confined slot impinging jet. *Ind. & Engg. Chem. Research*, 51: 9153–9163.

15. Roy S. S., 2012. Modelling and Prediction of Surface Roughness in End Milling Operation using Adaptive Neuro-Fuzzy Inference System, International Journal of Engineering Systems Modelling and Simulation, Vol. 4 (3), 145-154.
16. Roy S.S., Pratihari D.K., 2013. Adaptive Neuro-Fuzzy Expert Systems for Predicting Specific Energy Consumption and Energy Stability Margin in Crab Walking of Six-legged Robots, Journal of Intelligent and Fuzzy Systems, Vol. 24, 467-482.
17. Roy S.S., Pratihari D.K., 2013. Dynamic Modeling, Stability and Energy Consumption Analysis of a Realistic Six-legged Walking Robot, Robotics and Computer Integrated Manufacturing, Vol. 29 (2), 400-416.
18. Sinha P.K., Mullick A.N., Halder B., Majumdar B., 2012. Computational Investigation of Performance Characteristics in a C-shaped Diffusing Duct, International Journal of Advances in Engineering and Technology, Vol. 3, Issue 1, 129 – 136.

Department of Metallurgical & Materials Engineering

1. Basak, S., Pal, T.K., Shome M., and Maity, J., 2013. Formation of Fe₅Si₃ dispersed α_1 interface in metal inert gas brazed interstitial free steel sheet for efficient joint", The Welding Journal, American Welding Society, Vol.92, 29 – 35.
2. Bera, S., Chowdhury, S.G., Estrin, Y., Manna, I, 2013. Mechanical properties of Al7075 alloy with nano-ceramic oxide dispersion by mechanical alloying and consolidation by equal channel angular pressing", Journal of Alloys and Compounds, Volume 548, 257-265.
3. Bera, S., Chowdhury, S.G., Lojkowsky, W., Manna, I, 2012. Synthesis of CuCr and CuCrAg alloys with extended solid solubility with nano-Al₂O₃ dispersion by mechanical alloying and consolidation by high pressure sintering, Materials Science and Engineering A, Volume 558, 298-308.
4. Bhowmick, S., Ghatak, B. R., Show, B. K., 2013. Effect of prior heat treatment on microstructure and mechanical properties of 0.23% carbon dual phase steel, International Heat Treatment and Surface Engineering.
5. Dasgupta, R.K., Mondal, D.K., and Chakrabarti, A.K., 2012. Evolution of Microstructures During Austempering of Ductile Irons Alloyed with Manganese and Copper, Metallurgical and Materials Transactions A, DOI: 10.1007/s11661-012-1502-0.
6. Ghosh, K. S., Mondal, D. K., 2013. Effect of grain size on mechanical electrochemical and hydrogen embrittlement behavior of a micro-alloy steel, Materials Science and Engineering A, 559, 693-705.
7. Ghosh, M. M., Ghosh, S., and Pabi, S. K, 2012. On synthesis of a highly effective and stable silver nanofluid inspired by its multiscale modeling, Nanoscience and Nanotechnology Letters, Vol. 4, No. 8, A, 843-848.
8. Ghosh, M. M., Ghosh, S., and Pabi, S. K, 2013. A Parameter for Selection of Nano-dispersoids for Nanofluids used in Thermal Applications, Materials Science Forum, Vol. 736, 223-228.
9. Ghosh, K. S., Mukhopadhyay, S., Konar, B., and Mishra, B, 2012. Study of Aging and Electrochemical Behaviour of Al-Li-Cu-Mg Alloys, Materials and Corrosion, 63, 1-10.
10. Ghosh K. S., and Mondal, D. K., 2013. Effect of grain size on mechanical electrochemical and hydrogen embrittlement behaviour of a micro-alloy steel, Materials Science and Engineering A, 559, 693-705.

11. Ghosh, K. S., Gao N., and Starink, M. J., 2012. Characterisation of High Pressure Torsion Processed 7150 Al-Zn-Mg-Cu Alloy, *Materials Science and Engineering A* 552, 164-171.
12. Kumar, S. R., Nuthalapati, M., and Maity, J., 2012. Development of nanocrystalline ZnSe thin film through electrodeposition from non-aqueous solution, *Scripta Materialia*, Elsevier, Vol. 67, Issue 4, 396-399.
13. Maity, J., Saha, A., Mondal D. K., and Biswas, K., 2013. Mechanism of accelerated spheroidization of steel during cyclic heat treatment around upper critical temperature, *Philosophical Magazine Letters*, Taylor & Francis; Vol. 93, Issue 4, 231-237.
14. Maity, J., and Pal, T. K., 2012. Transient liquid phase diffusion bonding of aluminium metal matrix composite using a mixed Cu-Ni powder interlayer, *Journal of Materials Engineering and Performance*, ASM international, Vol. 21, No. 7, 1232-1242,
15. Mallik, M., Roy, S., Ray, K. K., Mitra, R., 2013. Effect of SiC content, additives and process parameters on densification and structure-property relations of pressure less sintered ZrB₂-SiC composites, *Ceramics International*, Vol. 39, 2915-2932.
16. Mallik, M., Ray, K. K., Mitra, R., 2012. Electrical and thermophysical properties of ZrB₂ and HfB₂ based composites, *Journal of the European Ceramic Society*, Vol. 32(10), 2545-2555.
17. Mitra, S. K., & Ghosh, D., 2012. Influence of alloy grain size on high temperature corrosion behavior of 2.25 Cr-1 Mo steel in SO₂ + O₂ atmosphere, *High Temperature Material and Processes*, Vol 31, issue 6, 727-731.
18. Mitra, S. K., & Ghosh, D., 2012. Effect of Y₂O₃ Superficial Coating on the High Temperature Corrosion behavior of 2.25 Cr-1 Mo steel in SO₂ + O₂ atmosphere, *Journal of Institution of Engineers (India): Series D*, Springer publications Vol 93, issue 2, 59-93.
19. Mondal, M. K., Maruoka, N., Kitamura, S., Gupta, G. S., Nogami, H., Shibata, H., 2012. Study of Fluid Flow and Mixing Behaviour of a Vacuum Degasser, *Transactions of the Indian Institute of Metals*, Vol. 65, Issue 3, 321-331.
20. Mondal, B. K., PAL, T. K., and MAITY, J., 2012. Microstructural Characterization and Fatigue Performance Evaluation of MIG-Welded Ship Hull Steel, *Steel Research International*, WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim, Volume 83, No. 3, 218-229.
21. Panja, B., Mondal, D. K., and Chakrabarti, A. K., 2012. Isothermal reoxidation of sponge iron, *Steel Grips*, Process technology, 10, 121-124.
22. Rout P. K., and Ghosh, K. S., 2012. Aging and Electrochemical Behaviour of a 7017 Al-Zn-Mg Alloy, *Materials Science Forum*, 710, 665-670.
23. Saha, A., Mondal, D. K., BISWAS, K., Maity, J., 2012. Microstructural modifications and changes in mechanical properties during cyclic heat treatment of 0.16% carbon steel, *Materials Science and Engineering: A*, Elsevier, Vol. 534, 465-475.
24. Saha, A., Mondal, D. K., BISWAS, K., Maity, J., 2012. Development of high strength ductile hypereutectoid steel by cyclic heat treatment process, *Materials Science and Engineering: A*, Elsevier, Vol. 541, 204-215.

Department of Physics

1. Chakraborty, G., Gupta, K., Rana, D., Meikap, A. K., 2012. Effect of Multiwall Carbon Nanotubes on Electrical Conductivity and Magnetoconductivity of Polyaniline, *Adv. Nat. Sci. Nanosci. Nanotechnol*, 3, 035015, 1-8.
2. Chakraborty, S., Sahoo, B., Sahoo, S., 2012. Isospin dependence of the saturation properties of asymmetric nuclear matter in non-relativistic mean field model, *International Journal of Modern Physics E*, 21(9), 1250079.
3. Chakraborty, S., Tiwari, C. S., Kole, A. K., Kumbhakar, P., 2013. A simple method of synthesis and optical properties of Mn doped ZnO nanocups, *Materials Letters*, 91, 379-382.
4. Chakraborty, S., Kumbhakar, P., 2013. Observation of exciton-phonon coupling and enhanced photoluminescence emission in ZnO nanotwins synthesized by a simple wet chemical approach, *Materials Letters*, 100, 40-43.
5. Chatterjee, A., Bhattacharjee, P., Roy, N. K., Kumbhakar, P., 2013. Usage of nanotechnology based gas sensor for health assessment and maintenance of transformers by DGA method, *International Journal of Electrical Power and Energy Systems*, 45 (1),137-141.*
6. Chatterjee, A., Sarkar, R., Roy, N. K., Kumbhakar, P., 2012. Online monitoring of transformers using gas sensor fabricated by nanotechnology, *European Transactions on Electrical Power*. DOI: 10.1002/etep.1675.*
7. Desarkar, H. S., Kumbhakar, P., Mitra, A. K., 2013. Synthesis of silver hollow nanoparticles and observation of photoluminescence emission properties, *Journal of Luminescence*, 134, 1-7.
8. Desarkar, H. S., Kumbhakar, P., Mitra, A. K., 2012. Optical properties of tin oxide nanoparticles prepared by laser ablation in water: Influence of laser ablation time duration and laser fluence, *Materials Characterization*, 73, 158-165.
9. Desarkar, H. S., Kumbhakar, P., Mitra, A. K., 2012. Linear optical absorption and photoluminescence emission properties of gold nanoparticles prepared by laser ablation technique, *Applied Physics A: Materials Science and Processing* 108 (1), 81-89.
10. Dutta N. and Mandal M. K., 2012. Realisation of electronic circuit based on modified rossler system and its application in secure communication, *Elixir Comp. Sci. & Engg.*, 49(8), 9845-9848.
11. Ghosh, P., Ghatak, S., Mandal, M. K., Meikap, A. K., 2012. Anomalous Electrical Transport Properties of PVA-Ag Composites below Room Temperature, *Polymer Composites*, 33, 1941-1950.
12. Goswami, M., Ghosh, R., Meikap, A. K., 2012. Preparation, Characterization and Luminescence Properties of Polyaniline CdS for a twisted nematic liquid crystal Cell, *AIP Conf. Proc.*, 1447, 377-378.
13. Gupta, K., Das, P. T., Nath, T. K., Jana, P. C., Meikap, A. K., 2012. Polymer Coated Manganites and Magnetic Properties, *Int. J. Soft Comp. Engg.*, 2, 246-250.
14. Gupta, K., Jana, P. C., Meikap, A. K., 2012. Synthesis and Properties of Polyaniline Samarium Nanocomposite, *J. Phys. Sci.*, 16, 209-216.
15. Hossain SK. M., Mukherjee A., Chakraborty S., Yusuf S.M., Basu S. and Pal M., 2013. Enhanced multiferroic properties in nanocrystalline BiFeO₃ through La doping, *Material Focus*, 2, 1-7.
16. Kole, A. K., Kumbhakar, P., 2012. Cubic-to-hexagonal phase transition and optical properties of chemically synthesized ZnS nanocrystals, *Results in Physics*, 2, 150-155.

17. Kole, A. K., Sarkar, R., Kumbhakar, P., 2012. Observation of tunable nonlinear optical properties and quenching of photoluminescence emission in Cu^{2+} Doped ZnS quantum dots, *Nonlinear Optics, Quantum Optics: Concepts in Modern Optics*, 44, 281-301.
18. Kole, A. K., Tiwary, C. S., Kumbhakar, P., 2013, Room temperature synthesis of Mn^{2+} doped ZnS d-dots and observation of tunable dual emission: Effects of doping concentration, temperature, and ultraviolet light illumination, *Journal of Applied Physics*, 113, 114308, 1-11.
19. Kumar, M., Sahoo, S., 2012. Time Interval and Lattice Vibration in Raman Effect, Photoelectric effect and Plane Mirror Reflection”, *Modern Physics Letters B*, 26(18), 1250115.
20. Kumar, M., Sahoo, S., 2012. Quantum Black Hole and the Origin of the Universe, *ARPN Journal of Science and Technology*, 2(7), 586 – 592.
21. Kumar, M., Sahoo, S., 2012. Photon, electron, and strong gravity, *Instasci J. of Physics*, 2(4), 102–109.
22. Kumar, M., Sahoo, S., 2012. Strong gravity explains the stability of the electron, *New Advances in Physics*, 6(2), 77-80.
23. Kumar, M., Sahoo, S., 2013. Planck Scale Particles in the Universe, *ARPN Journal of Science and Technology*, 3(1), 26 – 27.
24. Kumar, M., Sahoo, S., 2013. Ordinary matter as black holes”, *ARPN Journal of Science and Technology*, 3(2), 169 – 171.
25. Mandal M K, Banik G. D., Chattopadhyay D and Nandi D., 2012. An Image Encryption Process based on Chaotic Logistic Map, *IETE Tech. Rev.*, 29(5), 395-404.
26. Mukherjee, A., Basu S, Chakraborty G. and Pal M., 2012. Electrical transport properties of Yttrium doped BiFeO_3 nanoparticles. *J. Appl. Phys* 112, 014321.
27. Mukherjee A., Hossain SK. M. Basu S. and Pal M., 2012. Optical and Electrical Properties of Codoped Nanocrystalline Multiferroic BiFeO_3 , *AIP Conf. Proc.* 1447, 315.
28. Pathak C. S., Mishra D. D., Agarwala V. and Mandal M. K., 2012. Optical properties of ZnS nanoparticles produced by mechanochemical method, *Ceramics International*, 38(12), 6191-6195.
29. Pathak C. S., Mishra D. D., Agarwala V. and Mandal M. K., 2012. ‘Mechanochemical Synthesis, Characterization and Optical Properties of Zinc Sulphide Nanoparticles, *Indian Journal of Physics*, 86(9), 777-781.
30. Pathak C. S., Agarwala V., Mandal M. K., 2012. Mechano-chemical Synthesis and Optical Properties of ZnS Nanoparticles, *Physica B*, 407(9), 3309-3312.
31. Pathak C. S., Mishra D. D., Agarwala V. and Mandal M. K., 2012. ‘Mechanochemical Synthesis, Characterization and Optical Properties of Zinc Sulphide Nanoparticles, *Indian Journal of Physics*, 86(9), 777-781.
32. Pathak C. S., Agarwala V., Mandal M. K., 2012. Mechano-chemical Synthesis and Optical Properties of ZnS Nanoparticles, *Physica B*, 407(9), 3309-3312.
33. Sahoo, S., Dutta, A. K., 2012. A Comparative Study of Fractional Quantum Hall Effect in Monolayer and Bilayer Graphene, *ARPN Journal of Science and Technology*, 2(4), 302 – 312.

34. Sahoo, S., Sahoo, B. K., 2012. The Mysterious Higgs Boson, *ARPJ Journal of Science and Technology*, 2(10), 912 – 918.
35. Sahoo, S., Kumar, M., 2012. Collapsing of a charged particle into a quantum black hole in a cyclotron, *New Advances in Physics*, 6(2), 53-55.
36. Sahoo, S., Kumar, M., 2012. Creation of Tachyon Particles from Black Hole, *New Advances in Physics*, 6(1), 35-39.
37. Sahoo, S., Kumar, M., 2012. Will the expansion of the Universe be ever accelerating?, *The African Review of Physics*, 7, 441.
38. Sahoo, S., Banerjee, D., Kumar, M., Mohanty, S., 2012. Effect of both Z and Z' -mediated Flavor-Changing Neutral Currents on $B_s \rightarrow \tau^+ \tau^-$ decay”, *International Journal of Modern Physics A27(31)*, 1250184.
39. Sahoo, S., Banerjee, D., 2013. Calculation of same-sign dimuon charge asymmetry in $B_q^0 - \overline{B}_q^0$ system using recent data, *Orissa Journal of Physics*, 20(1), 19–27.
40. Sinha, S., Chatterjee, S. K., Meikap, A. K., 2012. Effect of Screening on the Variation of Transmittance with Voltage and Frequency for a twisted nematic liquid crystal Cell, *AIP Conf. Proc.*, 1447, 159-160.
41. Sinha, S., Mukherjee, A., Chatterjee, S. K., Meikap, A. K., Basu, S., 2013. Introduction of BiFeO₃ Nanoparticles in 5CB Nematic Liquid Crystal Host: Effect on Texture and the Non Responsive Behaviour of the Sample in a Twisted Nematic Configuration, *Advanced Nanomaterials and Nanotechnology*, Springer Proceedings in Physics, 143, 109-114.
42. Sinha, S., Chatterjee, S. K., Ghosh, J., Meikap, A. K., 2013. Preparation and Introduction of CdSe Quantum Dots in a 5CB Twisted Nematic Liquid Crystal Cell: Observation of Ordered array of Nanostructures, *AIP Conf. Proc.*, 1512, 158-159.
43. Sinha, S., Chatterjee, S. K., Ghosh, J., Meikap, A. K., 2013. Structural Characterization and Observation of Variable Range Hopping Conduction Mechanism at High Temperature in CdSe Quantum dot Solids, *J. Appl. Physics*, 113 093703, 1-10.
44. Sinha, S., Chatterjee, S. K., Ghosh, J., Meikap, A. K., 2013. Comparative Study on the Freezing Temperature Synthesized CdSe Nanoparticles Before and After Annealing, *Micro & Nano Letters*, 8, 35-38.
45. Sinha, S., Chatterjee, S. K., Ghosh, J., Meikap, A. K., 2013. Semiconducting Selenium Nanoparticles: Structural, Electrical Characterization and Formation of a back-to-back Schottky Diode Device, *J. Appl. Physics*, 113, 123704, 1-8.

* Repeated in other departments

Annexure–11.4(c) ii. Research papers accepted for publication in peer-reviewed journals during 2012-13

Department of Biotechnology

1. Chebolu A., Laha B., Ghosh M., Nagahanumaiah N., Investigation on Bacterial Adhesion and Colonization Resistance over Laser Machined Micro Patterned Surfaces. *Micro and Nano Letters*.
2. Ghosh A., Sinha K., Das P. , Central composite Design optimization and artificial neural network modeling of copper removal by chemically modified orange peel, *Desalination and Water Treatment*, Date of Acceptance :- 18/02/2013.
3. Kullu J., Dutta A., Constales D., Chaudhuri S., Dutta D., 2012. Experimental and Modeling Studies on Microwave-assisted Extraction of Mangiferin from *Curcuma amada*, *3 Biotech*. DOI 10.1007/s13205-013-0125-5;
4. Mandal, S., Bhunia, B., Kumar, A., Dasgupta, D., Mandal, T., Datta, S., Bhattacharya, P., 2013, A statistical approach for optimization of media components for phenol degradation by *Alcaligenes faecalis* using Plackett–Burman and response surface methodology, *Desalination and water treatment*, DOI:10.180/19443994.2013.769746*

* Repeated in other departments

Department of Chemical Engineering

1. Bhattacharyya A., Chatterjee S., Dutta S., De P., Basu S., 2012. Removal and Recovery of Lead (II) from Simulated Solution Using Alginate Immobilized Papain (*AIP*), *Environmental Engineering and Management Journal*, Date of acceptance: 04/07/2012.
2. Bhunia B., Mukhopadhyay D., Goswami S., Mandal T., Dey A., 2012. Improved production, characterization and flocculation properties of poly (γ)-glutamic acid produced from *Bacillus subtilis*, *Journal of Biochemical Technology*.
3. Goswami S., Rani A., Priyadarshini R., Bhunia B., Mandal T., 2012. A Review on Production of Echinocandins by *Aspergillus sp.*, *Journal of Biochemical Technology*
4. Karmakar M., Mandal J., Halder S., Chatterjee P. K., 2013. Investigation of fuel gas generation in a pilot scale fluidized bed auto thermal gasifier using rice husk. *Fuel* (Ref: JFUE 6938).
5. Mandal S., Bhunia B., Kuma, A., Dasgupta D., Manda, T., Datta S., Bhattacharya P., 2013. A statistical approach for optimization of media components for phenol degradation by *Alcaligenes faecalis* using Plackett–Burman and response surface methodology, *Desalination and water treatment*, DOI:10.180/19443994.2013.769746*
6. Mukhopadhyay D., Sarka, J. P., Dutta S., 2012. Macroscopic temporal studies on the effect of waste plastic materials on anaerobic digestion of raw vegetable market wastes: Experiment & Modeling, *International Journal of Environment and Waste Management*, Date of acceptance: 27/12/2012.
7. Narayanan C.M., Studies on Performance Characteristics of Solar Parabolic Trough Concentrator with Variable Area Absorber, *International Journal of Renewable Energy Technology* Date of acceptance: February, 2013.

* Repeated in other departments

Department of Chemistry

1. Bairagya H. R., Mukhopadhyay B.P., An Insight to the Dynamics of Conserved Water Mediated Salt Bridge Interaction and Inter-Domain Recognition in hIMPDPH Isoforms. Journal of Bimolecular Structure & Dynamics, 2012, Aug 28. PMID:22928911 doi:10.1080/07391102.2012.712458.
2. Bairagya H.R., Mukhopadhyay B.P., Protein folding: challenge to chemistry. J. Bimolecular Structure & Dynamics, 2013 Jan 9.PMID: 23298169.
3. BanerjeeA., Bairagya H.R., MukhopadhyayB.P., Nand ,T.K., Mishra D.K., 2013., Conserved water mediated H-bonding dynamics of Ser 117 and Thr 119 residues in human transthyretin-thyroxin complexation: Inhibitor modeling study through docking and molecular dynamics simulation Journal of Molecular Graphics and Modelling, 2013. <http://dx.doi.org/10.1016/j.jmgn.2013.04.010>,

Department of Civil Engineering

1. Ghosh S., Roy P. 2012. Quantification of the uncertainty in stress index B_2 for pipe bends subjected to out-of-plane bending. International Journal of Pressure Vessels and Piping, 95.
2. Mishra S.N., Dwivedi, V.K., Sarvanan C., Pathak K.K., 2013. Pattern Discovery in Hydrological Time Series Data Mining during the Monsoon Period of the High Flood Years in Brahmaputra River Basin, International Journal of Computer Applications , Foundation of Computer Science, New York, USA.
3. Roy P., Ghosh S. 2012. Statistical characterisation of B_2 for nuclear pipe bends: in-plane closing moment. Nuclear Engineering and Design, 249.
4. Roy P., Ghosh S. 2013. Fabrication Uncertainty in B_2 for Nuclear Pipe Bends Subjected to In-Plane Opening Moment, Journal of Pressure Vessel Technology (Transactions of the ASME), 135(1).

Department of Computer Science & Engineering

1. Banerjee, S., Poddar , R., Guha Thakurta, P. K , 2013. A Real Time Framework of Multiobjective Genetic Algorithm for Routing in Mobile Networks, ACEEE International Journal of Network Security (IJNS).
2. Sarker, G., 2013. A Competitive Learning Network for Face Detection and Localization International Journal of Computer, Information Technology and Engineering (IJCITAE).

Department of Electrical Engineering

1. Biswas P.K and Bannerjee S, ANSYS Based FEM Analysis for Three and Four Coil Active Magnetic Bearing- A Comparative Study,International Journal of Applied Science and Engineering.
2. Sarkar M.K, Banerjee S, Ghoshal S. P., & Saha T.K, Implementation of GSA Based Optimal Lead-Lead Controller for Stabilization and Performance Enhancement of a DC Electromagnetic Levitation System, Journal of Control Engineering and Applied Informatics.
3. Das S., Mandal D., Kar R., Ghoshal S.P., "A Generalized Closed Form Expression of Directivity of Arbitrary Planar Antenna Arrays with Point Sources", IEEE Transactions on Antennas and Propagation.*

4. Gopi Ram, Mandal D., Kar R., Ghoshal S.P. 2012. NPSO Based Optimal Design and Synthesis of Concentric Circular Antenna Array with Non-isotropic Elements. International Journal of Computer Information Systems and Industrial Management (IJCISIM), MIR Lab, USA.*
5. Saha S.K., Ghoshal S.P., Kar R., D. Mandal. 2013. Cat Swarm Optimization Algorithm for Optimal Linear Phase FIR Filter Design. ISA Transactions.*
6. Saha S.K., Ghoshal S.P., Kar R., Mandal D., "Design and Simulation of FIR Band Pass and Band Stop Filters using Gravitational Search Algorithm," Journal of Memetic Computing.*
7. Saha S.K., Ghoshal S.P., Kar R., Mandal, D. 2012. Optimal design of FIR filters using Fire Fly Algorithm. International Journal of Swarm Intelligence Research, IGI Global.*
8. Saha S.K., Kar R., Mandal D., Ghoshal S.P., "A new design method based on Firefly Algorithm for IIR System Identification Problem", Signal, Image and Video Processing.*
9. Saha S.K., Kar R., Mandal D., Ghoshal S.P., "Gravitation search algorithm: Application to the Optimal IIR Filter Design", Journal of King Saud University - Engineering Science.*
10. Saha S.K., Kar R., Mandal D., Ghoshal S.P., Collective Animal Behaviour based Optimization Algorithm for IIR System Identification Problem. ISA Transactions.*
11. Saha S.K., Vasundhara, S. Bardhan, Ghoshal S.P., Kar R., Mandal D., "Optimal design of FIR filter using Social Emotional Optimization Algorithm (SEOA)", Signal, Image and Video Processing.*
12. Vasundhara, Mandal D., Kar R., Ghoshal S.P., "Digital FIR Filter Design Using Fitness Based Hybrid Adaptive Differential Evolution with Particle Swarm Optimization," Natural Computing.

* Repeated in other departments

Department of Electronics and Communication Engineering

1. Chandra, A., Das, P., 2013. Location management in cellular mobile networks, IEEE Potentials, 2013.
2. Chatterjee, A., Mahanti, G. K. and Das Choudhury, G., 2012. Combination Of Differential Evolution Algorithm and Fast Fourier Transform For Synthesis Of Footprint Patterns From Rectangular Planar Array, International Journal of Numerical Modelling Electronic Networks, Devices and Fields, 2012.
3. Das, S., Mandal, D., Kar, R., Ghoshal, S. P., 2013. A Generalized Closed Form Expression of Directivity of Arbitrary Planar Antenna Arrays with Point Sources, IEEE Transactions on Antennas and Propagation.
4. Datta, U., Kundu, S., 2012. Performance of Multi hop CDMA Wireless Sensor Networks with Correlated Interferers using Different Retransmission Strategies and Error Control Schemes, accepted in International Journal of Sensor Networks (IJSNet), , Dec 2012.
5. Gopi, R., Mandal, D., Kar, R., Ghoshal, S. P., 2013. NPSO Based Optimal Design and Synthesis of Concentric Circular Antenna Array with Non-isotropic Elements, International Journal of Computer Information Systems and Industrial Management (IJCISIM), MIR Lab.*
6. Gopi, R., Mandal, D., Kar, R. and Ghoshal, S.P., 2013. Optimized Hyper Beamforming of Linear Antenna Arrays Using Collective Animal Behaviour, The Scientific World Journal.
7. Maheshwari, V., Bhadauria, R. S., Kar, R., Mandal, D., Bhattacharjee, A. K., 2013. Delay Modelling of On-Chip RC Global VLSI Interconnect for Step Input, International Journal of Computer Information Systems and Industrial Management (IJCISIM), MIR Lab.
8. Nallagonda, S., Dhar Roy, S., Kundu, S., 2013. A Weighted Cooperative Spectrum Sensing scheme with Censoring of Cognitive Radios in Rayleigh Fading channel, Int. J. Communication Networks and Distributed Systems.

9. Nandi, A., Kundu, S., 2012. Optimal Power and Packet Size in Wireless Sensor Networks in Lognormal Shadowed Environment, International Journal of Sensor Networks (IJSNet), Inderscience (in Press), 11(2).
10. Parida, P. , Dhar Roy, S., Kundu, S., 2013. Multimedia Broadcast and Multicast Services in WCDMA Network with LDPC Code and Raptor Code, International Journal of Electronics.
11. Saha, S. K., Kar, R., Mandal, D., Ghoshal, S. P., 2013. Optimal IIR Filter Design using Gravitational Search Algorithm with Wavelet Mutation, Journal of King Saud University - Computer and Information Sciences.
12. Saha, S. K., Datta, R., Chowdhury, R., Kar, R., Mandal, D., Ghoshal, S. P., 2013. Efficient and Accurate Optimal Linear Phase FIR Filter Design using Opposition based Harmony Search Algorithm, The Scientific World Journal.
13. Saha, S. K., Kar, R., Mandal, D., Ghoshal, S. P., 2013. Optimal Linear Phase FIR Filter Design using Particle Swarm Optimization with Constriction Factor and Inertia Weight Approach with Wavelet Mutation, International Journal of Hybrid Intelligent Systems (IJHIS).
14. Saha, S.K., Kar, R., Mandal, D., Ghoshal, S. P., 2013. An Efficient Crazyness based Particle Swarm Optimization Technique for Optimal IIR Filter Design, LNCS Transactions on Computational Science.
15. Saha, S.K., Ghoshal, S. P., Kar, R., Mandal, D., 2013. Optimal design of FIR filters using Fire Fly Algorithm, International Journal of Swarm Intelligence Research, IGI Global.*
16. Saha, S. K., Kar, R., Mandal, D., Ghoshal, S. P., 2013. Collective Animal Behaviour based Optimization Algorithm for IIR System Identification Problem, ISA Transactions.*
17. Saha, S. K., Ghoshal, S. P., Kar, R., Mandal, D., 2013. Cat Swarm Optimization Algorithm for Optimal Linear Phase FIR Filter Design, ISA Transactions. *
18. Saha, S. K., Kar, R., Mandal, D., Ghoshal, S. P., 2013. Gravitation search algorithm: Application to the Optimal IIR Filter Design, Journal of King Saud University - Engineering Science.*
19. Saha, S. K., Kar, R., Mandal, D., Ghoshal, S. P., 2013. A new design method based on Firefly Algorithm for IIR System Identification Problem, Signal, Image and Video Processing .*
20. Saha, S. K., Vasundhara, Bardhan, S., Ghoshal, S. P., Kar, R., Mandal, D., 2013. Optimal design of FIR filter using Social Emotional Optimization Algorithm (SEOA), Signal, Image and Video Processing.*
21. Saha, S.K., Ghoshal, S.P., Kar, R., Mandal, D., 2013. Design and Simulation of FIR Band Pass and Band Stop Filters using Gravitational Search Algorithm, Journal of Memetic Computing.*
22. Upadhyay, P., Kar, R., Mandal, D., Ghoshal, S. P., 2013. A Novel Low Power 8T SRAM Cell Design Using Lower and Upper Self controllable Voltage Level Techniques in 45 nm Technology, WSEAS Transactions on Circuits and Systems.
23. Vasundhara, Mandal, D., Kar, R., Ghoshal, S. P., 2013. Digital FIR Filter Design Using Fitness Based Hybrid Adaptive Differential Evolution with Particle Swarm Optimization, Natural Computing.

* Repeated in other departments

Department of Humanities & Social Sciences

1. Chakraborty, Joy, Sengupta, P. P., 2013. Measuring Performance and Efficiency Growth of Selected Indian Life Insurance Companies: A Total Factor Productivity Approach, Arth Praband, Journal of Economics and Management.

Department of Management Studies

1. Bhattacharyya, S., Bandyopadhyay, G., 2013. Establishing Designed Financial Control: An Empirical Study on Urban Local Bodies in India using Factor and Cluster Analysis, Management Research and Practice.
2. Upadhyay, P., De, A., 2012. Financial Business Process Re-engineering in ABC Ltd., Asia – Pacific Finance and Accounting Review, I(1).

Department of Mathematics

1. Bhattacharyya, R., Hossain, A., Kar, S., 2013. Fuzzy cross entropy-mean-variance-skewness models for portfolio selection, Journal of King Saud University – Computer and Information Sciences.
2. Das, D., Kar, M. B., Roy, A., Kar, S., 2013. Two-warehouse production model for deteriorating inventory items with time-dependent demand with shortages : A genetic algorithm with varying population size approach, Engineering Optimization.
3. Mukherjee, S., Kar, S., 2013. A three phase supplier selection method based on fuzzy preference degree, Journal of King Saud University – Computer and Information Sciences.
4. Nandi, P. K., Gorain, G. C., Kar, S., 2013. Stability of vibrations for some Kirchhoff equations with a dissipation, Applications of Mathematics.
5. Qin, Z., Kar, S., 2013. Single-period inventory problem under uncertain environment, Applied Mathematics and Computation.

Department of Mechanical Engineering

1. Karmakar, S., Suresh, M. V.J.J., and Kolar, A.K., Effect of advanced steam based coal-fired power plants with CO₂ capture on the Indian energy Scenario. International Journal of Green Energy (Date of acceptance September 8, 2012).
2. Mahapatra A., Roy S. S., Pratihari D.K., 2013. Modeling and Simulation of Wave Gait of a Hexapod Walking Robot: A CAD/CAE Approach, International Journal of Robotics and Automation,
3. Roy S.S., Pratihari D.K., 2013. Kinematics, Dynamics and Power Consumption Analyses for Turning Motion of a Six-legged Robot, Journal of Intelligent and Robotic Systems,

Department of Metallurgical & Materials Engineering

1. Mitra, S. K., Ghosh, D., & Shukla, A. K. Influence of CeO₂ superficial coating on the High Temperature Corrosion Behavior of 2.25 Cr-1 Mo steel in SO₂ + O₂ atmospheres. Journal of Protection of Metals and physical chemistry of surfaces.

2. Mondal, M. K., Biswas K., and Maity, J., 2013. Microstructural characterization of a novel 6351 Al- Al_4SiC_4 insitu composite, Materials Science and Technology, Maney, UK.
3. Show, B. K., Mondal, D. K., Biswas K., and Maity, J., 2013. Development of a novel 6351 Al- $(\text{Al}_4\text{SiC}_4 + \text{SiC})$ hybrid composite with enhanced mechanical properties, Materials Science and Engineering: A, .
4. Ghosh, M. M., 2012. Estimation of Thermal Conductivity of Amorphous Carbon Nanotube Using Molecular Dynamics Simulations, Journal of Nanoscience and Nanotechnology.
5. Ghosh, M. M. Ghosh, S., and Pabi, S. K., 2012. Effects of particle shape and fluid temperature on heat transfer characteristics of nanofluids, Journal of Materials Engineering and Performance.
6. Ghosh, M. M. and Rai, R. K., 2013. Coupled MD-Stochastic Model for Thermal Conductivity of Ethylene Glycol Based Copper Nanofluid, Journal of Nanoscience and Nanotechnology.
7. Ghosh, K. S. and Mondal, D. K., 2013. Mechanical and Electrochemical Behaviour of a High Strength Low Alloy Steel of Different Grain Sizes, Metallurgical & Materials Transactions A.
8. Ghosh, K. S., Hilal, Md. A., and Bose, S. Corrosion Behavior of a 2024 Al-Cu-Mg Alloy of Various Tempers, Transactions Non Ferrous Society of China.

Annexure–11.4(d) Research papers presented in conferences and published in proceedings during 2012-13

Department of Biotechnology

1. Banerjee, A., Das, K., Kumar, A., Dasgupta, D., Mandal, T., Datta, S., 2012. Isolation and characterization of phenol degrading bacteria from phenol contaminated industrial wastewater, 65th CHEMCON–2012, NIT, Jalandhar, Punjab.*
2. Biswas G, Das R, and Kazy S K, 22-25 November 2012. Hexavalent Chromium reduction by *Alcaligenes faecalis* strain P2 isolated from tannery effluent, 53rd International Conference of Association of Microbiologists of India, KIIT University, Bhubaneswar.
3. Choudhary P, Das R and Kazy S K , 24-26 February, 2012. Anthracene Biodegradation by *Aerococcus* sp. BPD-6 isolated from Petroleum Oil Sludge, "ENSURE 2012: Environmentally Sustainable Urban Ecosystems", Indian Institute of Technology Guwahati.
4. Das R, and Kazy S K, 22-25 November 2012. Aerobic and anaerobic reduction of chromium (VI) in presence of anthracene by *Bacillus pumilus* strain BPD-14 isolated from oil sludge, 53rd International Conference of Association of Microbiologists of India, KIIT University, Bhubaneswar.
5. Das R, Sar P, and Kazy S K, 20-23 January 2013. Microbial community structure and catabolic potentials in a petroleum hydrocarbon contaminated sludge sample from an oil reservoir, 2nd International Conference on Water Research, Singapore.
6. Dey P, Das R, and Kazy S K , 24-26 February 2012. Benzene Utilization as a Sole Source of Carbon in the Minimal Medium by *Aerococcus* sp. isolated from Petroleum Hydrocarbon Contaminated Sludge, "ENSURE 2012: Environmentally Sustainable Urban Ecosystems", Indian Institute of Technology Guwahati.
7. Ghosh M., 23-24 December 2012. Dendritic Cell: A double-edged sword in Immunotechnology, workshop in the programme of 'Indo-US Center Research Excellence in 'Fabronics' funded by Indo-US Forum for Science and Technology on "Fabronics for Health Care" at CMERI Durgapur;
8. Jain N., Dasgupta, D. 28-30 January, 2013, 2,4,6- Trichlorophenol: its toxicity reduction in plant system by an indigenous bacterial monoculture treatment.(won the first prize in poster section) XXXVIII Annual Conference Of Environmental Mutagen Society Of India (EMSI-13)And National Conference On "Current Perspectives On Environmental Mutagenesis And Human Health" Anushaktinagar, Mumbai- 400 094 India.
9. Kumar, S., Kumar, A., Dasgupta, D., Mandal, T., Datta, S., 2012. Biodegradation of Salicylic acid and its kinetics study using isolated bacteria from coke oven wastewater, International conference on Satellite Symposium on Advances in Structural Biology, ICABS-2012, Dept. of Biotechnology and Microbiology, Kannur University , Kerala.*
10. Mandal, T., Saha, A., Kumar, A., Dasgupta, D., Datta, S. 2012. Biodegradation kinetics of Phenol and Catechol using *Alcaligenes faecalis* an isolated microorganism from Durgapur Steel Plant, India, 65th ChemCon – 2012, , Organised by NIT, Jalandhar, Punjab.*
11. Pranaw, K., Singh, S., Dutta, D., Ganguly, S., Kalia, V., Lata., 15 - 17 March, 2013. Purification and Characterization of Extracellular Serralysin type Metalloprotease Enzyme produced by *Xenorhabdus indica*, International Conference on Life Science and Biological Engineering, Tokyo (Japan).
12. Pranaw, K., Singh, S., Dutta, D., Ganguly, S., Kalia, V., Lata., 22 – 25 November, 2012. Proteolytic Enzyme Production by Entomopathogenic Nematode Symbionts *Xenorhabdus indica* as a Potential Virulence Factor, International Conference on "Microbial World: Recent Innovation and Future Trend", KIIT, Bhubaneswar, Odisha (India).

13. Samanta, A.K., Chaudhuri, S., Dutta, D., 4 – 5 February, 2012. Study of Nutritional and Growth Characteristics of a Pigment Producing Bacteria isolated from Soil, National Symposium on Frontiers in Modern Biology (FIMB-2012), Department of Biological Sciences, IISER-Kolkata, Kolkata (India).
14. Satheesh Kumar.S ; Gokulasuriyan R.K; Ghosh Monidipa, 13-16 march 2013. Comparative In-silico genome analysis of *L.donovani*: Identifying its species specificity, World Immune Regulation Meeting-VII, in Davos Switzerland.
15. Singh, R., Kumar, A., Dasgupta, D., Mandal, T., Datta, S., Studies on Biodegradation Kinetics of Cyanide by using an isolated microorganism from steel plant wastewater INDIA WATER WEEK 2013, "Efficient Water Management: Challenges and Opportunities, Organised by Ministry of water resources, Govt. of India, New Delhi.*

* Repeated in other departments

Department of Chemical Engineering

1. Banerjee, A., Das, K., Kumar, A., Dasgupta, D., Mandal, T., Datta, S., 2012. Isolation and characterization of phenol degrading bacteria from phenol contaminated industrial wastewater, 65th ChemCon – 2012, Organised by NIT, Jalandhar, Punjab.*
2. Basak, A. K., Kumar, A., Halder, S., Mandal, T., Datta, S., 2012. Biodegradation and growth kinetics of phenol by isolated bacteria from coke oven wastewater (IISCO, Burnpur, West Bengal, India), 65th CHEMCON-2012, NIT, Jalandhar, Punjab.
3. Chakraborty, S., Pal, P., 27-30 December, 2012. Transport Modeling of Arsenic Separation by a Nano-membrane based Hybrid Process, International Conference on Sustainable Technologies for Energy and Environment in Process Industries and Indo-US Joint International Conference on Energy and Environment, (P-322), Organized by IICHE Deoaba Regional Centre and Development of Chemical Engineering and B.R. Ambedkar National Institute of Technology, Jalandhar-144011, Punjab, India.
4. Gupta, R., Gorai, D., Kumar, A., Dasgupta, D., Mandal, T., Datta, S., Isolation and characterization of microorganisms from coke oven wastewater and its role on biodegradation, International conference on Satellite Symposium on Advances in Structural Biology, ICABS-2012, Dept. of Biotechnology and Microbiology, Kannur University, Kerala.
5. Kumar R., Pal, P., 13 - 14 December, 2012. Recovery of Struvite from Ammoniacal Wastewater by Chemical Precipitation – A New Approach in Optimization and Downstream Purification, National Conference on 'Waste to Wealth', Organized by Indian Institute Metals (IIM), Bhubaneswar.
6. Kumar, R. and Pal, P., 27 - 30 December, 2012. A new membrane-integrated hybrid process for by-product recovery and water recycling from hazardous wastewater in coke manufacturing industry, International Conference on 'Sustainable Technologies for Energy and Environment in Process Industries, held at NIT Jalandhar, Punjab.
7. Kumar, S., Kumar, A., Dasgupta, D., Mandal, T., Datta, S., 2012. Biodegradation of Salicylic acid and its kinetics study using isolated bacteria from coke oven wastewater, International conference on Satellite Symposium on Advances in Structural Biology, ICABS-2012, Department of Biotechnology and Microbiology, Kannur University, Kerala.*
8. Kumar, T., Bera A. and Mandal A. 25-26 April, 2012. Physicochemical Properties of Microemulsions and their uses in Enhanced Oil Recovery – paper presented at International Conference on Chemical and Environmental Engineering organized by World Academy of Science, Engineering and Technology at Paris, France.
9. Kushwaha, D., Basu, S. Chaudhuri, P. and Dutta, S., 10 - 12 January, 2013. Application of Response Surface Methodology for Copper (II) Removal from Wastewater using Algal Biomass, International

Conference on Algal Biorefinery: A potential source of food, feed, biochemicals, biofuels and biofertilizers, Indian Institute of Technology Kharagpur, India.

10. Mandal, A., Bera, A., Ojha, K. and Kumar, T. 12-14 June, 2012. "Characterization of Surfactant Stabilized Nanoemulsion and Its Use in Enhanced Oil Recovery"- paper *SPE 155406*, presented at the SPE International Oilfield Nanotechnology Conference held in Noordwijk, The Netherlands
11. Mandal, T., Saha, A., Kumar, A., Dasgupta, D., Datta, S. 2012. Biodegradation kinetics of Phenol and Catechol using *Alcaligenes faecalis* an isolated microorganism from Durgapur Steel Plant, India, 65th CHEMCON-2012, NIT, Jalandhar, Punjab.*
12. Manna, A.K., Pal, P. Dec 27-30, 2012. Polarization in a flash vaporization solar-driven membrane distillation, Published in the proceedings of International Conference on Sustainable Technologies for Energy and Environment in Process Industries, P-145, NIT Jalandhar, Punjab, India.
13. Narayanan, C.M., Tejaswi, M., Prasad, H., Chakraborty, N., 18-22 June, 2012. Studies on Performance Analysis and Computer Aided Design of Inverse Fluidized Bed Bioreactors with Nano – support Particles, Proc. World Congress cum Exhibition on Chemical Engineering, Environmental Protection and Biotechnology, Frankfurt, Germany.
14. Narayanan, C.M., 26 - 28 October. Case Studies on Commercial Synthesis of Poly(laeco Lactic Acid Bioplastic (Invited Paper), Proc, International Conference on Natural Products and Biomaterials, Kottayam.
15. Narayanan, C.M., De, M., 27 – 30 December, 2012. Studies on Kinetics Of Synthesis of Phosphatic Biofertiliser from Rock Phosphate Ore, Proc. Chemical Engineering Congress – 2012, Jalandhar.
16. Singh, R., Kumar, A., Dasgupta, D. Mandal, T., Datta, S., 2013. Studies on Biodegradation Kinetics of Cyanide by using an isolated microorganism from steel plant wastewater INDIA WATER WEEK 2013, "Efficient Water Management: Challenges and Opportunities, Organised by Ministry of water resources, Govt. of India, New Delhi.*

* Repeated in other departments

Department of Chemistry

1. Dutta, A., Panja, S. S., Nandi, M. M., Sukul, D., 23 – 25 August, 2012. Corrosion inhibition of mild steel in hydrochloric acid by some Benzimidazole derivative: Correlation between structure and corrosion inhibition efficiency, Sixteenth National Congress on Corrosion Control, Organised by National Corrosion Council of India, Karaikudi, held at CII, Suresh Neotia Centre for Excellence, Kolkata.
2. Dutta, S. Saha, R., 22 March, 2013. Degradation of Reactive dye using Nanoscale Zero Valent Iron (nZVI); National Conference on Green Chemistry Engineering under TEQIP-II organized by Department of Chemical Engg., VNIT, Nagpur.
3. Ahmad, N.H., Saha, R., 22 March, 2013. Degradation of p-dichlorobenzene by Fenton's Oxidation followed by lime treatment. National Conference on Green Chemistry Engineering under TEQIP-II organized by Department of Chemical Engg., VNIT, Nagpur.
4. Roy P., Pal, A., Sukul, D., 28 February - 2 March, 2013. Corrosion inhibition of mild steel in sulphuric acid by polysaccharide-thiourea mixed system: A synergistic effect study, International Corrosion Prevention Symposium for Research Scholars (CORSYM-2013), Organized by NACE, held at Hotel GRT Grand, Chennai, India.

5. Sikdar, A., Roy, S., Panja, S. S., 1 – 2 June, 2012. 'Development of a new Cu²⁺ selective fluorosensor, its quenching study and application in living cell' NSNT-2012 at IIT Mandi.
6. Sukul D., Rani N., Pal A., Kumar K. R., 23 - 25 August, 2012. Corrosion inhibitory property of gelatin on mild steel in hydrochloric acid medium, Sixteenth National Congress on Corrosion Control, Organised by National Corrosion Council of India, Karaikudi, held at CII, Suresh Neotia Centre for Excellence, Kolkata.

Department of Civil Engineering

1. Basu P, Karmakar S., Shaw A. and Saha S., 7-9 February 2013. "The Response of shear wall with proective barrier under blast loading", National Symposium on Sustainable Infrastructure Development, IIT Bhubaneswar, Pp 267-274.
2. Das A., Karmakar S. and Saha S., 7-9 February 2013. "Strengthening of concrete column using glass fibre reinforced polymer", National Symposium on Sustainable Infrastructure Development, IIT Bhubaneswar, Pp 30-37.
3. Dwivedi, V. K, and Berndtsson, R., 8-12 April 2013. "Geomorphology based hydrological information system for the catchment of river kosi system lying in Nepal", published in the proceedings of THE International Conference "INDIA WATER WEEK-2013", New Delhi, India, organised by National Water Development Agency, Ministry of Water Resources, Govt. of India.
4. Elizabeth, S. and Datta, A..K.. 29 Nov.- 1 Dec., 2012: Bamboo as a construction material in seismic zone area of developing countries: A Review. Fifth CUSAT National Conference on Recent Advances in Civil Engineering, Kochi, India.
5. Karmakar S., Shaw A. and Saha S., 7-9 February 2013. "Response of concrete bridge under blast load", National Symposium on Sustainable Infrastructure Development, IIT Bhubaneswar, Pp 38-45.
6. Karmakar S., Shaw A. and Saha Showmen, 12-13 October 2012. "A Review of Blast loading and Blast Effects on Structure", International Conference on Safety, IIT Gandhinagar.
7. Sahu, A., Samanta, A. K., 19 – 20 April, 2012. "Revisiting Current Design Practice Of Biaxially Loaded Concrete Encased Steel Composite Column." Presented in National Conference on Innovations in Civil Engineering; pp 149-152 (NCICE -2012), SCMS School of Engg. & Technology, Kochi, Kerala.
8. Roy, P., Ghosh, S. 23-25 May, 2012. Probabilistic characterization of B₁ for nuclear pipe bends subjected to internal pressure with in-plane closing moment. Fifth Asian-Pacific Symposium on Structural Reliability and its Application (APSSRA 2012), organized by National University of Singapore, Singapore.

Department of Computer Applications

1. Banerjee, S., Sarkar, A., Debnath, N. C., 21 – 24 January, 2013. "Quality Evaluation of Requirement Engineering Framework: Business Object based Approach", International Conference on Computing, Management and Telecommunications (ComManTel 2013) [IEEE], PP 374 – 379.
2. Choudhury, P., Nandi, S., Pal, A., Debnath, N.C., 25 - 27 July 2012. "Mitagating Route Request Flooding Attack in MANET using Node Reputation" in the IEEE INDIN2012 - IEEE International Conference on Industrial Informatics, Beijing, China.
3. Choudhury, P., Datta, P., Nandi, S., Debnath, N.C., 25 - 27 July 2012. "Mobility Aware Distributed Service Composition Framework in SOA based MANET Application" in the IEEE INDIN2012 - IEEE International Conference on Industrial Informatics, Beijing, China.

4. Das, B., Saha, M., Sikdar, B. K. 15 - 16 March, 2012. *Evaluation of Branch Predictors Targeting Easeful Diagnosis of Design Inaccuracies*; IEEE International Conference on Devices, Circuits and Systems – ICDCS, 2012, Coimbatore, India. pp 230-234.
5. Ganguly, R., Sarkar, A., November 2012. “*Graph Semantic Based Semi Structured Data Management for Insurance Industry: A Case Study*”, Accepted in IEEE Sponsored National Conference on Computing and Communication System (NCCCS 2012), Durgapur, India.
6. Jaiswal, S., Howlader, J., Choudhury, P., 19-20 January, 2013. “*A Review Anonymous Communications – Mix*” in the International Conference on Advances in Computing and Communication Technologies, Pattaya, Thailand.*
7. Mandal, A. K., Changder, S., Sarkar, A., Debnath, N. C., 25 - 27 February 2013. “*A Novel and Flexible Cloud Architecture for Data-Centric Applications*”, IEEE 7th International Conference in Information Technology, PP 1834 – 1839, Cape Town (SA).
8. Pal S., Mukherjee, S., Choudhury P., Nandi, S., Debnath N.C., 25 - 27 February 2013. “*M-Learning in University Campus Scenario –Design and Implementation Issue*” in the IEEE ICIT-International Conference on Industrial Technology, Cape Town, South Africa.
9. Prajapati S. K., Changder S., Sarkar A., 15 – 17 March, 2013. “*Trust Management Model for Cloud Computing Environment*”, International Conference on Computing, Communication and Advanced Network (ICCCAN), India. PP 1- 5.
10. Rabidas, S., Kumar, J., Das, S., Ghosh, D., Debnath, N. C., 27 - 29 June, 2012. “*Towards Forensic Readiness and Homogeneity of Operating System Logs*”, 21st International Conference on Software Engineering and Data Engineering 2012 (SEDE 2012), LA, California.
11. Ray, M.K., Choudhury, P., De, T., 6 - 8 April, 2012. “*Ad-hoc Wireless sensor positioning Approach with Energy Optimization*” in the International Conference on Electronics Computer Technology (ICECT 2012), Kanyakumari, India.
12. Roy, R., Changder, S., Sarkar, A., Debnath, N. C., 21 – 24 January, 2013. “*Evaluating Image Steganography Techniques: Future Research Challenges*”, International Conference on Computing, Management and Telecommunications (ComManTel 2013) [IEEE], PP 309 – 314.
13. Saha, M., Sikdar, B. K., 3 – 4 October, 2012; “*CA based implementation of March test for high speed memories*”, IEEE International Conference on Circuits and Systems - ICCAS 2012; Coimbatore, India; pp 54-58.
14. Saha, S., Shah, V., Verma, R., Mandal, R. Nandi, S., 22 August, 2012.” *Is It Worth Taking A Planned Approach To Design Ad Hoc Infrastructure For Post Disaster Communication?*” in ACM CHANTS 2012 co-located with ACM MobiCom 2012, Istanbul, Turkey.
15. Saha, S., Agarwal, N., Dhanuka, P., Nandi, S., 2013. “*Google Map Based User Interface for Network Resource Planning in Post Disaster Management*”, in ACM DEV 2013 co-located with ACM COMSNETS 2013, Bangalore, India.
16. Saha, S., Sengupta, S., Verma, R., Mishra, V., ,Nandi S. 13 - 15 July, 2012. ”*SRSnF: A Strategy for Secured Routing in Spray and Focus Routing Protocol for DTN*”,The Fifth International Conference on Network Security & Applications (CNSA-2012), Chennai, India.
17. Saha, M., Sikdar B. K., 15 – 16 March, 2012. “*A Cellular Automata Based High Speed Test Hardware for Word-organized memories.*”, IEEE International Conference on Devices, Circuits and Systems - ICDCS 2012; Coimbatore, India. pp 345-349.
18. Sarkar, A., Choudhury, S., Debnath, N. C., July 25 – 27, 2012. “*Graph Semantic Based Design of XML Data Warehouse: A Conceptual Perspective*”, 10th IEEE Conference on Industrial Informatics (INDIN 2012), Beijing, China, PP 992 – 997.

19. Sarkar, A., Debnath, N. C., April 2012. "Aspect Algebra: The Operational Semantics for Aspect Oriented Software", 9th International Conference on Information Technology: Next Generation (ITNG 2012) [IEEE], PP 139 – 144, Las Vegas, USA.
20. Sarkar, A., Debnath, N. C., 25 – 27 July, 2012. "Measuring Complexity of Multi-Agent System Architecture", 10th IEEE Conference on Industrial Informatics (INDIN 2012), Beijing, China, PP 998 – 1003.
21. Sharma, A., Bhattacharya, U., 17-19 Jan, 2013. "Load Balancing Scheme for Wireless Cellular Networks", 7th International Conference on Ubiquitous Information Management and Communication (ICUIMC), Article No.: 43, Kota Kinabalu, Malaysia.
22. Sharma, A., Bhattacharya, U., 2012. "An Efficient Call Admission Control Scheme to Reduce Call Blocking in Mobile Cellular Systems", IEEE International Conference on Communication, Networks and Satellite (ComNetSat).
23. Sharma, A., Bhattacharya, U., 2012. "An Efficient Scheme to Reduce Call Blocking in Cellular Networks", IEEE 1st International Conference on Mobile Services (IEEE MS 2012), Hawaii.
24. Sharma, A., Roy, A., Ghosal, S., Chaki, R., Bhattacharya, U., 26 - 28 July 2012. "Load Balancing in Cellular network: A Review", 3rd International Conference on Computing Communication & Networking Technologies (ICCCNT), pp1 – 5, Coimbatore.

* Repeated in other department

Department of Computer Science and Engineering

1. Barat, S., Kumar, A., Pradhan, A.K., De, T., August 2012. A Light-forest Approach for QoS Multicasting in WDM Networks, 7th IEEE International Conference on Industrial and Information Systems, pp. 1-6.
2. Barat, S., Pradhan, A.K., De, T., August 2012. A Genetic Algorithm for Multicasting in Resource Constraint WDM Mesh Networks, 7th IEEE International Conference on Industrial and Information Systems, pp. 1-6.
3. Bhakta, D, Sarker, G., 10th March 2013. A Radial Basis Function Network for Face Identification and Subsequent Localization, International Conference on Computer Science & Information Tehnology (ICCSIT), pp. 1-6.
4. Bhattacharjee, S., Taparia, G., Pandey, A., 2012. Stability History based Route Selection using K-Means Clustering in Mobile Adhoc Network. Proceeding of International Conference on Computational Intelligence and Information Technology, Chennai, India.
5. Bhattacharjee, S., Bandyopadhyay, S., 2013. Maximally Node Disjoint Congestion Aware Multi Path Routing in Wireless Networks for Delay Minimization, Proceedings of Amrita International Conference of Women's in Computing, India (Available in IJCA).
6. Bhowmik, S., Sen, A., Bhattacharjee, S., 2012. Balanced Neighborhood Aware Clustering Technique in Wireless Sensor Networks, Proceedings of IEEE International Conference on Power, Control and Embedded System, Allahabad, India.
7. Chakraborty, B., Dalui, M., 29-31 January, 2013. A Segmented CA Based Approach to Test TSVs in 3D IC', IEEE 4th International Conference on Intelligent Systems Modelling and Simulation, Bangkok, Thailand.
8. Das, B., Sen, B., Saran, D., Sikdar, B. K., 3-5 October, 2012. Identification of Power Hungry Unit In a Processor With Faulty Predictor, Proceedings of ICCAS, Kulalumpur, Malaysia.
9. Das, P., Dubey, K., De, T., February, 2013. Priority Aided Scheduling of Pigeons in Homing-Pigeon-Based Delay Tolerant Networks, 3rd IEEE International Advance Computing Conference, India.

10. Das, P., Dubey, K., De, T., February, 2013. Routing in Delay Tolerant Networks Using Credit Based Spraying, 3rd IEEE International Advance Computing Conference, India.
11. Das, P., Dubey, K., De, T., December 2012. Credit Based Routing in Delay Tolerant Networks, 2nd IEEE International Conference on Parallel Distributed and Grid Computing , India.
12. Das, P., Dubey, K., De, T., December 2012. Threshold Triplet Incorporated Scheduling of Storage Based Pigeons in Homing-Pigeon-Based Delay Tolerant Networks, 5th International Conference on Computers and Devices for Communication, India.
13. Dalui, M., Sikdar, B. K., July, 2012. An Efficient Test Design for CMPs Cache Coherence Realizing MESI Protocol, 16th International Symposium on VLSI Design and Test, Kolkata, West Bengal, India.
14. Dalui, M., Sikdar, B. K., December, 2012. A Test Design for Quick Determination of Incoherency in Chip Multiprocessors' Cache Realizing MOESI Protocol, 3rd International Symposium on Electronic System Design, Kolkata, West Bengal, India.
15. Dalui, M., Sikdar, B. K., 29-31 January, 2013. A Protocol Independent Test Design for Quick Determination of Incoherency in CMPs Cache, IEEE 4th International Conference on Intelligent Systems Modelling and Simulation, Bangkok, Thailand.
16. Dey, P., Guha Thakurta, P. K., 18 - 19 August, 2012. Coordinate based Routing Protocol for Mobile Networks: A Fuzzy Logic Approach, 3rd International Conference on Technical and Managerial Innovation in Computing and Communications in Industry and Academia, Science City, Kolkata, India.
17. Dubey, K., Das, P., De, T., December 2012. Postbox DTN: It's Modeling and Routing Analysis, 2nd IEEE International Conference on Parallel Distributed and Grid Computing, India.
18. Mukherjee, S., Roy, S., February 2013. Graph Colouring based Multipin Net Detailed Routing for FPGAs using SAT. Proceedings of 3rd IEEE International Advance Computing Conference, Gaziabad, India.
19. Mukherjee, S., Roy, S., September, 2012. Testing the Effect of Different Switch Box Architectures on Detailed Routing in FPGAs. Proceedings of International Conference on Communication, Circuits and Systems (IC³S-2012) in the International Journal of Computer Applications, Bhubaneswar, India.
20. Nag, K., Pal, T., 10-15 June, 2012. A new Archive-based Steady-state Genetic Algorithm, World Congress on Computational Intelligence (IEEE), Brisbane, Australia, pp. 853-859.
21. Poddar, R., Banerjee, S., Guha Thakurta, P. K., 1-2 August, 2012. Shortest Path Routing for Coordinate Based Mobile Networks: A Genetic Algorithm Approach, International Conference on Advances in Mobile Network, Communication and its Applications (MNCApps), Bangalore, India.
22. Pradhan, A. K., De, T., January 2013. Multicast Traffic Grooming in Sparse Splitting WDM Mesh Networks, International Conference in Advances in Computing Communication and Control (ICAC3), Springer CCIS, volume 361, pp. 444-458.
23. Sadhu, S., Maity, S., Agarwal, V., Guha Thakurta, P. K., 1-2 August, 2012. A New Cluster Based Approach on Load Balancing Technique with Congestion Control Schema for Mobile Networks, International Conference on Advances in Mobile Network, Communication and its Applications (MNCApps), Bangalore, India.
24. Sadhu, S., Hazarika, S., Jain, K. K., Basu, S., De, T., 2012. GRP_CH Heuristic for Generating Random Simple Polygon, (IWOCA 2012) Combinatorial Algorithms Lecture Notes in Computer Science Volume 7643, pp 293-302.
25. Sarker, G., 28 – 29 December, 2012. An Unsupervised Learning Network for Face Identification and Localization, International Conference on Communications, Devices and Intelligent Systems (CODIS), Kolkata, pp 652-655.

26. Sarker, G., Roy , K., 21-23 February, 2013. An RBF Network with Optimal Clustering for Face Identification, International Conference on Information & Engineering Science, organized by IMRF, Vijayawada, Andhra Pradesh.
27. Sarker, G., Roy , K., 15th February, 2013. A Modified RBF Network with Optimal Clustering for Face Identification and Localization, International Conference Advanced Engineering and Technology, Kolkata, pp. 32-37.
28. Sarker, G., Kundu, S., 15th February, 2013. A Modified Radial Basis Function Network for Fingerprint Identification and Localizations, International Conference on Advanced Engineering and Technology, Kolkata, pp. 26-31.
29. Sen, B., Dutta, M., Singh, K. D., Banik , D., Sikdar, B. K., 19-22, December, 2012. Design of Fault Tolerant Reversible Arithmetic Logic Unit in QCA, Proceedings of ISED, BESUS, shibpur, India.
30. Sen, B., Dutta, M., Singh, K. D., Saran, D., Sikdar, B. K., 3-5 October, 2012. QCA Multiplexer Based Design of Reversible ALU, Proceedings of ICCAS, Kulalumpur, Malaysia [Awarded best paper in that conference].
31. Sen, B., Dutta, M., Saran, D., Sikdar, B. K., 1-4 July, 2012. An Efficient Multiplexer in Quantum-dot Cellular Automata, Proceedings of VDAT, Vol. 7373, Springer, p.350-351. BESUS, shibpur, India.

Department of Electrical Engineering

1. Acharjee P., 14-17 October, 2012. "Investigation of the power scenario in India for the implementation of Smart Grid", Innovative Smart Grid Technology (ISGT) Europe Conference, IEEE international conference, Berlin Germany.
2. Chakraborty A., Dey J., 25th - 27th Feb, 2013. Real-time Study of Robustness Aspects of Periodic Controller for Cart-Inverted Pendulum System, IEEE International Conference on Industrial Electronics (ICIT) 2013, Cape Town, South Africa.
3. Chatterjee A, Sarkar R, Kumbhakar P and Roy N K., 27-28 Sept, 2012. "Doped thin film of ZnO exhibits better structural, optical and electrical properties", accepted for International conference on Advances in material science, Bangkok.
4. Chatterjee K., Mahato, S. N. and Chattopadhyay S., 2013. "A novel approach for Enhancing Accuracy in weighing system Using a new Superregenerative architecture in DSSS", Proceedings of International Conference on Industrial Electronics and Applications (ICIEA), Bhubaneswar, India.
5. Das S., Mandal D., Kar R., Ghoshal S. P., , 20-21 Dec, 2012."Application of Differential Evolution with Best of Random Mutation strategy on Asymmetric Location only Synthesis of Broadside Circular Antenna Array", SEMCCO 2012, LNCS 7677, pp. 33-40, Springer, Orissa.*
6. Dey J. and Saha T.K., 25th - 27th Feb, 2013. Design and Performance Analysis of Two Degree-of-freedom (2 DOF) Control of DC-DC Boost Converter, IEEE International Conference on Industrial Electronics (ICIT) 2013, Cape Town, South Africa.
7. Ghosh A, Banerjee, S., Saha P K, and Panda G. K., March 21-22, 2013. Nonlinear Modeling and Bifurcations In Switched Power-Factor-Correction Boost Regulator, Proc. of IEEE International Conference on Circuit, Power and Computing Technologies (ICCPCT-2013), Noorul Islam Centre for Higher Education, Thuckalay, Tamilnadu.
8. Majumdar, K., Banerjee, S., Sarkar M. K. and Ghosh A., March 16- 17,2013, Analysis, Design, Modeling and Control of DC/DC Converters, Proc. in 1st National Conference on Power Electronics Systems & Applications, PESA 2013,NIT Rourkela.
9. Mandal D, Kar R., Ghoshal S. P., 27-31 May, 2012. "Non-Uniform Concentric Circular Antenna Array Design Using NPSO Technique for SLL Reduction", IEEE Antenna Week. (IAW 2012), Gangtok, Sikkim.*

10. Mondal S., Chakraborty D., Ghoshal S. P., Majumdar A., Kar R., Mandal D., 24 - 27 June 2012. "Novel Particle Swarm Optimization for High Pass FIR Filter Design," Proc. IEEE SHUSER 2012, pp. 413-418, Malaysia.*
11. Mondal S., Mallik P., Ghoshal S. P., Kar R., Mandal D., 24 - 27 June 2012. "Optimal FIR band Pass Filter Design using Novel Particle Swarm Optimization," Proc. IEEE SHUSER 2012, pp. 141-146, Malaysia.*
12. Mondal S., Ghoshal S. P., Majumdar A., Kar R., Mandal D., 30 May - 01 Jun 2012. "Optimal design of Linear phase FIR band stop filter using Particle Swarm Optimization with Improved Inertia Weight Technique," Proc. 9th IEEE JCSSE 2012, pp. 168 - 173, Bangkok, Thailand.*
13. Ram G., Mandal D., Kar R., Ghoshal S. P., 20-21 Dec, 2012. "Minimization of Side Lobe of Optimized Uniformly Spaced and non-uniform Exited Time Modulated Linear Antenna Arrays Using Genetic Algorithm", SEMCCO 2012, LNCS, Springer, , Orissa.
14. Ram G., Biswas A., Mandal D., Kar R. and Ghoshal S. P., Dec. 28-29, 2012. "Performance comparison of Optimum uniform and non-uniform Spacing of Circular Antenna Arrays", Proc. IEEE CODIS 2012, pp. 205 - 208, Kolkata.
15. Ram G., Mandal D., Ghoshal S. P., Kar R., Jan 31 - Feb 1, 2013. "IPSO Based Performance Comparison of Optimum Uniform and Non-uniform Spacing of Circular Antenna Arrays", Proc. 5th IEEE KST 2013, , Bangkok.
16. Saha S. K., Rakhshit I., Kar R., Mandal D., Ghoshal S. P., 24 - 27 June 2012. "IIR System Identification Using Particle Swarm Optimization with Constriction Factor and Inertia Weight Approach" Proc. IEEE SHUSER 2012, pp. 367-372, , Malaysia.*
17. Saha S. K., Yangchen S., Kar R., Mandal D., Ghoshal S. P., 24 - 27 June 2012. "Digital Stable IIR High Pass Filter Optimization using PSO-CFIWA", Proc. IEEE SHUSER 2012, pp. 389-394, Malaysia.*
18. Saha S. K., Chaudhuri A., Kar R., Mandal D., Ghoshal S. P., 24 - 27 June 2012. "Optimization of IIR High Pass Filter using Craziiness based Particle Swarm Optimization Technique", Proc. IEEE SHUSER 2012, pp. 401-406, Malaysia.*
19. Saha S. K., Kar R., Mandal D., Ghoshal S. P., 30 May - 01 Jun 2012. "Digital Stable IIR Low Pass Filter Optimization Using Particle Swarm Optimization with Improved Inertia Weight , " Proc. 9th IEEE JCSSE 2012, pp. 147 - 152, Bangkok, Thailand.*
20. Saha S. K., Ghoshal S. P., Kar R., Mandal D., November 30-December 01, 2012. "Gravitational Search Algorithm in Digital FIR Low Pass Filter Design", Proc. IEEE EAIT 2012, pp. 52-55, , Kolkata.*
21. Saha S. K., Kar R., Mandal D., Ghoshal S. P., November 30-December 01, 2012. "IIR System Identification using Particle Swarm Optimization with Improved Inertia Weight , " Proc. IEEE EAIT 2012, pp. 43-46, , Kolkata.*
22. Saha S. K., Ghoshal S. P., Kumar Nishant, Kar R., Mandal D. Oct. 30-Nov. 02, 2012. "Optimal Linear Phase FIR High Pass Filter Design using Particle Swarm Optimization with Constriction Factor and Inertia Weight Approach with Wavelet Mutation", Proc. IEEE WICT, Trivandrum, pp. 768-773.*
23. Saha S. K., Kar R., Mandal D., Ghoshal S. P., October 30-November 02 2012. "Optimal Digital Stable IIR Band Stop Filter Optimization using Craziiness based Particle Swarm Optimization Technique", Proc. IEEE WICT, Trivandrum, , pp. 774-779.*
24. Saha S. K., Kar R., Mandal D., Ghoshal S. P., Jan 31 - Feb 1, 2013. "IIR Filter Design and Identification Using NPSO Technique", Proc. 5th IEEE KST 2013, Bangkok.*
25. Sarkar, M. K, Banerjee S. and Ghoshal S. P, October 25-28, 2012, Evolutionary Computation Based Optimization of Controller Parameters for an Electromagnetic Levitation System, Proc. of 38th Annual Conference of the IEEE Industrial Electronics Society (IECON 2012), Montreal, Canada.

26. Upadhyay P., Kar R., Mandal D., Ghoshal S. P., December 5-7, 2012. "A Low Power CMOS Voltage Mode SRAM Cell for High Speed VLSI Design", Proc. IEEE PrimeAsia 2012, pp. 25-28, , Hyderabad, India.*
27. Upadhyay P., Chhotray S. K., Kar R., Mandal D., Ghoshal S. P., 22-23, Feb 2013. "Write Stability Analysis of 8-T Novel SRAM cell for High Speed Application", Proc. 3rd IEEE IACC 2013, Ghaziabad, India.*

* Repeated in other department

Department of Electronics & Communication Engineering

1. Bandyopadhyay, S., Mistri, H., and Maji, B., 2012 , Antenna Array Synthesis by Implementing Non-Uniform Amplitude Using Fuzzy Logic, IEEE-2012 International Conference on Communications, Devices and Intelligent Systems (CODIS), 209-212.
2. Bandyopadhyay, S., Chatla, A.B., Maji, B., 2012, Antenna Array Synthesis by Implementing Non – Uniform Spacing Using Tsukamoto Fuzzy Logic Controller, Proc. International Conference on Computer Science and Engineering (ICCSE - 2012), 67 – 72.
3. Biswas, N., Ghosh, B., Chandra, A., 2013, Energy efficient relay node placement in a eta-mu fading channel, IEEE International Conference on Information and Communication Technologies (ICT).
4. Bhowmick, A., Parbat, G., Dhar Roy, S. and Kundu, S., 2012, Cooperative Spectrum Sensing in Cognitive Radio Network with Power Control in Proc. of Fifth IEEE International Conference on Computers and Devices for Communication (CODEC- 2012).
5. Bhowmick, A., Parbat, G., Dhar Roy, S. and Kundu, S., 2013, Performance of Spectrum Sensing in Nakagami fading channel with Improved Energy Detector Using Double Threshold, accepted in IEEE International Conference on Communication and Signal processing (ICCSP-13).
6. Chakraborty, M., Karmakar, P., Maji, B., Kandar, D., 2013, An Artificial Neural Network Based Approach of Rejecting Static Clutter from the Covariance Matrix Containing Low Velocity, Small RCS Target in case of Monostatic Airborne Radar, International Conference on Telecommunication & Networks, TEL-NET 2013.
7. Chandra, A., 2012, Energy conservation in wireless communication systems with relays (Invited Paper): 1-4, IEEE Advances in Mobile Network, Communication and its Applications (MNCApps).
8. Chatla, A.B., Bandyopadhyay, S., Maji, B., 2012, A Dual Band Z-Shape Stepped Dielectric Resonator Antenna for Millimeter Wave Applications, Proc. International Conference on Electronics and Communication Engineering (ICECE - 2012), 180 – 184.
9. Chattopadhyay, A., Chandra, A., Bhattacharjee, A. K., 2012, A simplified analytical and simulation framework for evaluating BER of RS coded digital signal in Rician fading channels, IEEE International Conference on Communications, Devices and Intelligent Systems (CODIS).
10. Das, S., Mandal, D., Kar, R., Ghoshal, S.P., 2012, Application of Differential Evolution with Best of Random Mutation strategy on Asymmetric Location only Synthesis of Broadside Circular Antenna Array, SEMCCO 2012, LNCS 7677, 33-40.*
11. Datta, U., Sahu, P. K. and Kundu, S., 2013, Lifetime Analysis of CDMA Wireless Sensor Networks with Efficient Channel Aware Forwarding Protocol, in Proc. of Workshop on Sustainable Monitoring Through Cyber-Physical Systems (SuMo-CPS), IEEE ICDCN.
12. Datta, U. and Kundu, S., 2012, Performance of Multi Hop CDMA Wireless Sensor Networks with Nearest Neighbors Based Routing, IEEE Indicon 2012.

13. Datta, U. and Kundu, S., 2012, Packet Size Optimization for Multi Hop CDMA Wireless Sensor Networks with Nearest Neighbors Based Routing, in Proc of IEEE EAIT (Third International Conference on Emerging Applications of Information Technology).
14. Datta, U., and Kundu, S., 2012, Energy level Performance of Multi hop CDMA Wireless Sensor Network with Error Control, in Proc. of IEEE ICSPCC -2012.
15. Datta, U. and Kundu, S., 2012, Packet Size Optimization for Multi Hop CDMA Wireless Sensor Networks with Nearest Neighbors Based Routing, accepted at International Conference on Emerging Applications of Information Technology (EAIT).
16. De, A., Bhattacharjee, A. K., Chanda, C. K., Maji B., 2013, Registration of Progressively transmitted MR with lesions in brain, IEEE International Conference on Circuit, Power and Computing Technologies, ICCPCT-2013.
17. Dey, C. K. and Kundu, S., 2012, Hybrid Forwarding for cooperative Wireless Relaying with Interference at the Relay in m-Nakagami Fading Channel, presented in National Conference on Computing and communication Systems (NCCCS-2012).
18. Dutta, S., Chandra, A., 2012, Accurate SER expressions for M-ary dual ring star QAM in fading channels, IEEE International Conference on Communications, Devices and Intelligent Systems (CODIS).
19. Gopi, R., Mandal, D., Kar, R., Ghoshal, S. P., 2012, Minimization of Side Lobe of Optimized Uniformly Spaced and non-uniform Excited Time Modulated Linear Antenna Arrays Using Genetic Algorithm, SEMCCO 2012, LNCS, Springer.
20. Gopi, R., Biswas, A., Mandal, D., Kar, R. and Ghoshal, S. P., 2012, Performance comparison of Optimum uniform and non-uniform Spacing of Circular Antenna Arrays, Proc. IEEE CODIS 2012, 205 - 208.
21. Gopi, R., Mandal, D., Ghoshal, S. P., Kar, R., 2013, IPSO Based Performance Comparison of Optimum Uniform and Non-uniform Spacing of Circular Antenna Arrays, Proc. 5th IEEE KST 2013, 139-143.
22. Ghosh, B., Ghosh, A., Biswas, N., Chandra, A., 2012, Placing the 'third' node: An energy efficiency perspective, International Conference on Computers and Devices for Communication.
23. Kumari, A. and Mahapatra, R., 2013, Impact of design parameters on performance of NEM switch, International Conference on Emerging Technology-Micro to Nano (ETMN 2013).
24. Pilli, H., Mukherjee, A., Gupta, V., Mondal, S., Sarkar, S. and Mahanti, G.K., 2012, Generation of Multiple Side Lobe Levels of Non Uniformly Excited Linear Array Antenna Using Iterative Fast Fourier Transform, IEEE Symposium on Computers and Informatics, 252-255.
25. Polimetla, M. and Mahapatra, R., 2012, Design of square wave generator with CNTFET Opamp, IEEE 4th International Conference on Electronics Computer Technology (ICECT 2012).
26. Mahanti, G.K. , Bikkani, V.V.B. and Mandal, S.K., 2012, Placement of Wide Nulls in The Radiation Pattern of A Linear Array Antenna Using Iterative Fast Fourier Transform, IEEE International Conference on Signal processing, Communications and Computing, 552-555.
27. Maheshwari, V., Joshi, N., Anushree, Kar, R., Mandal, D., Bhattacharjee, A.K., 2012, 4- π Crosstalk Noise Model for Deep Submicron VLSI Global RC Interconnect, Proc. IEEE SHUSER 2012, 355-360.
28. Maheshwari, V., Gupta, S., Khare, K., Yadav, V., Kar, R., Mandal, D., Bhattacharjee, A.K., 2012, Efficient Coupled Noise Estimation For RLC On-Chip Interconnect", Proc. IEEE SHUSER 2012, 1125-1129.
29. Maheshwari, V., Agarwal, S., Goyal, A., Jain, J., Kumar, S., Kar, R., Mandal, D., Bhattacharjee, A.K., 2012, "Elmore's approximations based Explicit Delay and Rise Time Model for Distributed RLC On-Chip VLSI Global Interconnect, Proc. IEEE SHUSER 2012, 1135-1139.

30. Maheshwari, V., Kar, R., Mandal, D., Bhattacharjee, A. K., 2012, Moment Based Delay Modelling for On-Chip RC Global VLSI Interconnect for Unit Ramp Input, Proc. 9th IEEE JCSSE 2012, 164 - 167.
31. Maheshwari, V., Bhadauria, R.S., Jha, S. K., Mandal, D., Kar, R., Bhattacharjee, A.K., 2012, Delay Modelling of On-Chip RC Global VLSI Interconnect for Step Input, Proc. IEEE WICT, 458-463.
32. Maheshwari, V., Majumdar, S., Kar, R., Mandal, D., Bhattacharjee, A. K., 2012, A Novel Method for Delay Analysis of CMOS Inverter with RLC Interconnect Load, Proc. IEEE CODEC 2012, 1-3.
33. Maheshwari, V., Mazumdar, S., Anushree, Kar, R., Mandal, D., 2012, $2-\pi$ Crosstalk Noise Model for Deep Submicron VLSI Global RC Interconnects, Proc. IEEE ICEDSA 2012, 225-229.
34. Maheshwari, V., Baboo, A., Kar, R., Mandal, D., Bhattacharjee, A. K., 2012, Delay Model for VLSI RLCG Global Interconnects Line, Proc. IEEE PrimeAsia 2012, 201-204.
35. Maheshwari, V., Khare, K., Kar, R., Mandal, D., Bhattacharjee, A. K., 2012, Crosstalk Noise Estimation for Generic RLC Trees with Capacitive Coupling, Proc. IEEE PrimeAsia 2012, 150-154.
36. Maheshwari, V., Rakshit, J., Mazumdar, S., Jadav, H., Kar, R., Mandal, D., 2012, Delay Metric for On-Chip RLCG Interconnect for Arbitrary input, Proc. IEEE CODIS 2012, 369 - 372.
37. Maheshwari, V., Khare, K., Jha, S. K., Kar, R., Mandal, D., 2013, "An Analytical Crosstalk and Delay Model for VLSI RLC Coupled Interconnects, Proc. 3rd IEEE IACC 2013, 1568-1572.
38. Mandal, D., Kar, R., Ghoshal, S. P., 2012, Non-Uniform Concentric Circular Antenna Array Design Using NPSO Technique for SLL Reduction, IEEE Antenna Week. (IAW 2012).*
39. Mandal, S. K., Habib, M. Md., Mahanti, G. K., Ghatak, R., 2012, Optimized Non-Uniformly Excited Time Modulated Linear Array with Low Dynamic Range Ratio, in the proceedings of IEEE IAW 2012, 82 – 85.
40. Mandal, S. K., Mahanti, G. K., Ghatak, R., 2012, Synthesis of Flat Top Beam Pattern through Time Modulation of Linear Array, in the proceedings of International Conference on Signal Processing, Communications and Computing (ICSPCC 2012), 32-37.
41. Mandal, S. K., Mahanti, G. K., Ghatak, R., 2012, Optimizing Time Delay of Time Modulated Linear Array Elements to Reduce the Side Band Radiation Level, to appear in the proceedings of International Conference on Signal Processing, Communications and Computing (ICSPCC 2012), 556 – 559.
42. Mondal, S., Chakraborty, D., Ghoshal, S.P., Majumdar, A., Kar, R., Mandal, D., 2012, Novel Particle Swarm Optimization for High Pass FIR Filter Design, Proc. IEEE SHUSER 2012, 413-418.*
43. Mondal, S., Mallik, P., Ghoshal, S. P., Kar, R., Mandal, D., 2012, Optimal FIR band Pass Filter Design using Novel Particle Swarm Optimization, Proc. IEEE SHUSER 2012, 141-146.*
44. Mondal, S., Ghoshal, S. P., Majumdar, A., Kar, R., Mandal, D., 2012, Optimal design of Linear phase FIR band stop filter using Particle Swarm Optimization with Improved Inertia Weight Technique, Proc. 9th IEEE JCSSE 2012, 168 - 173.*
45. Nallagonda, S., Chandra, A., Roy, S. D., Kundu, S., 2012, Performance of cooperative spectrum sensing in Hoyt fading channel under hard decision fusion rules, International Conference on Computers and Devices for Communication.
46. Nallagonda, S., Roy, S. D., Kundu, S., Ferrari, G., and Raheli, R., 2013, Cooperative Spectrum Sensing with Censoring of Cognitive Radios in Rayleigh Fading Under Majority Logic Fusion in Proc. of NCC 2013.
47. Nallagonda, S., Chandra, A., Roy, S. D. and Kundu, S., 2012, Performance of cooperative spectrum sensing in Hoyt fading channel under Hard decision Fusion rules, in Proc. of Fifth IEEE International Conference on Computers and Devices for Communication (CODEC- 2012).

48. Nallagonda, S., Roy, S. D. and Kundu, S., 2012, Performance of cooperative spectrum sensing using an improved energy detector in Fading Channels, in Proc. of Fifth IEEE International Conference on Computers and Devices for Communication (CODEC- 2012).
49. Nallagonda, S., Roy, S. D., and Kundu, S., 2012, Cooperative Spectrum Sensing with Censoring of Cognitive Radios and Improved Energy Detector under LRT Fusion, IEEE Indicon 2012.
50. Nallagonda, S., Roy, S. D. and Kundu, S., 2012, Cooperative spectrum sensing with censoring of cognitive Radios in Presence of Log-normal shadowing under Majority logic fusion, in Proc. of IEEE International Conference on Communications, Devices and Intelligent Systems (CODIS'12).
51. Nallagonda, S., Bandari, S. K., Roy, S. D. and Kundu, S., 2012, Performance of Weighted Cooperative spectrum sensing Schemes in Fading Channels, in Proc. of IEEE International Conference on Communications, Devices and Intelligent Systems (CODIS'12).
52. Nallagonda, S., Sudheer, S., Roy, S. D. and Kundu, S., 2012, Cooperative Spectrum Sensing with Censoring of Cognitive Radios and Improved Energy Detector under Majority Logic Fusion, in Proc. of IEEE ICSPCC -2012.
53. Panda, S, Mukherjee, C., Maji, B., Mukhopadhyay, A. K., 2013, Thermal Noise Analysis of SGMOSFET for different Substrate and Gate Oxides, Accepted for the Proceedings of an International Conference, IEEE International Conference on Circuit, Power and Computing Technologies (ICCPCT-2013).
54. Pokuri, S., Chandra, A., 2013, Current-bleeding folded Gilbert RF mixer design for wireless applications, IEEE International Conference on Information and Communication Technologies (ICT).
55. Saha, S. K., Rakhshit, I., Kar, R., Mandal, D., Ghoshal, S. P., 2012, IIR System Identification Using Particle Swarm Optimization with Constriction Factor and Inertia Weight Approach, Proc. IEEE SHUSER 2012, 367-372.*
56. Saha, S. K., Yangchen, S., Kar, R., Mandal, D., Ghoshal, S. P., 2012, Digital Stable IIR High Pass Filter Optimization using PSO-CFIWA, Proc. IEEE SHUSER 2012, 389-394.*
57. Saha, S. K., Chaudhuri, A., Kar, R., Mandal, D., Ghoshal, S. P., 2012, Optimization of IIR High Pass Filter using Craziness based Particle Swarm Optimization Technique, Proc. IEEE SHUSER 2012, 401-406.*
58. Saha, S. K., Kar, R., Mandal, D., Ghoshal, S. P., 2012, Digital Stable IIR Low Pass Filter Optimization Using Particle Swarm Optimization with Improved Inertia Weight, Proc. 9th IEEE JCSSE 2012, 147 - 152.*
59. Saha, S. K., Ghoshal, S. P., Kar, R., Mandal, D., 2012, Gravitational Search Algorithm in Digital FIR Low Pass Filter Design, Proc. IEEE EAIT 2012, 52-55.*
60. Saha, S. K., Kar, R., Mandal, D., Ghoshal, S. P., 2012, IIR System Identification using Particle Swarm Optimization with Improved Inertia Weight, Proc. IEEE EAIT 2012, 43-46.*
61. Saha, S. K., Ghoshal, S. P., Kumar, N., Kar, R., Mandal, D., 2012, Optimal Linear Phase FIR High Pass Filter Design using Particle Swarm Optimization with Constriction Factor and Inertia Weight Approach with Wavelet Mutation, Proc. IEEE WICT, 768-773.*
62. Saha, S. K., Kar, R., Mandal, D., Ghoshal, S. P., 2012, Optimal Digital Stable IIR Band Stop Filter Optimization using Craziness based Particle Swarm Optimization Technique, Proc. IEEE WICT, 774-779.*
63. Saha, S. K., Kar, R., Mandal, D., Ghoshal, S. P., 2013, IIR Filter Design and Identification Using NPSO Technique, Proc. 5th IEEE KST 2013, 128-133.*
64. Sarkar, M., Maji, B., Kumar, A., Bhattacharjee, A. K., 2013, Analysis of Data Transmissions Scheme for Wide Band Code Division Multiple Access with Rake Receiver International Conference on Computation and Communication Advancement-2013.

65. Sha, R., Ghatak, R. and Mahapatra, R., 2013, Study of cantilever MEMS switch using different beam materials, International Conference on Emerging Technology-Micro to Nano (ETMN 2013).
66. Singh, S. K., Mahanti, G.K. and Pilli, H., 2012, Synthesis of Discrete Amplitude-Only Linear Array Antenna With Minimum Side Lobe Level Using Iterative Fast Fourier Transform, 5th International Conference on Computers and Devices for Communication (CODEC 2012).
67. Upadhyay, P., Kar, R., Mandal, D., Ghoshal, S. P., 2012, A Low Power CMOS Voltage Mode SRAM Cell for High Speed VLSI Design, Proc. IEEE PrimeAsia 2012, 25-28.*
68. Upadhyay, P., Chhotray, S. K., Kar, R., Mandal, D., Ghoshal, S. P., 2013, Write Stability Analysis of 8-T Novel SRAM cell for High Speed Application, Proc. 3rd IEEE IACC 2013, 1564-1567.*

* Repeated in other department

Department of Humanities & Social Sciences

1. Chakraborty, T., Banerjee, J., May 21-24, 2012. Gender, Race and Ethnicity in Indo English Fiction, International Conference for Academic Disciplines, Central Connecticut State University, Ryerson University's International Learning Center at 240 Jarvis Street, Toronto (Canada)
2. Chattaraj (Chakraborty), T., Banerjee, J., April 26-28, 2012. Language: The global reputed phenomena, Asian Conference on Language Learning 2012, Ranada, Osaka, (Japan).
3. Chattaraj (Chakraborty), T., Banerjee, J., Feb. 20-22, 2013. The Marginal Whimpers Become Prominent Voices: Recent Trend in Mainstream Indian Woman-Centric Films, International Conference on Voices from the Margin: Society, Culture and Exclusion, organized by School of Languages, Central University of Jharkhand, Ranchi, India.
4. Guha Roy, S., Banerjee, J., Feb. 20-22, 2013. Addis of Identity in Jhumpa Lahiri, International Conference on Voices from the Margin: Society, Culture and Exclusion, organized by School of Languages, Central University of Jharkhand, Ranchi, India.
5. Modak, Arindam. 19-21 July 2012. Re-contextualising the Teaching of English in India, Proceedings of the 7th International & 43rd Annual ELTAI Conference on The English Classroom: Experiments and Experiences, organized by Velammal Engineering College and ELTAI, and supported by British Council, at Velammal Engineering College, Surapet, Chennai.
6. Rai, S. K. 29 June- July 2012. Walcott's Poetry: Potrayal of Broken Boundaries, DIAS 5: Proceedings of the 5th Global Conference – Diasporas, Oxford, United Kingdom.
7. Rai, S. K. Feb. 20-22, 2013. The Rani of Kittur: An Attempt to acquire the centre stage, International Conference on Voices from the Margin: Society, Culture and Exclusion, organized by School of Languages, Central University of Jharkhand, Ranchi, India.
8. Halder, S., Dey, S., Chakraborty, B., 2012. Application of tree structure for Primary Disease detection for automated Patient Admission System, 10th. IEEE International Conference on Industrial Informatics, IEEE INDIN 2012, Beijing, China, 25-27th.

Department of Information Technology

1. Agarwal N., Dutta A., 9-10th May 2012. "Agent Based Computing Environment for Accessing Privileged Services", The 8th International conference on computing and Information Technology(IC²IT 2012), Pattaya City, Thailand.

2. Baksi Debanjana, Datta Deepanwita, Nandi Debashis & Chattopadhyay Debashis, 19-20 January, 2013. "Chaotic Block Encryption with Position Permutation", accepted in *International Conference on Advances in Computing and Communication Technologies (ICACCT 2013)*, Pattaya, Thailand.
3. Choudhury S, Nair V, Biswas P, Choudhury B, Mal A K, 2012. "A family of flexible offset-time based wavelength schedulers for OBS edge-nodes", IEEE International Conference on Photonics (ICP) 2012, pp 280-284.
4. Das. D, Mukhopadhyay. S., 10-12th August, 2012. Painting an Area by Swarm of Mobile Robots With Limited Visibility, Sixth International Conference on Information Processing ICIP 2012, Bangalore, Wireless Networks and Computational Intelligence Communications in Computer and Information Science, 2012, Volume 292.
5. Deyashi Samaresh, Banerjee Debrup and Chakraborty Baisakhi.; 25-27th. July 2012. "A combination of CBR and bottom up approach for fever detection", 10th. IEEE International Conference on Industrial Informatics, INDIN 2012, Beijing, China.
6. Dutta A., Upadhyay P. D. , Acharya S., 1-3 July, 2012. "Requirement Analysis and Automated Verification: A Semantic Approach" Proceedings of the 24th International Conference on Software Engineering & Knowledge Engineering (SEKE'2012), Hotel Sofitel, Redwood City, San Francisco Bay, USA.
7. Dutta S, Choudhury S, Dutta A, 2012. "Techno-economic effects of a recovery mechanism against malicious Control Packet to support QoS aware multicasting over Optical Burst Switched Networks", proceedings of ICBIM 2012, NIT, Durgapur, India, pp 186-197.
8. Golui S., Ekka E. V. P. , Jain N., Dutta A. , 19-20 May, 2012. "An Ontology Driven E-counseling System As An Implementation of Semantic Web Technology", International Conference on Computer, Electrical, Electronics & Biomedical Engineering (ICCEEBE'2012) Penang, Malaysia.
9. Gupta S, Mukhopadhyay S, Ghosh D., 2012. "Efficient Incentive Compatible Mechanism For Paid Crowdsourcing", In 3rd Annual International Conference on Advances in Distributed and parallel computing (ADPC 2012), springer, pp 611-620.
10. Howlader J, Kar Jayanta Kumar, Mal Ashis Kumar:, December 2012. Coercion Resistant Mix for Electronic Auction. In ICISS, pp 238-248, Springer.
11. Jana N D and Sil J, August 2012. "Particle Swarm Optimization with Backtracking in Protein Structure Prediction Problem", In 2012 International Conference on Signal Processing, Communications and Computing (ICSPCC2012), Hong Kong.
12. Jana N D, Si T and Si J, December 2012. "Fast Convergence in Function Optimization Using Modified Velocity Updating in PSO Algorithm", In FICTA 2012, Bhubaneswar, India.
13. Jaswal S. Howlader J. Choudhury P: Jan 19-20, 2013. A Review of anonymous Communication –MIX. In Intr. Conf. on Advances in Computing and Communication Technologies, Pattaya, Thailand, pp 77-81.*
14. Mane P., Mukhopadhyay S., Ghosh D., 2012. "Efficient Incentive Compatible Mechanism to Motivate Wikipedia Contributors", In 3rd Annual International Conference on Advances in Distributed and parallel computing (ADPC 2012), springer, pp 171-181.
15. Mitra Debasis, Ghoshal Sarmishtha, Rahaman Hafizur, Chakraborty Krishnendu, Bhattacharya Bhargab B., August 2012. "Automated Path Planning for Washing in Digital Microfluidic Biochips", in *the Proceedings of the International Conference on Automation Science & Engineering (CASE 12)* , pp. 115-120, Seoul, Korea.
16. Mitra Debasis, Roy Sudip, Chakraborty Krishnendu, Bhattacharya Bhargab B., August 2012. "On-chip Sample Preparation with Multiple Dilutions using Digital Microfluidics", in *the Proceedings of the International Symposium on VLSI (ISVLSI 12)*, pp. 314-319, Amherst, USA.

17. Mitra Debasis, Ghoshal Sarmishtha, Rahaman Hafizur, Chakrabarty Krishnendu, Bhattacharya Bhargab B., November 2012. "On-line Error Detection in Digital Microfluidic Biochips", *in the Proceedings of the Asian Test Symposium (ATS 12)* , pp. 332-337, Niigata, Japan.
18. Mukherjee Sudarshan, Ghosh Debashis, Nandi Debashis & Datta Deepanwita, 19-20 January, 2013. "A Review on Chaotic Digital Modulation Schemes", accepted in *International Conference on Advances in Computing and Communication Technologies (ICACCT 2013)*, Pattaya, Thailand.
19. Nandi M, De P, Dash S, Choudhury S, 8-9 March, 2013 " A service replication scheme for service oriented computing in pervasive environment", ICADET, , Indore, India.
20. Si T, Jana N D and Sil J, December 2012. "PSO-tuned Control Parameter in Differential Evolution Algorithm", In SEMCCO 2012, Bhubaneswar, India.
21. Upadhaya P. D., Acharya S., Dutta A., 9-10th May 2012. "Automated Software Development Methodology: An agent oriented approach" , 8th International Conference on Computing and Information Technology (IC²IT 2012), Pattaya City, Thailand.

* Repeated in other department

Library

1. Mandal, M. and Mondal, J., 4-6 November, 2012. 'Envisioning Changes in Academic Libraries and the Subsequent Challenges; a Study with special reference to Indian Libraries', in International Conference on Change and Challenge: Redefine the Future of Academic Libraries held at Peking University Library, Beijing ,China.

Department of Management Studies

1. Bandopadhyay, G., 2012. Efficiency Measurement of Indian Major Petrochem Industries: An Application of Data Envelopment Analysis, International Conference on Optimization, Computing and Business Analysis.
2. Banerjee, A., De, A., 2012. An Empirical Study on the Determinants of Capital Structure in Indian Textile Industry, International Conference on Banking and Finance Services (BFSCON).
3. Banerjee, N., Siddhanta, S., 2012. An Empirical Analysis of the Impact of Marketing Communication on Profit in the Indian Cement Industry, International Marketing Conference (MARCON).
4. Mandal, K., Banerjee, C., 2012. Gap Triangle between Faculty, Beginners and Experienced Students on the Quality of Hospitality Management: An Examination , International Conference on Creating a Sustainable Business: Managerial Implications and Challenges (ICSBMC-12).
5. Mandal, K., Roy, K., 2012. Are the Power Sources Equally Effective to Channel Partners? A Study in Indian Context, International Conference on Creating a Sustainable Business: Managerial Implications and Challenges (ICSBMC-12).
6. Pal, D., Ray, T., 2012. A Study on Employee Engagement in Indian Organizations, National Conference on Positive Behaviour: Perspectives & Applications.
7. Samanta, J., Banerjee, N., 07 - 09 December, 2012. A Cross National Comparative Study on the Automobile Industry Considering Factors Influencing Automobile Purchase Decision Between Consumers in India and US, International Conference on Creating a Sustainable Business: Managerial Implications and Challenges held at Jaipuria Institute of Management, Jaipur Conference Proceedings.
8. Siddhanta, S., Bandopadhyay, G., Banerjee, N., 2013. A Study on the Impact of Marketing Communication on Profit in the Indian Pharmaceutical Industry, 5th IIMA Conference on Marketing In Emerging Economies, Conference Proceedings.

Department of Mathematics

1. Bondyopadhyay A., Kar S., 2012, Analysis of Dynamical Complex Network of Ecological Stability Diversity and Persistence, First International conference on Analysis and Applied Mathematics.
2. Bondyopadhyay A., Kar S., 2012, Fuzzy continuous dynamical system: A multivariate optimization technique, First International conference on Analysis and Applied Mathematics.
3. Das P., Chatterjee K and Kar S., 2012, Supplier selection in risk environment: Fuzzy interval type-2 TOPSIS method, International Conference on Advances in Computing and Communication Technologies.
4. Kundu P., Kar S. and Maiti M., 2013, Some solid transportation models with crisp and rough costs" International Conference of World Academy of Science, Engineering Technology.
5. Pal Anita, 2012, L(2,1)-Labelling of Cactus Graphs in the proceeding of International conference on Fluid Mechanics and Graph theory, ICFGD 2012.
6. Pal Anita, 2013, Fuzzy k -Competition Graph and p -Competition Fuzzy Graph, in the proceeding of 2nd International Conference on Rough Sets, Fuzzy Sets and Soft Computing (ICRFSC13).

Department of Mechanical Engineering

1. Gautam S., Mitra R. K., October 5-7, 2012. "Control of Vibration Using Time-Delayed State Feedback By Incremental Harmonic Balance Method", *International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering*, Punjab Technical University, Jalandhar, India.
2. Pramanik, S., Das, M. K., 09 - 12 December, 2012. Numerical study of flow field and thermal characteristics of two plane parallel jets, Fourth International Congress on Computational Mechanics and Simulation organized by I. I. T. Hyderabad, India.
3. Pramanik, S., Das, M. K., 20 - 22 September, 2012. Deflection of a turbulent wall jet along a multiple inclined flat plate and effects of inlet condition on mean flow, International Conference on Applications of Fluids Engineering, organized by G. L. Bajaj Instt of Tech. & Mngmnt., Greater Noida, India.
4. Raman A. K., Biswas A. K., Das N. K., Mullick A. N., Ray P., Haldar B., Majumdar B., April 2012. "Comparison between C-shaped Constant Area Duct and Diffuser using CFD Analysis" – published in the proceedings of International Conference on Recent Advances in Mechanical Engineering, Chennai.

Department of Metallurgical & Materials Engineering

1. Mitra, S. K., Ghosh, D., Shukla, A. K., 26 September, 2012. Ceria (CeO₂) and yttria (Y₂O₃) coating – An Effective Method of High Temperature Corrosion Protection of Industrial Grade 2.25 Cr- 1 Mo steel plate in SO₂ +O₂ atmosphere. International conference CORCON-2012 (NACE, India) at Goa, India.
2. Pramanik, S., Mitra, S. K., Singh, P. K., 14 - 18 October, 2012. Development of Sintered Pellets made of Blast Furnace Flue Dust and Blast Furnace Sludge. 6th International Congress of the Science and Technology of Iron making –ICSTI, 42nd ABM Iron Making Seminar/ 13th ABM Iron Ore Symposium, Rio de Janerio –RJ-Brazil.
3. Ghosh, D., Shukla, A. K., Mitra, S. K., 24 January 2013. Effect of Plasma Sprayed cerium oxide (CeO₂) coating on High Temperature corrosion behavior of 2.25 Cr- 1 Mo steel, National Seminar on Advanced Functional Materials (NSAFM – 2013) on at CSIR-CMERI Durgapur.

4. Mitra, S. K., Ghosh, D., Basu, N., Roy, A., 7-9 February, 2013. Characterization of Microstructure and Secondary precipitates of Tungsten Inert gas (TIG) welded 2.25 Cr-1 Mo steel. National welding Seminar, 2013, Bangalore, India.
5. Mahto, M. K., Maurya, R. Bhattacharya, A., Mallik, M., Chakraborti, A. K., January, 2013. "Structure-property correlation of semi solid heat treated Al-Cu alloys," Poster presentation in National Seminar on Advanced Functional Materials, Durgapur.
6. Mallik, M., Ray, K. K., Mitra, R., 19 - 24 August, 2012. "Mechanical Behavior of ZrB₂ and HfB₂ Based Ultra-high Temperature Ceramic Composites", Oral presentation in 16th International Conference on Strength of Materials on, Bangalore.
7. Mahto, M. K., Maurya, R. Bhattacharya, A., Mallik, M., Chakraborti, A. K., November, 2012. "Structure-property correlation of semi solid heat treated Al-Cu alloys," Poster presentation in National Metallurgist Day-Annual Technical Meeting, Jamshedpur.
8. Pramanik, S., 12 -13 December, 2012. " Development of Cold Model to increase the efficiency of charging coke breeze with Sinter" Poster presentation at 3rd International Conference on Thermo-mechanical Treatment of Steel, RANCHI.
9. Mitra, S. K., Pramanik, S., Ray, R. N., November, 2012. " Development of hollow pellets and their characterization"; Paper presentation at National Metallurgist Day-Annual Technical Meeting, Jamshedpur.
10. Mitra, S. K., Pramanik, S., Ray, R. N., 12 - 14 May, 2012 "Auto raft control in Blast Furnaces "; AIST TECH2012, Atlanta, U.S.A.
11. Mitra, S. K., Pramanik, S., Ray, R. N., SEPTEMBER, 2012. " Development of Hollow Briquettes and their Characterisation"; ASIASTEEL-2012.

Department of Physics

1. Banerjee, D., Sahoo, S., 2012. Effects of energy band nonparabolicity on density of states of graphene, (p.72), 17th National Seminar on Ferroelectrics & Dielectrics (NSFD-2012).
2. Chakraborty, A.K., Eberle, D., Barbezat, M., Terrasi, G. P. 2012. Epoxy nanocomposites reinforced with carbon nanotube and graphene, 2nd International Conference on Small Sciences (ICSS2012).
3. Chakraborty, S., Sahoo, B., Sahoo, S., 2012. Linear dependence of the single particle potential on asymmetry parameter, Proceedings (pp. 636–637) "DAE Symposium on Nuclear Physics".
4. Chakraborty, S., Kumbhakar, P., 2012. Growth of different ZnO nanostructures synthesized at room temperature by wet chemical approach, 1st International Workshop on Nanomaterials (IWON): Engineering Photon and Phonon Transport.
5. Desarkar, H. S., Kumbhakar, P., Mitra, A. K., 2013. Synthesis and optical characterization of Cu nanoparticles by laser ablation in liquid, National Laser Symposium-21 (NLS-21).
6. Desarkar, H. S., Kumbhakar, P., 2013. Synthesis of hollow silver nanoparticles by laser ablation in liquid technique, India-Singapore Joint Physics Symposium (ISJPS).
7. Kole, A. K., Kumbhakar, P., 2013. Enhanced nonlinear optical effects and tunable photoluminescence emission in Cu²⁺ doped ZnS quantum dots, National Seminar on Advanced Functional Materials (NSAFM-2013).
8. Kole, A. K., Kumbhakar, P., 2013. Tuning of photoluminescence emission and nonlinear optical properties of doped ZnS nanoparticles, 100th Indian Science Congress.

9. Kole, A. K., Kumbhakar, P., 2013. Observation of enhanced nonlinear optical properties in colloidal ZnS:Cu nanoparticles, India-Singapore Joint Physics Symposium (ISJPS).
10. Kole, A. K., Kumbhakar, P., 2013. Manganese doped ZnS quantum dots: synthesis, characterization and yellow-orange light emissions for laser applications, National Laser Symposium-21 (NLS-21).
11. Kumar, M., Sahoo, S., 2013. Modifications in Schwarzschild solution and Nordstrom-Reisner solution of Einstein's field equations and derivation of Schwarzschild solution for Tachyon particles, (p. 85), The XX DAE-BRNS High Energy Physics Symposium-2013.
12. Kumbhakar, P., Kole, A. K., 2012. Microstructure characterization and optical properties of chemically synthesized Cu²⁺ doped ZnS quantum dots, The XXXIII Annual Meeting of the Electron Microscopy Society of India (EMSI).
13. Kumbhakar, P., Kole, A. K., 2012. Linear and nonlinear optical properties of colloidal Cu doped ZnS nanoparticles, Optical Society of America Proceedings, International Conference on Fiber Optics and Photonics 2012 (Photonics-2012).
14. Mandal M.K. and Chatterjee M., 2013. Design of Variable Length Ring Oscillator for Clock Synthesis, National Seminar on RTCT 2013.
15. Meriga, V., Chakraborty, A. K., 2012. Synthesis and characterization of sulfonated polyaniline/graphite oxide composites, National Conference on Condensed Matter Physics and Applications (CMPA-2012).
16. Saha. S., Tiwary, C. S., Kumbhakar, P., 2012. Preparation of ZnS nanoparticles by high energy ball milling and its optical properties, 1st International Workshop on Nanomaterials (IWON): Engineering Photon and Phonon Transport.
17. Saha. S., Kumbhakar, P., 2013. Optical properties of ZnS nanoparticles synthesized by high energy ball milling, National Seminar on Advanced Functional Materials (NSAFM-2013).
18. Sahoo, S., Khan, A., Mishra, H. K., 2012. Black Holes and the Universe, Souvenir (pp. 30–37), National Seminar on Apodized Astronomical Telescope Objectives for Resolution of Binary Stars with unequal Brightness.
19. Sahoo, S. K., Sahoo, B. K., Sahoo, S., 2012. Piezoelectric Polarization effect and Phonon Relaxation Rates in Binary Wurtzite Nitrides, (p. 111), 17th National Seminar on Ferroelectrics & Dielectrics (NSFD-2012).
20. Sahoo, S. K., Sahoo, B. K., Sahoo, S., 2013. The Effect of Spontaneous and Piezoelectric Polarization on Phonon Relaxation Rates in Binary Wurtzite Nitrides, (p. 299), International Conference on Recent Trends in Applied Physics & Material Science (RAM2013).
21. Sahoo, S., 2013. Graphene: A Miracle Material, Proceedings (pp. 89–93), National Seminar on Recent Trends in Laser and Photonics & 30th Convention of Orissa Physical Society.
22. Sahoo, S., Banerjee, D., 2013. Same-sign dimuon charge asymmetry in $B_q^0 - \overline{B}_q^0$ system", (p.58–59), The XX DAE-BRNS High Energy Physics Symposium-2013.
23. Sarkar, A., Chakraborty, A. K., 2012. Tailoring antimicrobial properties of silver with graphene oxide, National Conference on Condensed Matter Physics and Applications (CMPA-2012).
24. Sinha, S., Chatterjee, S. K., Ghosh, J., Meikap, A. K., 2012. Preparation and Introduction of CdSe Quantum Dots in a 5CB Twisted Nematic Liquid Crystal Cell: Observation of Ordered array of Nanostructures, 57th DAE Solid State Physics Symposium.
25. Usha, K., Ghatak, S., Mondal, B., Kumbhakar, P., 2012. Nanocrystalline TiO₂ electrodes from modified precursor for dye sensitized solar cell (DSSC), National Seminar on Industrial Application of Solar Energy.

26. Usha, K., Sengupta, D., Mondal, B., Kumbhakar, P., 2013. Anodes for dye sensitized solar cells from modified TiO₂ particles, National Seminar on Advanced Functional Materials (NSAFM-2013).
27. Vishnu, D. Tiwary, C. S., Kumbhakar, P., 2013. Preparation of ZnO nanoparticles by room temperature ball milling and its optical properties, National Seminar on Advanced Functional Materials (NSAFM-2013).

Annexure - 11.4(e) Visits abroad during 2012-13**Department of Biotechnology**

Name	Name of the Programme	Organized by	Date of the programme
Ghosh, M.	World Immune Regulation Meeting-VII	Institute of Allergy And Asthma Research, Davos, Switzerland.	March 13-16, 2013
Kazy Sufia Khannam	Microbial Genomics and Metagenomics Workshop	US Department of Energy – Joint Genome Institute, California	September 10-14, 2012

Department of Chemical Engineering

Name	Name of the Programme	Organized by	Date of the programme
Dutta, S.	Faculty Exchange Program	Caledonian College of Engineering, Sultanate of Oman	December 1-4, 2012
Narayanan C. M.	World Congress cum Exhibition on Chemical Engineering, Environmental Protection & Biotechnology(ACHEMA – 2012)	DECHEMA, Frankfurt, Germany	June 18 – 22 , 2012

Department of Civil Engineering

Name	Name of the Programme	Organized by	Date of the programme
Roy P.	APSSRA 2012	National University of Singapore, Singapore	May 23-25, 2012

Department of Computer Applications

Name	Name of the Programme	Organized by	Date of the programme
Choudhury P.	INDIN 2012	IEEE Conference on Industrial Informatics, Beijing China	July 23 – 30, 2012
Saha M.	ICCAS2012	IEEE International Conference on Circuits & Systems, Kuala Lumpur, Malaysia	October 3 – 4, 2012
Saha S.	ACM CHANTS 2012	ACM MobiCom 2012, Istanbul Turkey	August 22, 2012
Sarkar A.	INDIN 2012	IEEE Conference on Industrial Informatics, Beijing China	July 23 – 30, 2012
Sharma A.	ICUIMC 2013	ACM ICUIMC 2013, Kota Kinabalu, Malaysia	January 17-19, 2013

Department of Electrical Engineering

Name	Name of the Programme	Organized by	Date of the programme
Acharjee P.	ISGT Europe Conference	Technical University of Berlin (TU Berlin)	October 14-17, 2012
Banerjee, S.	38th Annual Conference of the IEEE Industrial Electronics Society (IECON 2012) that held in Montreal Canada	IEEE Industrial Electronics Society, Canada.	October 25-28, 2012.

Department of Electronics & Communication Engineering

Name	Name of the Programme	Organized by	Date of the programme
Mahanti G.K.	IEEE ICSPCC	Hong Kong Polytechnic University, Hong Kong	August 12-15, 2012

Department of Humanities & Social Sciences

Name	Name of the Programme	Organized by	Date of the programme
Rai, S. K.	5 th Global Conference-- Diasporas	Mansfield College, University of Oxford	June 29 - July 1, 2012

Department of Information Technology

Name	Name of the Programme	Organized by	Date of the programme
Dutta A.	SEKE 2012 at San Francisco, USA.	Knowledge Systems Institute.	July 1-3, 2012.

Department of Mathematics

Name	Name of the Programme	Organized by	Date of the programme
Kar S.	First International conference on Analysis and Applied Mathematics	Gumushane University, Turkey	October 18-21, 2012
Pal A.	Collaborative research work and Invited talk.	Caledonian college of Engineering, Oman, Muscat	November 30,- December 5, 2012.

Department of Metallurgical & Materials Engineering

Name	Name of the Programme	Organized by	Date of the programme
Chakravorty R.	International conference of IASE	IASE & Rajamangala University of Technology (Bangkok), Thailand	December, 2012

Department of Physics

Name	Name of the Programme	Organized by	Date of the programme
Chakraborty, A.K.	2nd International Conference on Small Sciences (ICSS2012), Walt Disney World Resort, Orlando, Florida, USA	Open-Access Publication and Conference Management by Scientists and for Scientists (OAHOST), USA	December 16 - 19, 2012
Chakraborty, A.K.	Collaborative research program on "Graphene reinforced epoxy nanocomposites"	EMPA, Swiss Federal Laboratories for Materials Science & Technology, Duebendorf, Switzerland (Host)	June 18-July 18, 2012

Annexure - 11.4 (f) Ph.D. degree awarded during 2012-13**Department of Biotechnology**

Topic	Investigator	Supervisor(s)
A Study on the Role of Conserved Water Molecules in Human Inosine Monophosphate Dehydrogenase (hIMPDH) Enzyme by Molecular Dynamics Simulation Methods	Bairagya H. R.	Mukhopadhyay B. P.
Fermentative Production of Protease Enzyme	Bhunia B.	Dey A.

Department of Chemical Engineering

Topic	Investigator	Supervisor(s)
Process Intensification in Lactic acid Manufacturing through membrane-integrated Hybrid Reactor System	Dey P.	Pal P.

Department of Chemistry

Topic	Investigator	Supervisor(s)
Kinetics and Mechanism of Substitution on D ⁸ Metal Ion System by Bio-Active Ligands	Ghosh G. K.	Moi S. C. & Patra A. K.
Synthesis of Titania nanoparticles and Rheological Study for Different Applications	Mahata S.	Nandi M. M. & Mondal B. N. (CMERI)
Environmental Impact of Effluent Generating from Sponge-Iron Industries on Surrounding Water, Soil and Vegetation.	Nayek Sumanta (Regd. with B.U.)	Saha R.N. & Gupta S. (B.U.)
Development of a Suitable Treatment Scheme of Combined Effluent Generating from Iron & Steel, Ferro Alloy, Thermal Power and Chemical Industries Located in Durgapur Industrial Area, W.B.	Satpati Satarupa (Regd. with B.U.)	Saha R.N. & Gupta S. (B.U.)

Department of Electrical Engineering

Topic	Investigator	Supervisor(s)
Some Design Aspects for Single and Multi-Magnet Based Electromagnetic Levitation System	Biswas P.	Banerjee S.
Evolutionary Optimization Applied to Some Power System Problems	Chatterjee Apurba	Ghoshal S.P. & Mukherjee V.

Department of Electronics & Communication Engineering

Topic	Investigator	Supervisor(s)
Energy Level Performance of Wireless Sensor Networks with Fading and Error Control	Nandi A.	Kundu S.
Strategic Evaluation of Performance and Behaviour of Wireless Network Deploying Real-time Multimedia traffic	Shaik M. S.	Bhattacharya A. K. & Vallavaraj A.

Topic	Investigator	Supervisor(s)
To Study Some Aspects of Micro and Nanoelectronic Device Structures for VLSI/ULSI Circuits	Singh N. B.	De A. K. & Sarkar S. K.

Department of Humanities & Social Sciences

Topic	Investigator	Supervisor(s)
Feminist or otherwise : A Study in the Poetry of Kamala Das	Das Soma	Banerjee J.
Adaptation to Change in Steel Industry— A Managerial Approach in Sail	Sengupta Subhendu	Chakrabarti B.

Department of Management Studies

Topic	Investigator	Supervisor(s)
Knowledge Management as Source of Competitive Advantage in Indian Job Market	Chatterjee T.	Roy M.
Forecasting Using Optimization Techniques from the Perspective of Indian Financial Market	Ghosh A. (Regd. with J.U.)	Chaudhuri K. (J.U.) & Bandyopadhyay G.

Department of Mathematics

Topic	Investigator	Supervisor(s)
Impact of E-Learning for Enhancement of Gross Enrollment (GER) of West Bengal in Comparison to Other States: A Statistical Performance Based Study	Das A.	Basu K.
Application of Multivariate Analysis to study the heavy metal loading in grazing animals.	Karmakar P.	Sarkar (Mondal) S. & Majumder D.
On some Fuzzy Mathematical Techniques and their Application to Decision Making Problems	Mukherjee S.	Kar S.
Studies on vibration stability on flexible structure	Nandi P.	Kar S. & Gorain G.
A Critical Study to Analyze Characteristics of Indian Educational, Tourism and Shopping Websites to Increase Effectiveness & to Achieve Better Marketability	Panigrahi G.	Basu K.
Conditional Covering Problems on Intersection Graphs	Rana A.	Pal A. & Pal M.

Department of Mechanical Engineering

Topic	Investigator	Supervisor(s)
Modelling, Simulation and an Empirical Investigation of Worker Assignment for Virtual Cellular Manufacturing	Murali R. V.	Puri A. B. & Khalid F. A. R.
Casting and Analysis of Squeeze Cast LM-24 Aluminium-Silicon Alloy	Gangopadhyay S.	Majumder M. C. & De N. R.

Autonomous Navigation of Mobile Robots: A Fusion of Behaviour-based Robotics and Reinforcement Learning	Ray D. N.	Mukherjee S. & Mazumder S.
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Department of Metallurgical & Materials Engineering

Topic	Investigator	Supervisor(s)
Effect of Cyclic Heat Treatment on Microstructure and Mechanical Properties in Various Grades of Plain Carbon Steels	Saha A.	Mondal D. K. & Maity J.

Department of Physics

Topic	Investigator	Supervisor(s)
Preparation and Characterization of nanocrystalline Multiferroics	Hossain S. M.	Basu S. & Pal M.
Synthesis, Characterization and Study on the Properties of Functionalized Carbon Nanotube Hybrids	Paul R.	Mitra A. K.

Annexure - 11.4(g) i Ongoing Doctoral Programme**Department of Biotechnology**

Topic	Investigator	Supervisor(s)
Production of biopesticide from <i>Mucuna pruriens</i>	Acharya Bidyut	Aikat K.
Studies on Chromium removal from Tannery Waste Water using Nano Filtration Technique	Bajpai S. K.	Dey A., Jha M.K. (NIT Jalandhar) & Gupta S. K. (IIT D)
Studies on the Biochemical Characterization and Optimization of Media Composition for Phenol Degradation by Microbes from Industrial Waste Water	Basak Bikram	Dey A.
Studies on Genotoxicity of Industrial Effluents and Its Treatment Strategies for Remedy	Behera Minati	Dasguptamandal D.
Metabolomics of Carotenoid Production in <i>Dietzia maris</i> NIT-D (Accession No. - HM151403)	Bera Surojit	Dutta D.
Investigation of genetic and molecular functions of ZBF1/MYC2 with other regulatory protein of light 119ignalling in Arabidopsis seedling development	Chakraborty Moumita	Chattopadhyay S.
Treatiblility Studies of Dyes by Low cost adsorbent	Chakraborty Sagnik	Dey A. & Das P.
Exploration and Exploitation of Microbial Catabolic Potentials for the Bioremediation Petroleum Hydrocarbons	Das Ranjit	Kazy S. K.
Studies on Bioconversion of Lignocellulosic Materials to Ethanol	Ganguly Amit	Dey A. & Chatterjee P. K. (CMERI Durgapur)
Optimal Production Strategies for Microbial Pigments	Goswami Gargi	Dutta D. & Chaudhuri S.
Molecular and Functional analyses of ZBF1/MYC2, a Z-box interacting Bhlh transcription factor, in tomato (<i>Lycopersicon esculentum</i> Mill.)	Gupta Nisha	Chattopoadhyay S.
Bioprospecting of Extracellular Enzymes from <i>Xenorhabdus</i> sps	Kumar Pranaw	Dutta D. & Chaudhuri S.
Immune modulation of the Dendritic cells in the treatment of <i>leishmaniasis</i>	Laha, Bhakti	Ghosh M.
Genetic and Molecular Interactions of ZBF1/MYC2 and ZBF2/GBF1 in Arabidopsis Seedling Development	Maurya Jay Prakash	Chattopadhyay S.
Assessment on the Treatment of Pharmaceutical wastewater using sorption & bioremediation techniques	Mondal Sandip	Aikat K., Saha (Das) P. (CU) & Datta S. (JU)
Studies on natural resourced hydroxyapatite biomaterial	Mondal Sudip	Mondal B. N., Dey A. & Mukhopadhyay S.S.
A study on Candida infection in HIV/AIDS patients in a tertiary care hospital in Kolkata	Mukherjee Mita	Dutta D., Basak S. & Guha S. K.
Kinetic Studies on the Enzymatic Removal of Phenolic contaminants from industrial wastewater using Polyphenol oxidase enzyme	Mukherjee Suprabhat	Dey A., Mandal B. M. (CMERI Durgapur)
Studies on Structure-based Anti-Leismanial and Anti-Cancer Drug Design and Development of Delivery System	Munshi Sudip	Dasguptamandal D. & Patil P.
Functional analysis of G-protein coupled receptors (GPCRs) in rice blast fungus	Nazmiara Sabnam	Roy Barman S.
Studies on the Etiopathogenesis of Gall Bladder Carcinoma in Eastern India	Pramanik Vishmadeb	Kazy S. K., Kar M. & Sarkar B. N.

Topic	Investigator	Supervisor(s)
Production of Bio-Active Compounds from Marine Bacteria	Prasad Shiv Shankar	Aikat K.
Studies on Biodelignification to improve the paper quality & minimize the generation of genotoxic effluents."	Rashmi Priyadarshini	Dasguptamandal D.
Assessment of microbial communities and their bioremediation potentials in petroleum contaminated sludge from oil refineries	Roy Ajay	Kazy S. K.
Characterization and optimization of pigment production from an isolated strain	Samanta Amit Kumar	Dutta D. & Chaudhuri S.
Biofuel Production using Cellulosic and Hemicellulosic Biomass	Sarkar Nivedita	Aikat K.
Investigation of functional interrelations of ZBF3/CAM7 with COP1 in Arabidopsis seedling development	Senapati Dhirodatta	Chattopadhyay S.
Biosorption of heavy metals using <i>Chlorella minutissima</i>	Singh Shailendra Kumar	Dey A., Jha M. K. & Bansal A. (NIT Jalandhar)
Genetic Regulation of Systemic Acquired Resistance in Arabidopsis thaliana	Singh Vijayata	Chattopadhyay S. & Nandi A. (SLS, JNU)
Extraction and Application of Natural Dyes	Sinha Keka	Saha P. (CU) & Datta S.
Molecular and Genetic interactions of ZBF1/MYC2 with regulatory component of light signalling pathways in Arabidopsis thaliana	Srivastava A. K.	Chattopadhyay S.
Anti-leishmanial effect of Statins and micronutrients: exploring the mechanistic actions.	Verma Amit Kumar	Ghosh M.
Genotypic and Functional Characterization of Wheat Associated Microflora from Different Agro-Ecological Zones	Verma Priyanka	Kazy S. K. & Suman A.
Sequence Alignment and Phylogenetic Analysis of Human Herpes Virus using Molecular Evolution Genetic Analysis (MEGA).	Vipin Kumar	Dey A. & Singh A. (BCET, Gurdaspur)

Department of Chemical Engineering

Topic	Investigator	Supervisor(s)
Modelling and experimental investigations on thermochemical conversion of biomass and its blends	Banerjee A	Sadhukhan A. K. & Gupta P.
Technology Development of Liquid Phase Adsorption of Mercury Using Low-cost Adsorbent for Better Management of Industrial Wastes	Bhattacharya Aparupa	Dutta S. & Basu S. (HITK)
Studying the separation of acid and inert gas from flue gas and air using membrane technology	Bhattacharya Madhubanti	Mandal, M.K.
A Study of Adsorptive Removal of Carbon dioxide from Biogas for Enrichment of Methane by Pressure-Swing Adsorption Mechanism	Chakrabarty P	Halder G. N.
A Techno-management Study Towards sustainable Solution to arsenic and fluoride contamination problem	Chakraborty S.	Pal P. & Roy M. (Management)
Enzymatic removal of heavy metals from waste water: Experiment and Modeling	Chatterjee Soumasree	Dutta S. & Basu S. (HITK)
Analysis and Energy Optimization of Natural Circulation Flow	Goswami Nababithi	Paruya S.
Fermentative production of cholesterol- lowering drugs particularly Lovostatin	Goswami Saswat	Mandal T.

Topic	Investigator	Supervisor(s)
Analysis of the nonlinear Instabilities in the Natural Circulation Boiling Flow	Karmakar Arnab	Paruya S.
Chemical and biochemical treatment of industrial wastewater	Kumar Anuj	Mandal T.
A critical study on Natural refrigerants towards the Replacement of CFCs	Kumar Anupam	Halder G. N.
Green Energy Production through microbial fuel cell	Krishnaraj R. Navanientha	Pal P., Saravanan C (CC), Berchman S. (CSIR)
Studies on the Kinetics of Ethanol Conversion from Parthenium Hysterophorus	Majumdar Swati (Ghosh)	Haldar S. & Chatterjee P.K. (CSIR-CMERI)
Process Intensification in Production of Acetic acid	Nayak J.	Pal P.
Treatment of Coke-oven Waste Water	Pramanik S.	Ghanta K.C. & Dutta S.
Methane Potential from Anaerobic Co-digestion of Fruit and Vegetable Wastes with Oil and Fatty Residues	Seema S.	Narayanan C.M., Thanikkal J. V. (Sultanate of Oman) & Torrijos M. (France)
A Study of Fluoride Removal from Contaminated Groundwater by Biological Treatment	Singh N.P.	Halder G. N.

Department of Chemistry

Topic	Investigator	Supervisor(s)
Water Molecular Dynamics Study of Human Ransthyretin (TTR) and its Mutated Forms	Banerjee Avik	Mukhopadhyay B.P.
Corrosion Inhibition of Brass and Aluminium Alloy In Chloride Solution	Banerjee Ranu	Nandi M.M.
A Study on the Water Molecular Dynamics in Some Homologous Matrix Metallo Proteinases (Mmps) and their Inhibitors – Bonded Complexes by Modelling Methods	Chakrabarti Bornali	Mukhopadhyay B.P.
Evaluation of Arsenic Contamination in Groundwater, Soil, Vegetation through Food Chain and its Impact on the Environment	Chandra Sukanya	Saha R.N. & Pal P.
Stabilization of Various Oxidation States of Ni [Ni(I), Ni(II), Ni(III) and Ni(IV)] With Designed Multidentate Ligands : Synthesis of Ni Complexes Relevant To The Ni-site of Ni-Fe Hydrogenase Enzyme	Chatterjee Sudip	Patra A. K.
Spatial and Temporal Variations of Ambient Air Quality in Burdwan Town, West Bengal	Chattopadhyay Subrata (Regd. with B.U.)	Saha R.N. & Gupta S. (B.U.)
Effect of some heterocyclic bases on the corrosion inhibition of mild steel in acid medium	Dutta Alokdut	Sukul D.
Development of Natural Fibre Reinforced Polyester Composite Material	Hazarika Sonalee Borah	Panja S. S. & Choudhury S.
Synthesis of Metal and Metal Oxide Xerogel and their Film by Sol-Gel Method and their Characterization	Layek Manas	Maji M.
Application of Photo-Fenton's Oxidation and Biological Oxidation for the Degradation of Some Selected Pollutants Present in Petro-Chemical and Coke-Oven Wastewater	Mallik Tirthankar (Regd. with B.U.)	Saha R. N.
A MD Simulation study on the human IMPDH structures and its complexes	Mishra Deepak K.	Mukhopadhyay B.P

Topic	Investigator	Supervisor(s)
Kinetic and mechanistic studies of substitution on square planar d^8 metal complexes with special emphasis on sulphur containing bioactive ligands	Misra Koyel	Moi S. C.
Effect of exogenous phospholipids on sperm plasma membrane structure and function in relation with cryopreservation	Mondal Rajesh	Chakrabarty J. & Maji M.
A Study on the Invariant Water Molecular Dynamics in Plant Cysteine Protease and their Complexes By Modelling Methods	Nandi Tapas Kumar	Mukhopadhyay B. P.
Study of some biopolymers as corrosion inhibitor of mild steel in acid medium	Pal Aparesh	Sukul D.
Structure, Spectroscopic Properties and Reactivity Studies of Cu(II) Complexes With Supporting Tridentate Schiff base or Amide Ligands	Roy Suprakash	Patra A. K.
Bio-molecular interaction on palladium and platinum (II) complexes in aqueous medium by sulphur containing ligands: their kinetics and mechanism	Samanta Avradeep	Moi S. C.
Structure and Interaction Studies of some Nucleotide Molecules with the different Ligands by X - ray Crystallographic Methods	Sengupta Dhruva Kumar	Mukhopadhyay B. P. & Das S. B.
An Investigation on Composition of Sea Water and its Corrosion Effects on Metals	Shah Jahan (Oman)	Das S. B., Saha R.N. & Raut N. B. (C.C.E., Oman)
Development of New Molecular Device for Sensing Physiologically Important Metal Ions	Sikdar Anindita	Panja S.S.
Immobilization of Cholesterol Esterase and Cholesterol Oxidase on Conducting Polymers for Application to Cholesterol Biosensor	Singh Suman	Maji M. & Chandra Prakash (CMERI)

Department of Civil Engineering

Topic	Investigator	Supervisor(s)
Modelling and Analysis of Flexural Strength of Reinforced Concrete Beams with Corrugated Glass Fibre Reinforced Polymer Composite	Aravind N.	Samanta A. K., Singha Roy D. K. & Thanikal V. J.
Three Dimensional Finite Element Modelling of Reinforced Concrete Slabs.	Chattopadhyay Achintya	Ghosh S. N. & Samanta A. K.
Experimental Analysis For Plan Form Development And Erosion Around An Island In A Natural Stream	Chhabra Ajeet	Dwivedi V. K.
Use of shape memory alloy for making of smart concrete structure to withstand time dependent effects in prescribed concrete bridges	Debbarma S.	Saha S.
Development Of Intelligent System Using GSM Technology With Fuzzy Logic For Controlling Water Supply In Agricultural Field	Goyal Hari Om	Dwivedi V. K.
Dynamic analysis & behaviour of seismic base-isolation of structures using time history modal superposition	Guha Sumit	Nanda R. P.
Applying Soft Computing Techniques In Hydrological Data Collection From Aerial Vehicles With Special Reference To Rainfall In Water Resource Problems	Kumar Gravit	Dwivedi V. K.
Data Mining And Its Application In Real Time Hydrologic Forecast	Mishra S.	Dwivedi V. K.
Earthquake and Fire assessment to hospitals buildings	Pal Nilendu	Nanda R. P.
Investigation on Stability and Ovaling of Cylindrical Shell Wall of Ground Elevated RC Silo under Lateral Load.	Patra Prasanta	Samanta A. K.

Topic	Investigator	Supervisor(s)
Seismic vulnerability assessment : applicability to Bhubaneswar, India	Rout Sukanti	Nanda R. P.

Department of Computer Applications

Topic	Investigator	Supervisor(s)
Functional Specification of Software as a Service for Data Centric Cloud Applications.	Mandal Kr Amit	Sarkar Anirban & Changder S
Object Based Digital Image Steganography for Secure and Robust Data Hiding.	Roy Ratnakirti	Changder S & Sarkar Anirban

Department of Computer Science and Engineering

Topic	Investigator	Supervisor(s)
Studies on multicast routing and wavelength assignment in WDM optical networks	Barat Subhendu	De T.
Active Stereo Vision from Uncalibrated Camera Images	Bhattacharya Jhilik	Sanyal G.
Study and Analysis of some aspects of f Stagenography Techniques for Information Hiding	Bhattacharya Souvik	Sanyal G.
Power Efficient Architechtrual Designs	Chandrakar Khusbu	Roy S.
Applications on Soft Computing	De Prosenjit	Pal T.
Different applications of wireless sensor networks	De Tusharkanti	De T.
Algorithmic Mechnism Design and its Application in Network Economics	Mukherjee Sajal	Ghosh D.
New SAT based Solutions in VLSI Physical Design Automation	Mukherjee Shyama pada	Roy S.
Some studies on Optical and wireless network interface	Naik Deepa V	De T. & Ghosh. D
Optical Networks	Pradhan Ashok Kr.	De T.
Analysis and Classification of Syntactic Aperture Rader (SAR) images	Samanta Debabrata	Sanyal G.
A Novel approach to enhance security of data using invisible digital water marking tagged with encryption	Samanta Sabyasachi	Sanyal G.
Enhance of Forensic Capabilities of the Linux Kernel	Das Suvorijit	Ghosh. D

Department of Earth and Environmental Studies

Topic	Investigator	Supervisor(s)
Groundwater occurrence and quality assessment in north-western and north-eastern part of Bankura district, West Bengal	Bajpayee Swastika	Adhikari K., Chatterjee P. K. & Ruj B.
Assessment of groundwater potential with special emphasis on impact of mining activities in and around Durgapur, West Bengal, India	Chakraborty Barnali	Gangopadhyay A. & Adhikari K.
Studies on the Environmental vis-a-vis socio-economic impact of vermicomposting in organic waste management	Karmakar Sruti (Thesis submitted)	Gangopadhyay A. & Brahmachari K.

Seismic Diffraction Tomography and Modelling for Subsurface imaging	Mahapatra Mahasweta (Thesis submitted)	Gangopadhyay A., Mahapatra S. & Koyal J. R.
Development of filter media and system for high temperature applications	Nayek Sisir Kumar	Adhikari K. & Datta S.
Detection of Subtle and Obscure Structure in Bengal Basin, India using Integrated Remote Sensing Studies with Special reference to Hydrocarbon Exploration in the Basin	Mazumder Subhobrata	Adhikari K., Mahapatra S. & Mitra D. S.
Geoenvironmental impact of open cast coal mining on soil and groundwater of Raniganj coalfields, West Bengal, India	Sadhu Koushik	Adhikari K. & Gangopadhyay A.
The tectonics of eastern segment of Delhi fold belt, southeast of Beawar, Rajasthan	Saha Pinaki (Thesis submitted)	Gangopadhyay A. & Mukhopadhyay D.

Department of Electrical Engineering

Topic	Investigator	Supervisor(s)
Robust Stabilization of Cart-inverted Pendulum System in real-time by Continuous-time Periodic Controller	Chakraborty A.	Dey Jayati
Mathematical Modelling and Development of Nanoparticle based Gas Sensors for On line monitoring of Dissolved Gases in transformer oil	Chatterjee Anjali	Roy N.K. & Kumbhakar P.
Study of Various parameters and Optimization in Antenna Performance	Das Sudipta	Ghoshal S.P., Mandal D. & Kar R.
Optimization in Antenna Performance	Hardel Gopi	Ghoshal S.P., Mandal D. & Kar R.
Neural Network Based Sensorless Maximum Wind Energy Capture using DFIG	Kaur Kamaljit	Mahato S.N., Saha T.K. & Banerjee S.
Distribution Systems, optimal placement of DGs and Capacitors , Reliability	Khan Nasim Ali	Ghosh S. & Ghoshal S.P.
Robust Design of Power System Stabilizer	Mahapatra M. Das	Dey Jayati & Ghosh S.
State Estimation and Load Flow Analysis	Mallick S.	Thakur S. S., Acharjee P. & Ghoshal S.P.
Optimal Price Forecasting in Restructured Power Systems using Evolutionary Techniques	Pany P.K.	Ghoshal S.P.
Optimization in DSP filters and System Identification	Saha Suman	Ghoshal S.P., Kar R. & Mandal D.
Detection of partial Discharge in High Voltage Equipment using Fibre Optic Sensor	Sarkar B	Roy N. K., Koley C., Kumbhakar P.
Controller Design for Maglev Systems	Sarkar M.K.	Banerjee S, Ghoshal,S.P. & Saha T.K

Department of Electronics & Communication Engineering

Topic	Investigator	Supervisor(s)
Relay selection algorithms for energy consumption minimization	Biswas S.	Chandra A.
Radar-Communication Based Novel Approach For Next Generation Transportation System	Chakraborty Mithun	Maji B.

Synthesis of Concentric Ring Array and Rectangular Array Antennas Using Soft Computing Techniques	Chatterjee A.	Mahanti G.K.
Mitigating impulsive noise in PLC with RS coding	Chattopadhyay A.	Chandra A.
Integrated Energy Performance of CDMA based Wireless Sensor Networks with Efficient Forwarding and Error Control	Datta U.	Kundu S.
Performance of Cooperative Communication Networks with adaptive relay	De Chanchal	Kundu S.
Optimal energy efficient relay placement in wireless fading scenarios	Ghosh B.	Chandra A.
On certain aspects of underground digital communication systems: Analysis and modelling	Giri S.	Chandra A.
Communication and Intelligent Radar Technology Convergence for Vehicular Applications.	Guchhait Arghya	Maji B.
Image Compression In The Wavelet Domain – An Extension Study	Jayavrinda V. Vadakkeparambil	Mahanti G.K. & Saravanan C.
Performance Parameters' estimation of on-chip VLSI interconnections	Maheshwari Vikas	Kar R. & Mandal D.
Some Studies on Synthesis Of Time-Modulated Array Antenna Using Evolutionary Algorithms	Mandal S. K.	Mahanti G.K. & Ghatak R.
Array Failure Correction using Evolutionary Algorithms	Muralidharan R	Mahanti G.K.
Studies on Performance of Cognitive Radio Networks with Spectrum Sensing	Nallagonda Srinivas	Kundu S. & Roy Dhar S.
Some Studies on the Design Issues of VLSI Circuits Towards Optimization of Power, Delay and Noise in the Nano Devices.	Panda Saradindu	Maji B.
An Adaptive approach to optimized Steganographic Data Hiding based innocuous Communication	Rajkumar P.	Kar R. & Dharmasa (CCE, Oman)
Optimal Design of Digital IIR Filters using Evolutionary Optimization Techniques	Saha Suman Kumar	Kar R., Mandal D. & Ghoshal S. P.
A DSP Approach For Error Control Technique Used For Wireless Communication	Sarkar Mrinmoy	Maji B.
Design of Micro-chip for osteoblast cell characterization	Sarkar S.	Mahapatra R.
Hybrid solar cell	Sinha M.	Mahapatra R.
Some studies on optimum design of Electromagnetic shielding	Tewary J.	Mahanti G.K.

Department of Humanities and Social Sciences

Topic	Investigator	Supervisor(s)
Narrative Technique in the novels of Garcia Marquez	Banerjee Sriman	Rai S.K.
Micro-Pension Plans : Indian Perspective	Bhattacharya Prakash	Chakrabarti B.N.
Whose Power is Perpetuated at the Expense of Whom: An Exploration into the Linguistic Function of Bengali Proverbs in Depicting Gender Differences	Bhunia Chakraborty Aditi	Modak A.
Sashi Deshpande's Novels : A Feminist with a difference	Chakraborty Taniya	Banerjee J.
An Exploratory Study in to the Effect of Level and Function on Managerial Communication Behaviour in a Public Sector Integrated Steel Plant	Chandra Mouli C. (Submitted)	Sengupta P.P.
Crisis of Cultural Identity in the Novels of Amitav Ghosh	Chatterjee Rajarshi	Banerjee J.
Environmental Management	Das Dipankar	Sengupta P. P.

Topic	Investigator	Supervisor(s)
Feminist Approaches— Indian and European— to Classical Women Characters, with Special Reference to Sita, Draupadi, Sakuntala, Clytemnestra, Lady Macbeth, Medea, and Antigone	Das Saptorshi	Modak A.
Development of Socioeconomic Status, Livelihood Pattern and Empowerment of Rural Poor, Specially Rural Poor Women through Self Help Groups, Micro Credit and Livelihood Promotion in Bankura and East Medinipur District of West Bengal, India	De Debasis	Sengupta P.P.
Justification of Fertiliser Subsidy by applying Data Envelopment Analysis	De Sourav	Chakrabarti B. N.
Neo-Colonial Undertones in Arundhati Roy and Jhumpa Lahiri	Guha Roy Sandip	Banerjee J.
Postcolonial studies of Salman Rushdie's Select Novels	Gupta Punyajit	Rai S.K.
Tourism Management	Hazra Soma	Sengupta P. P.
Diaspora and Economic Development	Kahali Alok Kumar	Sengupta P. P.
Postmodern Elements in T. S. Eliot's Poetry	Mandal Annesha	Modak A.
Tagore in English Translation: A postcolonial Perspective	Misra Debi Prasad	Modak A.
Professional Development for Teachers of English: Implications and Practices	Mondal Dibyendu	Modak A.
Travel Writings of D. H. Lawrence: the Literary Dimensions	Mukherjee Abhik	Modak A.
Capital Adequacy Norm: Its Effect on Nationalised Banks in India	Pal Subrata Mohan (Submitted)	Sengupta P. P.
Effective Communication and Strategic Leadership: the Role of Emotional Intelligence and Values	Pyne Summauli	Modak A.
A Non-linear Approach to Richardson's Model of India-Pakistan Arms Race	Shah Rupali Subhashchandra	Sengupta P. P.

Department Of Management Studies

Topic	Investigator	Supervisor/S
Developing a Model for Better Utilization of Hospital Resources	Bandyopadhyay Soumendranath	Dutta A., Bandyopadhyay G. & Sanyal G.
Capital Structure Determinants and Decisions during Pre and Post Period of the Recent Financial Crisis in Global Economy: An Empirical Study on Indian Scenario	Banerjee Arindam	De A.
Extension of Service Quality Gap Model for Edu-Preneurs; A Study Based on WB	Banerjee Chandan Kr.	Mondal K.
Management of Green Marketing in a large Developing Economy	Biswas A.	Roy M.
A Study on Workplace Adaptability: An Indian Perspective	Bose Sujata	Pal D.
Application of Management Tool to Control Inherent Risk from Liquefied Petroleum Gas (LPG) & Developments of Maximum Credible Loss Model for Durgapur, WB	Chatterjee Saumya	Bandyopadhyay G.
Benefits & issues of coal mining on the socio economic environment in Asansol Raniganj coal field area with	Dan Surajit	Dutta A.

emphasis on formulating management strategies		
Understanding Various Facets of Purchase Involvement; A Study of Burdwan , WB	Dasgupta (Banerjee) Monami	Mondal K.
Study of Certain Aspects of Strategic Planning in IT Industry.	Dinkar	Bandyopadhyay G. & Mukherjee R. (B.C.E.T.,Durgapur)
Developing strategies and algorithm for multicasting over optical burst switched networks to enhance Economic value for end users through QOS policies	Datta Subhasis	Dutta A.
Towards Developing an Effective Strategy for Employee Retention in IT Organization	Dutta Monalisa	Dutta A.
Information & Communication Technology and E-Business Support for Indian MSMEs	Gayen Anupam	Roy M.
Attitude of Indian young generation towards online marketing	Ghosh Debasis	Banerjee N.
The Impact of Coal Mining Activities on the Environment and Socio-Economic Condition of Adjoining Human Population with Special Reference to Asansol- Ranigunj Area in West Bengal, India	Guha Debasish	Dutta A. & Mondal S.
Study of Impact of Global Economy on Petrochemical Business in Asia	Khastagir D.	Roy M.
An Empirical Quest for Various Aspects of Brand Switching.	Maji Sukanta	Bandyopadhyay G.
Stress in police personnel: A study of the occurrences, consequences within West Bengal Police Service and coping up strategies	Majumdar Nandi Malini	Dutta A.
The Influence of Corporate Culture on Organisational Commitment-Evidence from Selective Hospitality Industry In India	Mitra Manojit	Bandyopadhyay G.
Assessing service quality gap and customers satisfaction of commercial banks in India with special reference to the state of west Bengal	Mukhopadhyay Sumanta	Dutta A.
Study on Nature of Relationship Between Channel Power and Influence Strategy Visa-A-Vis Channel Management Practices Prevalent in India.	Roy Koushick	Mondal K.
A study on various aspect of consumer behavior in context to different products and services- A comparison between consumers in India and USA	Samanta Jyotirmoy	Banerjee N.
Studies on Polluting Industries' Socio-Economic and Environmental Impact	Sarkar Sreemanta	Roy M.
The impact of integrated marketing communications on profit– A study of Indian firms	Siddhanta Somroop	Banerjee N.
Psychological contract and its relevance to Employment Relationship	Thomas Anitha	Dutta A.

Department of Mathematics

Topic	Investigator	Supervisor(s)
Study on a class of Optimization problem in 2-Banach Spaces	Adak Utpalendu	Dey L. K.
Solution of network problems under fuzzy environment	Banerjee Soumitra	Basu K. & Mukherjee S.
Effective Project Management in Durgapur Industrial Area and its Surroundings.	Chowdhury Anghuman	Sarkar (Mondal) S.

Topic	Investigator	Supervisor(s)
Modeling of some decision making problem with uncertainty in optimization framework	Chatterjee Animesh	Kar S.
Instabilities in Rayleigh Bénard Convection	Dan Surajit	Pal P.
Optimization in Steel Makes Parameters of Integrated Steel Plant with Special Reference to Durgapur Steel Plant in the Realm of Applied OR Tools and Techniques to Make Steel Making Globally Competitive in the Post Liberalization Indian Economy	Das Subhas K.	Sarkar (Mondal) S.
Different aspects of modeling on CSR with bureaucracy	Debnath Animesh	Kar S. & Dey J. K.
A study on FCM and FRM	Ghosh D	Pal Anita
Study of Some New Codes and their Supporting t-Designs	Ghosh Debashis	Dey L. K.
Some production Inventory models in Uncertain environments	Hazari Samar	Kar S., Dey J. K. & Maiti K.
Studies on Mathematical Methods for Portfolio Selection Problems in Uncertain Environment	Hossain Ahmed	Kar S. & Bhattacharyay R.
Exploring real life generalised assignment problems under fuzzy environment	Kar Supriya	Basu K. & Mukherjee S.
Some real life multiobjective multi criteria decision making Problems under fuzzy environment	Kour Dalbinder	Basu K. & Mukherjee Sathi
Some Transportation Problems in uncertain environments	Kundu Pradip	Kar S. & Maiti M.
Analysis and Optimization of Coal Mine Production and Operation Management System.	Mandal Satya	Sarkar (Mondal) S. & Ghosh A.
Application of Fuzzy Graphs	Mishra S.	Pal Anita
Fuzzy clustering techniques	Mondal S.	Pal Anita
Formulation of lower bounds for multiple covering codes and study of their corresponding designs	Mondal Saranan	Dey L. K.
Synchronization in Complex Networks	Nandan Mauparna	Pal P.
Reliability Modelling and Analysis of an Industrial System	Narayanan P.	Pal A. & Rizwan S. M.
Reduction of Pollution by Applying Optimization Techniques in Consideration with Cost Effective Emission of Pollution	Pandey Abhay K.	Sarkar (Mondal) S.
Mathematical Models of Some Decision Making Problems in Different Environments	Saha Anirban	Kar S. & Maiti M.
Some studies on Optimum design of Electro Magnetic field	Tewary Jyotirmay	Basu K. & Mohanty G.K.
Effect of Lorenz force on convective instabilities	Yada Nandu kumar	Pal P.

Department of Mechanical Engineering

Topic	Investigator	Supervisor(s)
Optimization in Assembly Line Balancing Problem	Adhwarjee Dilip Kumar	Banerjee N., Majumder M.C
Probabilistic approach for autonomous Navigation of mobile robot in unstructured environment	Banerji Debajyoti	Basak I. Bose J.(CMERI)
Analysis of through a bifurcated diffusing duct at different angle of attack	Bhattachaejee Vidyasagar	Mullick A N
Improvement in performance of coal fired steam generation Technology for thermal power generation	Bhattacharya Chittatosh	Banerjee N. Sarkar H. (WBPCB)
An Investigation of Flow Characteristics within a Sinuous Duct	Biswas Arup Kumar	Mullick A.N. Majumder B. (JU)
Haptics based Instrumentation for Medical Rehabilitation	Chatterjee Avik	Basak I. Majumder S. (CMERI)
Modelling and Analysis of Machine Tool Dynamics for Prediction of Stability against Chatter using Bond Graph Technique	De Jagannath	Saha A.K. Banerjee N.
Simulation and optimization of Railway wheel forming process using finite element method and soft computing	Gangopadhayay Tapas	Basak I. Pratihar D.K.(IIT,Kgp)
Design and Analysis of robot arm for physically interactive applications	Kumar Virendra	Roy S.S. Sen S. (CMERI, Dgp)
Optimizing the potential thermal energy saving of a captive power plant - an industrial approach	Kundu Soumya Jyoti	Banerjee N
Modeling and simulations of six- legged robots over uneven terrains	Mahapatra Abhijit	Roy S.S. Pratihar D.K.(IIT,Kgp)
Design, Development, Testing and Optimization of a Vehicle Suspension Systems accounting the Effect of Road Profile using MATLAB/SIMULINK.	Mitra Anirban. C.	Banerjee N.
Development of an ECDM set up and performing parametric analysis for better machining performances	Nandi Debasish	Basak I. Puri A.B.
A Numerical Study of Flow through a Duct with constant surface heat flux at high Reynolds Number	Nayek B B	Mullick A N
Characterization, Process Modeling and Optimization of Friction Stir Welding For Joining Dissimilar Metals	Saravanan V.	Prof Amruthakanan. (CCE, Oman) Banerjee N.
Dynamics and Control of Flexible Manipulators	Sarkhel Prasenjit	Banerjee N. Hui N. B.
A Numerical Study for optimum production in Continuous Caster	Verma Deepak	Mullick A N

Department of Metallurgical & Materials Engineering

Topic	Investigator	Supervisor(s)
Semisolid heat treatment of non-ferrous alloy	Bandhopadhy B.	Bhattacharya A.
Studies on Status, Constraints and Solution of Coal Based Sponge Iron Industries in India	Chakraborty R.	Mitra S.K.
Characterization of biomaterials (dental amalgam and Ti alloys) and there electro chemical behaviour in an artificial saliva, body fluid and other enviornment	Dutta N.	Ghosh K. S.
Study on the Development of Nickel Free Wear Resistant Casting	Mandal S. S.	Mondal D.K.
Development of TiC reinforced aluminium based metal matrix composite with and without a second reinforcement	Mondal M. K.	Maity J. & Biswas K. (IIT Kharagpur)

Topic	Investigator	Supervisor(s)
Studies on Reduction Kinetics of Hollow Hematite Pellete using solid and gaseous reactant	Pramanik Susanta	Mitra S.K.
Development and characterisation of AA7075 composition	R. Karunanithi	Bera S. & Ghosh K. S.
Characterization of various tempers of 7XXX Al alloys with an emphasis of trace corrosion cracking behaviour	Routh P.	Ghosh K. S.
Transient liquid phase diffusion bonding of aluminium based metal matrix composites	Roy P.	Pal T. K. (JU) & Maity J.
Development of Aluminium Based Metal Matrix Composite with Hybrid Reinforcement	Show B. K.	Maity J. & Mondal D.K.
Optimization of process parameters for producing AISI 3166, 420 and A140 steels by metal injection moulding process	Singh M.	Mondal D. K. & Ghosh K. S.

Department of Physics

Topic	Investigator	Supervisor(s)
Investigation on the Mechanical Properties of Carbon-Nanotube Based Composites	Agarwalla Rajesh Kumar	Chakraborty A.K. & Mitra A.K.
Investigation on Synthesis and Optical Properties of Some ZnO Nanostructures	Chakraborty Sarbojit	Kumbhakar P.
Mathematical Modelling and Development of Nanoparticle Based Gas Sensor for On line Monitoring of Dissolved Gases in Transformer Oil	Chatterjee Anjali	Roy N. K. (EE) & Kumbhakar P.
Synthesis of Polymer Nanocomposites and its Electrical Magnetic And optical Properties	Choudhury Somnath	Meikap A.K. & Mandal M.K.
Z' -Boson, B-Mesons and New Physics	Das Chandan Kumar	Sahoo S. & Maharana L.(U.U.)
Synthesis and Characterization of nano materials using Nd:YAG laser	Desarkar Himadri Sankar	Kumbhakar P. & Mitra A. K. (Retired)
Some Alternative Studies for Developing Ultra-fast all Optical Signal Processors using Optical Nonlinear Materials	Ghosh Parimal	Kumbhakar P. & Sen B.
Optical and Electrical Properties of Polymer-Nanocomposites	Goswami Mrinmoy	Meikap A. K. & Ghosh R.
Synthesis and Charectarization of Rare Earth Ortho Ferrite Nanocomposites	Hossain Mazaffar	Basu S. & Pal M. (B.U.)
Studies on Synthesis, Photoluminescence and Nonlinear Optical Properties of ZnS Nanostructures	Kole Arup K	Kumbhakar P.
High energy physics phenomenology	Kumar Manish	Sahoo S.
Preparation and characterization of advanced polymer composites with carbon nanostructures	Meriga Venkanna	Chakraborty A.K.
A Method of Optical Implementation of Frequency Encoded all Optical Logic gates Based on Multiphoton Processes in Non-linear Material	Mukherjee Koushik	Meikap A. K. & Kumbhakar D.
Electrical and magnetic properties of multiferroics Bismuth ferrite nanoparticles both pure and doped prepare by chemical route	Mukherjee Ayan	Basu S. Pal M. (CSIR-CMERI.)

Topic	Investigator	Supervisor(s)
Carbon nanotube-polymer composites: synthesis and characterisation	Pal Subhashish	Chakraborty A.K. & Mitra A.K.
Microstructure, Electrical and Optical Characterization of Some Industrial Nanocrystalline Materials Synthesized By High Energy Ball Milling	Saha Sourav	Meikap A.K. & Pradhan S.K.
The effect of spontaneous and piezoelectric polarization on thermal and optical properties of Wurtzite Nitrides (GaN, AlN, InN and their ternary alloys)	Sahoo Sushant Kumar	Sahoo S. & Sahoo B.K.
Electro-Optical Study of the Characteristics of liquid crystals	Sinha Subhojyoti	Meikap A. K. & Chatterjee S. K.
Development of Dye Sensitized Nanocrystalline Solar Cells	Usha K	Kumbhakar P. & Mandal B. N. (CMERI)

Annexure - 11.4(g) ii Proposed Doctoral Programme

Department of Biotechnology

- Assessment on the removal of heavy metals and dye using low cost adsorbents.
- Bioactive compounds from marine organisms
- Biofuels
- Bionanotechnology
- Biopesticides
- Bioprospecting Microbial diversity for novel molecules
- Bioremediation
- Cancer Biology
- Cell Biology, Molecular Biology and Cancer Biology
- Developmental Biology and Signal Transduction
- Environmental Microbiology and biotechnology
- Extraction and application of natural dye
- Microbial Pigments
- Microbiology of arsenic contaminated groundwater
- Molecular Plant Pathology
- Parasite immunology and cell signaling
- Petroleum Microbiology and bioremediation of oil spill/oil sludge
- Plant Biotechnology
- Screening of Novel Enzymes

Department of Chemical Engineering

- Acetic acid production in membrane-integrated bioreactor system
- Arsenic removal by membrane technology
- Bioaugmentation of Biogas through Co-digestion of Municipal Sewage with Algal Sludge and Waste Paper
- Biochemical Utilisation of Petroleum Wax (Biochemical Conversion / SCP Production)
- Biodiesel Synthesis from Microalgae Oil using Immobilized Lipase in Fluidized Bed Bioreactors
- Biological treatment of fluoride contaminated ground water
- Biomass separation by Rotary disc Ultrafiltration process
- Bubbling Fluidized Bed Combustion
- CFD modelling of Pyrolysis, Combustion and Gasification of Coal and Biomass
- Characterisation of nanomembranes
- Chlorofluorocarbons Replacement
- Clean Technology development for chemical processes
- Clean water production by membrane technology

- Computer Aided Design and Analysis of Inverse Fluidized Bed Bioreactors with Immobilized Enzyme Nanoparticles
- Defluoridation of contaminated groundwater by physico-chemical nano-adsorption
- Design and Analysis of Circulating Fluidised Bed Bioreactors employing immobilised Enzyme Nanoparticles
- Design of Three Phase Fluidised Bed Combustion Equipment for Colloidal Fuels (Coal- Oil Suspension)
- Diesel Particulate Filter-A CFD Modelling
- Dynamic modelling of integrated coke-oven wastewater treatment plant
- Fluidized Bed Combustion
- Kinetic Studies on Biochemical Production of Phosphatic Biofertiliser from Rock Phosphate Ore
- Methane enrichment by TSA technology
- Methane Potential from Anaerobic Co-digestion of Fruit and Vegetable Wastes with Oil and Fatty Residues
- Modeling Green Process Technology
- Modeling transport through nanomembranes
- Modelling & Simulation of Integrated physico-chemical and biological treatment of wastewater
- Modelling & Simulation of lactic acid production in membrane-integrated hybrid system
- Modelling and simulation of PSA-VSA integrated system
- Modelling of Pyrolysis, Combustion and Gasification of Coal and Biomass
- Nanofiltration
- Noncatalytic Gas-Solid Reactions
- Performance Analysis of Diverging – Converging Fluidized Bed Bioreactors
- Pressure Swing Adsorption Mechanism for Separation
- Production of Biodegradable Plastics (PLLA) from Cheese Whey
- Pyrolysis of weeds
- Removal of phenol using shale
- Removal of fluoride using shale
- Slurry Flow Modelling
- Surface modification of activated carbon by chemical activating agent
- Utilization of activated carbon as catalyst for the production of biodiesel

Department of Chemistry

- Application of Fenton's, Lime & Biological Treatment & their Comparative Assessment for the Treatment of Textile and Dye Wastewater"
- Application of Photo-Fenton's Oxidation & Biological Oxidation for Degradation of Selected Pollutants Present in Petro-Chemical & Coke-Oven Wastewater.
- Corrosion chemistry
- Development of a suitable treatment scheme of common effluent generating from iron & steel, Thermal Power Plants and Chemical industries located in Durgapur industrial area.
- Development of natural fibre reinforced polyester composite material.
- Evaluation of Arsenic distribution through food chain contamination.
- Fluorescence Spectroscopy
- Isolation and characterisation of polysaccharides from Indian plants
- Kinetics and mechanism of inorganic and bioorganic reactions
- Modulation of cell membrane by integrating external lipid
- Spatial and Temporal Variations of Ambient Air Quality
- Surface Chemistry
- Synthesis and application of nonmaterial's for the reduction of environmental contaminants.
- Synthesis and Characterisation of Cu- & Fe complexes

Department of Civil Engineering

- Computational Mechanics of Concrete Structures
- Computational Mechanics of Shell Structures under Lateral load
- Computational Mechanics of Smart laminated Composite Structures
- Development of Smart Concrete Structures using Shape Memory Alloy to withstand Time Dependant Effects
- Experimental mechanics of Concrete Composites.

- NDT and evaluation of Concrete Structures /Advanced materials.
- Structural concrete both with conventional & Non-Conventional (Bio & Non-Bio degradable) Materials-FRC, Polymer Concrete, Assessment, retrofitting, Rehabilitation & strengthening of Damaged Concrete Structures/ Elements etc.

Department of Computer Applications

- Cloud Computing
- Data warehousing
- Database Systems
- Software Engineering
- Steganography

Department of Computer Science & Engineering

- Computer Vision/ Image/Processing
- Cloud Computing
- Digital systems/VLSI
- Information Security
- Mobile Computing
- Software Engineering
- Testing and Verification of Circuits

Department of Earth and Environmental Studies

- Environmental impact on coal mining areas
- Groundwater availability and its management
- High temperature filter media
- Structural Geology & Tectonics of selected areas in Rajasthan
- Use of remote sensing in detection of subtle and obscure geological structure

Department of Electrical Engineering

- AGC with renewable energy systems, FACTS and PSS in restructured power systems
- Analysis and control of multi-phase induction machine
- Control of Multi-link Robot Manipulators
- ELD, Evolutionary optimization techniques
- Electrical Power Systems State Estimation, Detection and Identification of bad data etc.
- Electromagnetic Levitation
- FACTS
- ICT enabled High Voltage Test system
- Integrated Renewable Energy Systems
- Investigation of Haematological disorders from blood cells using soft computing techniques
- Modelling of breakdown voltages using soft computing techniques
- On-line Monitoring of Partial Discharge in Transformer Oil
- Optimal Power Flow Studies
- Optimization in DSP Filter Designs
- Power System Stabilizer
- Price Forecasting
- Robust Stabilization of Cart-inverted Pendulum system in real-time with periodic controller
- Side Lobe Reduction in Antenna Arrays
- Small Signal Stability Analysis in Power Systems
- Synthesis and Characterization of Lanthanum Doped Barium Titanate Zirconate
- Unification of field forces and to explore some of the unanswered phenomena in nature and science

Department of Electronics & Communication Engineering

- Antenna
- Digital Signal processing

- MEMS
- Power Line Communication
- RF and Microwave Engineering
- Underwater Acoustic Communication
- VLSI
- Wireless Communication
- Wireless relays and space-time coding

Department of Humanities & Social Sciences

- English Language Teaching
- Linguistic Texture & Gender Discrimination

Department of Information Technology

- Agent Based Computing
- Image enhancement and segmentation.
- Optical Networks
- Semantic Web and Ontology
- Super-resolution image processing
- Swarm robotics
- Watermarking and Information Security

Department of Management Studies

- Business Management in Petrochemical Industry
- Business Management in Small Scale Industries
- Common property resource management
- Green Marketing
- Human resource management
- Knowledge Management

Department of Mathematics

- Bio-mathematics
- Coding and Design Theory
- Finite Field Theory
- Fixed Pointy Theory
- Functional Analysis
- Fuzzy mathematics
- Image processing
- Information and Coding Theory
- Operations Research
- Optimization of dynamics system
- Population Dynamics
- Real Analysis
- Statistical Analysis
- Soft Computing
- Theoretical & Computational Fluid Dynamics

Department of Mechanical Engineering

- Computational Fluid Dynamics
- Experimental analysis of composite structures
- Fault diagnosis, detection and isolation
- Industrial Management
- Mobile Robot Navigation
- Non conventional machining
- Soccer playing robots
- Soft Computing

- Thermodynamics

Department of Metallurgical & Materials Engineering

- Characterization of biomaterials (dental amalgam and Ti alloys) and their electro chemical behaviour in an artificial saliva, body fluid and other environment
- Corrosion environmental assisted cracking of aluminium alloys and stainless steels and their weldments.
- Development and characterisation of AA7075 composition
- Development of cast microalloyed steel.
- Development of Hollow Agglomerate and its Characterisation
- Development of TiC reinforced aluminium based metal matrix composite with and without a second reinforcement.
- Optimization of process parameters for producing AISI 3166, 420 and A140 steels by metal injection moulding process
- Semisolid heat treatment of non-ferrous alloy

Department of Physics

- Functionalization of Carbon Nanotubes, Preparation of Hybrid Structures with Carbon Nanotubes, Characterization and Study of Optical and Electrical Properties.
- Graphene based supercapacitors
- Low temperature characterization of nano-composites, conducting polymers and disordered alloys
- Non-linear optical frequency conversion techniques for characterization of non-linear optical materials
- Preparation and characterization of advanced polymer composites with carbon nanostructures
- Studies of the effect of electric and magnetic fields on liquid crystals by polarizing light microscopy
- Studies on phenomenology of Z' – Boson and B-meson decays, phenomenology of massive neutrinos
- Synchronous communication systems, studies on multiphase oscillator, nonlinear dynamics, chaos & cryptography.
- Synthesis and characterization of nanomaterials using laser
- Synthesis and characterization of nanostructured materials
- Synthesis and Characterization of Optical Properties of Semiconducting and Metallic Nanoparticles and Quantum Dots
- Synthesis and properties of carbon nanotube reinforced polymer nanocomposites
- Synthesis of Metal Nanoparticles by Laser Ablation and Study of Optical Properties

Annexure–11.4(h) i Ph.D. degree awarded till 2012-13

Name of the Department	Investigator	Supervisor(s)
Chemical Engineering	Dr. Shankar Mukherjee	Dr. A.P. Sinha
Chemical Engineering	Dr. S.K. Dutta	Dr. A.P. Sinha
Chemical Engineering	Dr. Sandip Kumar Lahiri	Dr. K.C. Ghanta
Chemical Engineering	Dr. Malay K. Karmakar	Dr. Haldar S. & Dr. A. B. Dutta (CMERI)
Chemical Engineering	Dr. Mou Sen	Dr. P. Pal
Chemical Engineering	Dr. Anup Kumar Sadhukhan	Dr. P. Gupta Dr. R. K. Saha (IIT Kharagpur)
Chemical Engineering	Dr. A.K. Manna	Dr. P. Pal
Chemical Engineering	Dr. Jaya Sikder	Dr. P. Pal & Dr. J.P. Sarker
Chemistry	Dr. M. Banerjee	Dr. R. S. Konar
Chemistry	Dr. S. Chatterjee	Dr. R. S. Konar
Chemistry	Dr. B. R. Guha	Dr. S. N. Banerjee
Chemistry	Dr. S. Basu	Dr. S. N. Banerjee
Chemistry	Dr. U. Satpathi	Dr. R. S. Konar
Chemistry	Dr. P. K. Banerjee	Dr. S. N. Banerjee
Chemistry	Dr. S. Saha	Dr. N. Kurmaiah

Name of the Department	Investigator	Supervisor(s)
Chemistry	Dr. V. K. Soi	Dr. N. Kurmaiah
Chemistry	Dr. S. Sarkar	Dr. R. S. Konar
Chemistry	Dr. M. S. Adhikary	Dr. R. S. Konar
Chemistry	Dr. S. Guchait	Dr. R. S. Konar
Chemistry	Dr. R. Roy	Dr. M. M. Nandi
Chemistry	Dr. P. Debnath	Dr. M. M. Nandi
Chemistry	Dr. S. Mishra	Dr. S. N. Banerjee
Chemistry	Dr. J. Chowdhuri	Dr. M. M. Nandi
Chemistry	Dr. S. Tarot	Dr. M. M. Nandi
Chemistry	Dr. T. K. Chatterjee	Dr. G. C. Bhaumik
Chemistry	Dr. A. K. Sarkar	Dr. N. Kurmaiah
Chemistry	Dr. N. Dey	Dr. R. S. Konar
Chemistry	Dr. S. C. Mitra	Dr. R. S. Konar
Chemistry	Dr. S.C. Moi	Dr. A. K. Ghosh
Chemistry	Dr. T. Kundu	Dr. A. K. Ghosh & Dr. P. Chowdhury
Chemistry	Dr. S. Samui	Dr. A. K. Ghosh & Dr. P. Chowdhury
Chemistry	Dr. B. Ghosh	Dr. B. P. Mukhopadhyay
Chemistry	Dr. Ranjana	Dr. M. M. Nandi & Dr. M. Maji
Civil Engineering	Dr. M. N. Rao	Dr. M. M. Basole
Civil Engineering	Dr. P. K. Das	Dr. M. M. Basole
Civil Engineering	Dr. N. M. Basu	Dr. M. N. Rao
Civil Engineering	Dr. S. N. Srimani	Dr. P. K. Das
Computer Science & Engineering	Dr. Partha Bhattacharya	Dr. G. Sanyal
Computer Science & Engineering	Dr. Tilendra Shisir Sinha	Dr. G. Sanyal
Computer Science & Engineering	Dr. Anirban Sarkar	Dr. S. hattacharya
Computer Science & Engineering	Dr. Baisakhi Chakraborty.	Dr. D.Ghosh.
Computer Science & Engineering	Dr. Suvamoy Changder	Dr. D.Ghosh.
Computer Science & Engineering	Dr. Raj Kumar Samanta	Dr. G. Sanyal
Electrical Engineering	Dr. P. K. Sen	Dr. A. M. Roy
Electrical Engineering	Dr. (Mrs.) J. Majumder	Dr. S. P. Roy Choudhury
Electrical Engineering	Dr. Ranjit Roy	Prof. S.P. Ghoshal
Electrical Engineering	Dr. V. Mukherjee	Prof. S.P. Ghoshal
Electrical Engineering	Dr. S. Karmakar	Dr. N. K. Roy & Dr. P. Kumbhakar
Electrical Engineering	Dr. R. Bhaduri	Dr. S. Banerjee
Electrical Engineering	Dr. P.K. Roy	Prof. S.P. Ghoshal & Prof. S.S. Thakur
Electronics & Communication Engineering	Dr. Pranam Paul	Dr. A. K. Bhattacharjee & Dr. S. Datta
Electronics & Communication Engineering	Dr. Krishnendu Adhvaryu	Dr. A. K. Bhattacharjee Dr. C. Chanda (BESU) Dr. B. B. Maji
Electronics & Communication Engineering	Dr. Swapan Kumar Ghoshal	Dr. A. K. Bhattacharjee Dr. R. Ghatak
Electronics & Communication Engineering	Dr. Rajib Kar	Dr. A. K. Mal Dr. A. K. Bhattacharjee
Electronics & Communication Engineering	Dr. Durbadal Mandal	Dr. S. P. Ghoshal Dr. A. K. Bhattacharyya
Electronics & Communication Engineering	Dr. Narendra Nath Pathak	Dr. G.K. Mahanti
Electronics & Communication Engineering	Dr. Banani Basu	Dr. G.K. Mahanti
Electronics & Communication Engineering	Dr. Sanjay Dhar Roy	Dr. Sumit Kundu
Electronics & Communication Engineering	Dr. Joydeb Roychowdhury	Prof. A. K. Bhattacharjee
Earth & Environmental Studies	Dr. T. K. Saha	Prof. S. B. Bhattacharjee & Prof. S.

Name of the Department	Investigator	Supervisor(s)
		N. Ghosh (ChE)
Earth & Environmental Studies	Dr. A. K. Batabyal	Mr. S. B. Bhattacharjee Dr. A. Mukherjee
Earth & Environmental Studies	Dr. K. Adhikari	Dr. A. Gangopadhyay Dr. P. Choudhury
Earth & Environmental Studies	Dr. Dibyendu Banerjee	Dr. A. Gangopadhyay Dr. S. Bhattacharyya Dr. S. K. Chakraborty
Humanities & Social Sciences	Dr. R. Chaudhury	Dr. P. P. Sengupta & Dr. S. C. Sikdar
Humanities & Social Sciences	Dr. S. K. Seth	Dr. P. P. Sengupta
Humanities & Social Sciences	Dr. Amit Bhattacharyya	Dr. P. P. Sengupta
Humanities & Social Sciences	Dr. Paroma Mitra	Dr. P. P. Sengupta
Humanities & Social Sciences	Dr. Rajib Roy	Dr. P. P. Sengupta
Humanities & Social Sciences	Dr. Chinmoy Samajdar	Dr. P. P. Sengupta
Humanities & Social Sciences	Dr. Niloy Sarkar	Dr. P. P. Sengupta
Humanities & Social Sciences	Dr. Amit Bhattacharyya	Dr. P. P. Sengupta
Humanities & Social Sciences	Dr. Tiyas Biswas	Dr. P. P. Sengupta
Humanities & Social Sciences	Dr. Anupam De	Dr. B.N. Chakrabarti & Dr.G. Bandyopadhyay
Humanities & Social Sciences	Dr. Anirban Dutta	Dr. P. P. Sengupta
Humanities & Social Sciences	Dr. Sukanya Ghosh	Dr. P. P. Sengupta
Mathematics	Dr. E. Tarafder	Dr. A. K. Chowdhury
Mathematics	Dr. R. Sircar	Dr. D. N. Mitra
Mathematics	Dr.(Miss.) H. Chattopadhyay	Dr. B. K. Roy
Mathematics	Dr. J. Sanyal	Dr. A. N. Roy Chowdhury
Mathematics	Dr. D. Chatteraj	Dr. S. K. Bose
Mathematics	Dr. T. Chattopadhyay	Dr. S. K. Bose
Mathematics	Dr. T. Das	Dr. R. Sircar
Mathematics	Dr. S. S. Halder	Dr. S. K. Bose
Mathematics	Dr. (Smt) P. Chakraborty	Dr. A. N. Roy Chowdhury
Mathematics	Dr. Sambhu Nath Dey	Dr. D. Ghosh & Dr. S. C. Sikder
Mathematics	Dr. S. N. Dey	Dr. D. Ghosh (CSE) & Dr. S.C. Sikder
Mathematics	Dr. R. Bhattacharyya	Dr. S. Kar & Dr. D DuttaMajumder
Mathematics	Dr. Debasis Das	Dr. S. Kar & Dr. A. Roy
Mathematics	Dr. Sathi Mukherjee	Dr. K. Basu
Mechanical Engineering	Dr. S. N. Mukherjee	Dr. S. K. Basu
Mechanical Engineering	Dr. D. K. Pal	Dr. S. K. Basu
Mechanical Engineering	Dr. S. N. Sengupta	Dr. S. K. Basu
Mechanical Engineering	Dr. G. Mitra	Dr. S. K. Basu
Mechanical Engineering	Dr. G. S. Gill	Prof. N. C. Dasgupta & Dr. D. Bhaduri
Mechanical Engineering	Dr. P. Basu	Prof. N. C. Dasgupta & Dr. D. Bhaduri
Mechanical Engineering	Dr. A. Majumdar	Dr. S. K. Basu
Mechanical Engineering	Dr. G. S. Patki	Dr. S. K. Basu
Mechanical Engineering	Dr. P. K. Sinha	Dr. D. Bhaduri
Mechanical Engineering	Dr. S. C. Nidhi	Dr. S. K. Basu
Mechanical Engineering	Dr. J. Basu	Dr. S. K. Basu
Mechanical Engineering	Dr. B. Bhaduri	Dr. S. K. Basu
Mechanical Engineering	Dr. S. P. Das	Dr. P. B. Choulia
Mechanical Engineering	Dr. M. S. Mukhopadhyay	Dr. D. K. Pal
Mechanical Engineering	Dr. M. R. Patkar	Dr. D. K. Pal & Dr. S. K. Basu
Mechanical Engineering	Dr. S. Chakraborty	Dr. D. K. Pal
Mechanical Engineering	Dr. M. A. Venkatesh	Dr. D. K. Pal
Mechanical Engineering	Dr. N. P. Mukherjee	Dr. D.K.Pal

Name of the Department	Investigator	Supervisor(s)
Mechanical Engineering	Dr. S. Mukherjee	Dr. S.N.Sengurpta & Dr. M.C.Majumder
Mechanical Engineering	Dr. Balamurugan Gopla	Dr. S. Ghosh Dr. B.N Mondal. (CMERI)
Mechanical Engineering	Dr. Chandan Chattoraj	Dr. M. C. Majumder
Mechanical Engineering	Dr. A. G. Mathew	Dr. M. C. Majumder Dr. K. P. Ramachandran (CCE, Oman)
Mechanical Engineering	Dr. G. K. Vijayaraghvan	Dr. Majumder M.C. Dr. K. P. Ramachandran (CCE, Oman)
Mechanical Engineering	Dr. S. Vishnupriyan	Dr. K. P. Ramachandran (CCE, Oman) Dr. M. C. Majumder
Mechanical Engineering	Dr. Pradip Debroy	Dr. Ghosh S
Mechanical Engineering	Dr. Atanu Maity	Dr. Ghosh S. Dr. Majumder S. (CMERI)
Metallurgical & Materials Engineering	Dr. A. C. Ganguli	Dr. S. C. Dasgupta Dr. A. K. Chakraborty
Metallurgical & Materials Engineering	Dr. S. Banerjee	Dr. D. Bhaduri
Metallurgical & Materials Engineering	Dr. B. Deo	Dr. S. Sarkar
Metallurgical & Materials Engineering	Dr. A. Basu	Dr. S. C. Sengupta & Dr. S. Jana
Metallurgical & Materials Engineering	Dr. S. K. Chattopadhyay	Dr. S. K. Chatterjee & Dr. S. P. Sengupta
Metallurgical & Materials Engineering	Dr. K. Lal	Dr. S. K. Chattopadhyay & Dr. A. K. Meikap (PH)
Metallurgical & Materials Engineering	Dr. Subhendu Mukherjee	Prof. D. K. Mondal
Metallurgical & Materials Engineering	Dr. Debashis Ghosh	Prof. S.K. Mitra
Metallurgical & Materials Engineering	Dr. Ranjan Kumar Dasgupta	Prof. D. K. Mondal & Prof. A. C. Ganguli
Physics	Dr. N. Choudhury	Dr. M. S. Sinha
Physics	Dr. A. K. Das	Dr. M. S. Sinha
Physics	Dr. B. C. Nandi	Dr. M. S. Sinha
Physics	Dr. P. S. Basu	Dr. M. S. Sinha
Physics	Dr. G. S. Roy	Dr. M. S. Sinha
Physics	Dr. (Mrs.) Ragasree Sen	Dr. S. K. Chatterjee
Physics	Dr. D. Biswas	Dr. A. K. Meikap & Dr. S. K. Chattopadhyay
Physics	Dr. S. Sahoo	Dr. L. Maharana & Dr. A. K. Meikap
Physics	Dr. A. Sarkar	Dr. A. K. Meikap & Dr. S. K. Chatterjee
Physics	Dr. Jiten Ghosh	Dr. S. K. Chatterjee
Physics	Dr. Prasanta Kr. Singha	Prof. A.K. Mitra
Physics	Dr. Manajit Chattopadhyay	Dr. P.Kumbhakar
Physics	Dr. Somenath Ghatak	Prof. A. K. Meikap
Physics	Dr. Kajal Gupta	Prof. A. K. Meikap & Dr. P. C. Jana (V.U.)
Physics	Dr. Subrata Karmakar	Prof. N. K. Roy & Dr. P. Kumbhakar
Physics	Dr. Rajat Sarkar	Dr. P. Kumbhakar & Dr. A. K. Mitra
Physics	Dr. Keka Talukdar	Dr. A. K. Mitra
Physics	Dr. G. Chakraborty	Prof. A. K. Meikap
Physics	Dr. P. Ghosh	Prof. A. K. Meikap

Annexure - 11.4(h) ii Proposed Plan for Research**Department of Biotechnology**

- Assessment on the removal of heavy metals and dye using low cost adsorbents.
- Bioactive compounds from marine organisms
- Biofuels
- Bionanotechnology
- Biopesticides
- Bioprospecting Microbial diversity for novel molecules
- Bioremediation
- Cancer Biology
- Cell Biology, Molecular Biology and Cancer Biology
- Developmental Biology and Signal Transduction
- Environmental Microbiology and Biotechnology
- Extraction and application of natural dye
- Metabolomics
- Microbial Pigments
- Microbiology of arsenic contaminated groundwater
- Molecular Plant Pathology
- Parasite immunology and cell signalling
- Petroleum Microbiology and bioremediation of oil spill/oil sludge
- Plant Biotechnology
- Screening of Novel Enzymes

Department of Chemical Engineering

- Bioaugmentation of Biogas through Co-digestion of Municipal Sewage with Algal Sludge and Waste Paper
- Biochemical Utilisation of Petroleum Wax (Biochemical Conversion / SCP Production)
- Biodiesel production
- Biodiesel Synthesis from Microalgae Oil using Immobilized Lipase in Fluidized Bed Bioreactors
- Circulating Fluidized Bed Combustion & Gasification
- Clean Technology for Chemical Processes
- Computer Aided Design and Analysis of Inverse Fluidized Bed Bioreactors with Immobilized Enzyme Nanoparticles
- Co-pyrolysis, Combustion and Gasification
- Design and Analysis of Semi Fluidized Bed Bioreactors
- Design of Three Phase Fluidised Bed Combustion Equipment for Colloidal Fuels (Coal- Oil Suspension)
- Development of Mixed Matrix Membrane for gas separation
- Development of nano-bio-catalyst for the conversion of biomass
- Development of nanosensor
- Diesel Particulate Filter-A CFD Modelling
- Dry beneficiation of coal
- Fluidized Bed Combustion
- Gasification of coal and biomass
- Kinetic Studies on Biochemical Production of Phosphatic Biofertiliser from Rock Phosphate Ore
- Membrane bioreactor for biofuel generation from natural biomass
- Methane Potential from Anaerobic Co-digestion of Fruit and Vegetable Wastes with Oil and Fatty Residues
- Methanogenesis of low grade Indian coal
- Modelling nanofiltration of arsenic removal by membrane-integrated hybrid system
- Multiphase flow
- Optimization and control
- Performance Analysis of Circulating Fluidised Bed Bioreactors employing Immobilised Enzyme Nanoparticles
- Performance Analysis of Diverging – Converging Fluidized Bed Bioreactors
- Process Intensification towards sustainable technology
- Production of Biodegradable Plastics (PLLA) from Cheese Whey
- Production of plastic to petrol

- Pyrolysis of weeds
- Realistic nanoseparation modelling through on-line streaming potential measurement
- Removal of phenol using shale
- Replacement of Chlorofluorocarbons from Conventional refrigeration systems
- Studies on Immobilised Cell / Enzyme Nanoparticles

Department of Chemistry

- Application of nanomaterials for the removal of Mercury from Wastewater
- Chemical modification of natural polysaccharides and their industrial implication
- Cryobiology
- Lipid Chemistry
- Pilot Scale study of Physico-Chemical and Biological Treatment of High Strength Wastewater
- Surface chemistry
- Synthesis and characterisation of Cu- & Fe complexes
- Synthesis of Nonmaterials for Environmental Application

Department of Civil Engineering

- Bioremediation and Nanotechnology
- Contaminant migration through soil
- Development of Decision Support System for water resource management and
- Development of Smart Concrete Structures.
- Engineering Limnology
- Experimental mechanics of concrete structures, Biodeposition on concrete
- Experimental set up for formation of river bed form and erosion around an island flood mitigation of river Kosi system lying in India and Nepal
- Impact of Climate change on water resources in a natural stream
- Removal of heavy toxic metal from ground water using nanotechnology.
- Rural water management
- Rehabilitation- Retrofitting & Strengthening of Structures
- Application of Nanotechnology in Concrete Structures/ Materials
- Setting up of a center of low-cost housing facilities.
- Solid waste management
- Wind energy Studies

Department of Computer Applications

- Design and Architecture of Multi Agent based system
- Design and Architecture of Semi-structure Software system
- Design of Latency Aware Hybrid Ad Hoc Infrastructure for post Disaster Communication.
- Designing Steganographic system for secured data transfer and data hiding.
- Efficient Intrusion Detection & Incident response : A FRAMEWORK FOR THE LINUX
- Enhancing call carrying capacity in Cellular Network KERNEL.
- Load Balancing in Cellular Networks
- Reducing handoff delays
- Study and development of Trust Computing in Cloud Computing Environment.

Department of Computer Science and Engineering

- Mobile Computing
- Software Engineering
- Testing and Verification of Circuits

Department of Earth and Environmental Studies

- Application of Remote Sensing in Petroleum exploration
- Environmental impact of CBM exploration
- Environmental impact on coal mining areas
- Groundwater availability and its management

- Structural Geology & Tectonics of selected areas in Rajasthan

Department of Electrical Engineering

- AGC with renewable energy systems, FACTS and PSS in restructured power systems
- Analysis and Control of Induction Generators
- Control of Converters.
- ELD, Evolutionary optimization techniques
- Electrical Power Systems State Estimation, Detection and Identification of bad data etc.
- Electromagnetic Levitation
- FACTS & Smart Grid
- ICT enabled High Voltage Test system
- Investigation of Haematological disorders from blood cells using soft computing techniques
- Modelling of breakdown voltages using soft computing techniques
- Non-conventional energy sources, wind energy, small hydro plants etc
- On-line Monitoring of Partial Discharge in Transformer Oil
- Optimal Power Flow Studies
- Optimization in Analog Circuits
- Optimization in DSP Filter Designs
- Optimization in VLSI
- Power System Stabilizer
- Price Forecasting
- Renewable Energy Systems
- Robust Design of Power System Stabilizer
- Side Lobe Reduction in Antenna Arrays
- Small Signal Stability Analysis in Power Systems
- Synthesis and Characterization of Lanthanum Doped Barium Titanate Zirconate
- Unification of field forces and to explore some of the unanswered phenomena in nature and science

Department of Electronics & Communication Engineering

- Cognitive Radio Network
- Cognitive Cooperative Communications
- Green Communication with Wireless Relays
- Impulse mitigation in Power Line Communication
- Nanoscale Semiconductor Devices
- Solar Cell

Department of Humanities and Social Sciences

- Literary Theory and Criticism
- Poems and Plays of Shakespeare
- Translation Studies

Department of Information Technology

- Deniable and hierarchical crypto-systems
- Game theory based automated mechanism design
- Group Synchronisation and design of Tele-teaching systems
- Image processing in polar coordinate system and its application in Biomedical Engineering
- Knowledge based systems
- Multi Agent Based Modelling and Simulation
- Optical networks – Burst and Coarse Packet switching
- Soft Computing Techniques for Bioinformatics systems
- Swarm robotics
- VLSI testing

Department of Mathematics

- Algebraic Coding Theory
- Bio-mathematics
- Block Design Theory
- Computational Fluid Dynamics
- Computational Graph Theory
- Fixed Point Theory
- Fuzzy Mathematics
- Geodesy and Geophysics
- Image Processing
- Information Theory
- Mathematical Modelling
- Operations Research
- Optimization of dynamics system,
- Population Dynamics
- Real Analysis
- Statistical Analysis
- Supply-chain Management
- Theoretical & Computational Fluid Dynamics
- Uncertainty Theory

Department of Mechanical Engineering

- Characterization, Process Modelling and Optimization of Friction Stir Welding For Joining Dissimilar Metals
- Complete fault diagnosis, detection and isolation of Rolling stand through electrical motor current signature analysis
- Constructal theory-based formulation of thermodynamic optimization principle
- Design and development of soft computing based multi agent systems
- Design, Development, Testing and Optimization of a Vehicle Suspension Systems
- Development of All terrain robot
- Development of climbing robot
- Dynamics and Control of Flexible Manipulators
- Experimental Analysis of Composite Structures
- Machine dynamics
- Modelling and Analysis of machine Tool Dynamics for Prediction stability against Chatter using Bond Graph.
- Nonlinear Control
- Numerical Simulation of Continuous Caster Tundish
- Numerical Simulation of Convective Heat Transfer Problem
- Optimisation in Assembly Line Balancing Problem
- Optimizing the potential thermal energy saving of a captive power plant
- Study of Molecular Dynamics of cavity flow

Department of Metallurgical & Materials Engineering

- Characterisation and pre-reduction of electric arc furnace dust.
- Characterization of alloyed cast iron
- Corrosion fatigue/environmental assisted cracking of aluminium alloys and stainless steels and their weldments.
- Development of cast microalloyed steel.
- Development of nanoceramic oxide dispersed aluminium alloy composites.
- Modification of Al-Si alloy microstructure by semisolid heat treatment.
- Semisolid heat treatment of non-ferrous alloys
- Studies on the different sources of MgO on the properties of Fluxed Iron Ore Pellets
- Study on the haematite and Magnetite mixed pellets and Their Characterisation

Department of Physics

- Development and characterization of nanomaterials using laser
- Functionalization of Carbon Nanotubes, Preparation of Hybrid Structures with Carbon Nanotubes, Investigation of Optical and Electrical Properties.
- graphene based supercapacitors
- Graphene reinforced epoxy nanocomposites for lightweight structures
- Low temperature characterization of nano-composites, conducting polymers and disordered alloys
- Non-linear optical frequency conversion techniques for characterization of non-linear optical materials
- Studies of the effect of electric and magnetic fields on liquid crystals by polarizing light microscopy
- Studies on phenomenology of Z' – Boson and B-meson decays, phenomenology of massive neutrinos
- Synchronous communication systems, studies on multiphase oscillator, nonlinear dynamics, chaos & cryptography.
- Synthesis and characterisation of graphene and its functional derivatives
- Synthesis and characterization of nanostructured materials
- Synthesis and Characterization Optical and Nonlinear Optical Properties of Semiconducting and Metallic Nanoparticles and Quantum Dots
- Synthesis and properties of carbon nanotube reinforced polymer nanocomposites
- Synthesis of Metal Nanoparticles by Laser Ablation and Study of Optical Properties

Annexure–11.4(i) Testing & Consultancy services rendered during 2012-13

Department	Title of the Project	Amount (Total)
Deptt. of Civil Engg. (Testing and consultancy cell)	Routine testing	Rs. 7.0 Lacs (Aprox)
Deptt. of Civil Engg.	PMGSY	Payment pending
Deptt. of Civil Engg.	Preparation of D.P.R. for the Construction of District Conference Hall-cum Convention Centre within Circuit House Campus, Bankura	Payment pending
Deptt. of Civil Engg.	Raising the height of boundary wall and water storage system of LPG Bottling Plant of I.O.C.L. Durgapur	Rs. 2.4 Lakhs
Inter Disciplinary Consultancy Group consisting of Dr. A. K. Datta (Civil Engg.), Dr. P. Topdar (Civil Engg.) and Mr. A. Patari (Mechanical Engg.)	Valuation of Factory “Quality Chemicals” at Barjora, Bankura, West Bengal. Client: West Bengal Mineral Development and Trading Corporation Limited (WBMD&TCL), Kolkata	Rs. 10.5 Lakhs
Metallurgical & Materials Engineering	Testing and Consultancy	Rs.15,168

11.5(a) Number of faculty in position

Name of Department	Professor	Associate Professor	Assistant Professor	Assistant Professor (Contractual)
Biotechnology	02	04	05	-
Chemical Engineering	06	03	04	-
Chemistry	01	05	04	-
Civil Engineering	06	05	06	-
Computer Application	Nil	Nil	05	02
Computer Science & Engineering	02	04	04	02
Earth and Environmental Studies	Nil	02	Nil	-
Electrical Engineering	05	04	06	-
Electronics & Communications Engineering	02	06	06	01
Humanities & Social Sciences	02	Nil	03	-
Information Technology	Nil	02	08	-
Management Studies	Nil	03	05	-
Mathematics	Nil	03	05	01
Mechanical Engineering	4	10	10	-
Metallurgical & Materials Engineering	02	05	05	01
Physics	01	02	03	-
T.P.S.W.	Nil	-	-	-
Total	33	58	79	07

Annexure-11.5(b) List of Faculty

Director	Kumar Tarkeshwar, PhD
Dean, Academic	Mondal Dipak Kumar, PhD
Dean, Administration	Sarker Jyoti Prakash, PhD
Dean, Faculty Welfare	Mitra Swapan Kumar, PhD
Dean, Planning & Development	Haldar Subhamay, PhD
Dean, Research & Consultancy	Gupta Parthapratim, PhD
Dean, Students Welfare	Sanyal Goutam, PhD

Department of Biotechnology

Name	Designation	Areas of Research Interest	Email id (Institute & other id)
Aikat Kaustav, Ph.D.	Associate Professor	Microbial Biotechnology and Biochemical Engineering	kaustav.aikat@bt.nitdgp.ac.in aikat@yahoo.co.in
Chattopadhyay Sudip, Ph.D.	Professor	Developmental Biology and signal transduction	sudip.chattopadhyay@bt.nitdgp.ac.in sudipchatto@gmail.com
Chaudhuri Surabhi, Ph.D.	Associate Professor	Biochemical Engineering, Food Biotechnology, Environmental Biotechnology	surabhi.chaudhuri@bt.nitdgp.ac.in surabhi_c@yahoo.com
Das (Saha) Papita, Ph.D.	Assistant Professor	Downstream processing, Environment Engineering	papita.saha@bt.nitdgp.ac.in papitasaha@gmail.com

Name	Designation	Areas of Research Interest	Email id (Institute & other id)
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Saha Anup Kumar, PhD	Professor	Vehicle Dynamics, Machine Dynamics, Bond graph Modeling, Biomechanics	anupkumar.saha@me.nitdgp.ac.in saha_ak2001@yahoo.co.in
Sengupta Amitava	Associate Professor	IC Engines, Refrigeration & Air Conditioning	amitava.sengupta@me.nitdgp.ac.in Aseg_nitdgp@yahoo.co.in

Department of Metallurgical & Materials Engineering

Name	Designation	Areas of Research Interest	Email id (Institute & other id)
Bera Supriya, PhD	Assistant Professor	Physical Metallurgy, Powder Metallurgy, Metallurgical Thermodynamics	supriyabera@gmail.com
Bhattacharyya Ashish, PhD	Associate Professor	Mechanical Testing, Nano-Composites	profab@mms.nitdgp.ac.in abnitd@yahoo.co.in
Chakraborty Rajib	Associate Professor	Agglomeration, Direct Reduction	profrajivc@mms.nitdgp.ac.in rajiby2k1@yahoo.co.in
Ghosh Sukomal, PhD	MOS Chair Professor	Extractive Metallurgy	sukomalnml@rediffmail.com
Ghosh Karuna Sindhu, PhD	Associate Professor	Corrosion, Physical Metallurgy, Welding	karunasindhu.ghosh@mms.nitdgp.ac.in ksgghosh2001@yahoo.co.uk
Ghosh Madan Mohan, PhD	Assistant Professor	Heat treatment, Dual Phase Steel, Metallography, Deformation behaviour of Materials	profmmg@mms.nitdgp.ac.in mmgreed@yahoo.co.in mmgnitd@gmail.com
Maity Joydeep, PhD	Associate Professor	Diffusion, Phase Transformation, heat treatment and transient Liquid Phase Bonding	joydeep.maity@mms.nitdgp.ac.in joydeep_maity@yahoo.co.in
Mallik Manab	Assistant Professor (Contractual)	Advanced materials, Mechanical Metallurgy, Materials Characterization	Manabmallik@yahoo.co.in Manabmallik@gmail.com
Mitra Swapan Kumar, PhD	Professor	Thermodynamics & high temp. Corrosion of metals & alloys	profskm@mms.nitdgp.ac.in skmnitd@yahoo.co.in
Mondal Dipak Kumar, PhD	Professor	Physical Metallurgy, Heat treatment & Metallography	profdkm@mms.nitdgp.ac.in dk_mondal2003@yahoo.co.in
Mondal Manas Kumar	Assistant Professor	Physical Metallurgy, Mathematical Modelling	manas.mandal@mms.nitdgp.ac.in manas_nitdgp@yahoo.co.in

Name	Designation	Areas of Research Interest	Email id (Institute & other id)
Pramanik Susanta	Associate Professor	Iron Making ;Steel Making Agglomeration of iron ore fines, Environmental Degradation of Materials	susanta.pramanik@mms.nitdgp.ac.in sus_metnitd@yahoo.com
Ray Rabindranath	Associate Professor	Mathematical Modelling, Transport Phenomena, Thermodynamics	profnr@mms.nitdgp.ac.in rnray_mete@yahoo.co.in rnraymete@gmail.com
Show Bijay Kumar	Assistant Professor	Mechanical behaviour of metals, Microalloyed steel, X-Ray Diffraction	bijay.show@mms.nitdgp.ac.in bijayshow@gmail.com

Department of Physics

Name	Designation	Areas of Research Interest	Email id (Institute & other id)
Basu Soumen, PhD	Assistant Professor	Nanomaterials, Multiferoics	soumen.basu@phy.nitdgp.ac.in sou_menbasu@yahoo.com
Chakraborty Amit, PhD	Associate Professor	Carbon nanotube, graphene and their nanocomposites	amit.chakraborty@phy.nitdgp.ac.in amitkc61@gmail.com
Kumbhakar Pathik, PhD	Associate Professor	Nanophotonics, Nonlinear Optics, PD Sensor, Gas Sensor	pathik.kumbhakar@phy.nitdgp.ac.in nitdgpkumbhakar@yahoo.com
Meikap Ajit Kumar, PhD	Professor	Low Temperature Characterisation, Thin-film Technology, Conducting polymers, Nanocomposites	ajit.meikap@phy.nitdgp.ac.in ak_meikap@yahoo.com
Mandal Mrinal Kanti, Ph. D.	Assistant Professor	Electronics	mrinalkanti.mandal@phy.nitdgp.ac.in nitmkm@yahoo.co.in
Sahoo Sukadev, Ph. D.	Assistant Professor	Theoretical High Energy Physics, Z' boson phenomenology, B meson decays	sukadev.sahoo@phy.nitdgp.ac.in sukadevsahoo@yahoo.com

Annexure – 11.5(c) New appointment of faculty during the year

NIL

Annexure-11.5(d) Retirement, Resignation, Death and Voluntary Retirement of faculty during the year

Sl. No.	Name	Department	Designation	Date of retirement
1	Ghosh Sukamal	Mechanical Engg	Professer	31.07.2012

Annexure-11.6(a) Number of Officers

Designation	Sanctioned	In position
Registrar	1	1
Librarian	1	1
Deputy Registrar(Admn)	1	1
Deputy Registrar(Accounts)	1	1
Maintenance Engineer	1	1
Manager(Hostel, Estate & Security)	1	1
Medical Officer	2	2
Officer, TPSW	1	vacant
Audit Officer	1	1
Administrative Officer	1	1
Asstt. Registrar(Academic)	1	1
Asstt. Librarian	1	vacant
Jr. Accounts Officer	1	1
Physical Training Instructor	1	1
Assistant Professor /System Manager	1	1
Lercturer / Programmer	1	1
Stores Officer	1	1
Foreman	3	2

Annexure-11.6(b) List of Officers

Designation	Name
Registrar	Sandhu P.S
Librarian	Mondal Manik, PhD
Deputy Registrar (Admn)	Ray Dhruvajyoti
Deputy Registrar (Accounts)	Mukherjee Uday Chandra
Maintenance Engineer	Haldar Tanmay
Manager (Hostel, Estate & Security)	Chattopadhyay Alope Kr.
Medical Officer	Patra Sucharita (Dr.) Sarkar Banhi Kumar (Dr.)
Audit Officer	Das Ashutosh
Administrative Officer	Sinha Sanat Kumar
Asstt. Registrar (Academic)	Sardar Amiya Kumar
Jr. Accounts Officer	Bhattacharya Sayan
Physical Training Instructor	Mukherjee Hillol
Assistant Professor /System Manager	Saravanan C, PhD
Lercturer / Programmer	Chatterjee Rajib
Stores Officer	Mondal Debasish
Foreman	Dutta Goutam Roy Ashok Kumar

Annexure-11.6(c) Number of technical & administrative staff members

Designation		In position
1	Asstt. Foreman	08
2	Cleaner	01
3	Draftsman	01
4	Driver	01
5	Duftry	01
6	Dupl. Machine Operator	01
7	Engg. Asstt.	03
8	General Duty Attd.	02
9	Head Asstt.	01
10	Hostel Cook	03
11	Jr. Computer Operator	02
12	Key Punch Operator	02
13	Laboratory Assistant	03
14	Laboratory Attd/Skilled Staff	07
15	LDA/LDC	22
16	Mali	02
17	Mazdoor	01
18	Mess Manager	05
19	Metron	01
20	Office Peon/Helper	34
21	Pharmacist	01
22	Sanitary Inspector	01
23	Security Inspector	Nil
24	Skilled staff	14
25	Sr. Lib. Asst/Lib. Asst.	02
26	Stack Attd(Lib)	02
27	Staff Nurse	02
28	Store Attendant	01
29	Sweeper	06
30	Technical Assistant	20
31	Telephone Mechanics	01
32	UDA/UDC	17
33	Watchman	03
34	Workshop Attendant	01
Total		172

Annexure-11.6(d) New Recruitment of Staff

Sl. No	Name	Department/Section	Designation	Date of Joining
1	Minz Arun Charles	D.Office	LDA	04.12.2012

Annexure-11.6(e) Retirement, Resignation, Death and Voluntary Retirement of Staff during the year

Sl. No	Name	Department/Section	Designation	Date of Retirement/Death
1	Das Gour Ch.	Workshop	Helper	30.04.2012
2	Nayek Jitendra	G.Store	LDA	31.05.2012
3	Kujur Sujit	Library	Lib.Asstt.	16.08.2012
4	Das Manik Ch.	Comp.Centre	Helper	30.09.2012
5	Pan Rabindra Nath	Per.Section	UDA	31.12.2012
6	Khan Monidipa	Medical Unit	Staff Nurse	28.02.2013
7	Dey Narayan Ch.	G.Store	Helper	28.02.2013
8	Chatterjee Santimay	Estate Section	Watchman	31.03.2013

Annexure – 11.7(a) Faculty deputed on QIP (doctoral programme) during this period

None

Annexure–11.7(b) Seminars, summer/winter schools, short term courses attended by faculty members during 2012-13**Department of Biotechnology**

SL. NO	Name	Name of the Programme	Organized by	Date of the programme
1	Dutta D.	Refresher Course on Recent Advances in Fermentation Technology	Jadavpur University, Kolkata	June 15 – July 5, 2010
2	Mukhopadhyay S.S.	International Symposium on Developmental & Complex Disorders & 38th Annual Conference of the Indian Society of human Genetics: Genomics and Community Health	Benaras Hindu University	December 9-11, 2012

Department of Chemistry

SL. NO	Name	Name of the Programme	Organized by	Date of the programme
1	Adhikari U.	Three day Workshop on “Recent Developments in Chemistry”	Department of Chemistry, Visva-Bharati, University	November 29 - December 1, 2012
2	Chakrabarty J.	Frontiers of Sciences (FOS 2012)	Centre for Natural Sciences and Philosophy and the Critical issues Forum, Kolkata	September 03 - 04, 2012
3	Chakrabarty J.	Three day Workshop on “Recent Developments in Chemistry”	Department of Chemistry, Visva-Bharati, University	November 29 - December 1, 2012
4	Sukul D.	Three day Workshop on “Recent Developments in Chemistry”	Department of Chemistry, Visva-Bharati, University	November 29 - December 1, 2012

Department of Civil Engineering

SL. NO	Name	Name of the Programme	Organized by	Date of the programme
1	Datta, A.K.	Workshop on ‘Advanced Functional Materials and Structures (AFMS)’	Dept. of Applied Mechanics, MNNIT Allahabad in collaboration with University of Missouri, Columbia, USA	July 12-14, 2012
2	Datta, A.K.	Short term program on “Exploration, Production and Refining of Petroleum” EPRP-2013	Dept. of Chemical Engineering, NIT Durgapur	January 7-11., 2013
3	Karmakar, S.	International Conference on Safety	IIT Gandhinagar	October 12-13 2012,
4	Karmakar, S.	National seminar on emerging building materials & construction technologies	Building Materials & Technology Promotion Council	July 31– August 01, 2012
5	Karmakar, S.	National Symposium on Sustainable Infrastructure Development	IIT Bhubaneswar,	February 8-9, 2013

SL. NO	Name	Name of the Programme	Organized by	Date of the programme
6	Karmakar, S.	Workshop on Indian Water Management in 21st Century	IIT Bhubaneswar,	February 7, 2013
2	Nanda, R. P.	Int. Conf. on Application of Optimization Technique in Engg.	Business Management Research	September 27-28, 2012
7	Singha Roy D.K.	UKIERI Concrete Congress-Innovations in Concrete Construction	Dr B R Ambedkar N. .I.T, Jajandhar	March 5 – 8, 2013
8	Topdar P.	Workshop on 'Advanced Functional Materials and Structures (AFMS)'	Dept. of Applied Mechanics, MNNIT Allahabad in collaboration with University of Missouri, Columbia, USA	July 12-14, 2012
9	Topdar P.	Short term program on "Exploration, Production and Refining of Petroleum" EPRP-2013	Dept. of Chemical Engineering, NIT Durgapur	January 7-11, 2013

Department of Computer Applications

SL. NO	Name	Name of the Programme	Organized by	Date of the programme
1	Das S.	8 th International Conference on Information Systems Security	IIT, Guahati.	December 15-19, 2012

Department of Electrical Engineering

SL. NO	Name	Name of the Programme	Organized by	Date of the programme
1	Barman J. C.	Smart Grid Technology for Renewal Energy Sources	IIT, Rajasthan	April 23-25, 2012
2	Bhowmik P. S.	Refresher Course on Inner Engineering	Jadavpur University, Kolkata	June 18 – July 7, 2012

Department of Electronics & Communication Engineering

SL. NO	Name	Name of the Programme	Organized by	Date of the programme
1	Kundu S.	Intl conf. on signal processing communication & computing) at HongKong Polytechnique university, 12-15 th Aug 2012	IEEE HongKong	August 12-15, 2012
2	Mandal S. K.	2012 IEEE Indian Antenna Week. Workshop on Advanced Antenna Technology	IEEE AP-MTT Kolkata Chapter in association with UGC Networking Resource Centre in Physical Sciences, University of Calcutta	May 27-31, 2012
3	Mandal S. K.	IEEE AP-MTT Workshop on Microwave Circuits	NSHM Knowledge Campus, Durgapur	September 8 – 9, 2012

Department of Management Studies

SL. NO	Name	Name of the Programme	Organized by	Date of the programme
1	Pal, D.	National Workshop On Psycho Informatics: Model for Measuring Randomized Psychological and Educational Data	Indian Institute of Psychometry, Kolkata in collaboration with Indian Statistical Institute, Kolkata & Indian Academy of Applied Psychology	March 11-12, 2013

Department of Mathematics

SL. NO	Name	Name of the Programme	Organized by	Date of the programme
1	Bagchi S.	Conference in Number Theory	Jadavpur University, Kolkata	December 12-14, 2012
2	Bagchi S.	I S L Combinatorics	HRI, Allahabad	June 1-14, 2012
3	Dey L. K.	Conference in Number Theory	Jadavpur University, Kolkata	December 12-14, 2012
4	Pal A.	International conference on Fluid Mechanics and Graph theory, ICFGD 2012 Christ University, Bangalore.	Mathematics dept., Christ University, Bangalore	August 16-18, 2012
5	Pal A.	2 nd International Conference on Rough Sets, Fuzzy Sets and Soft Computing (ICRFSC13).	Mathematics dept., Tripura University, Tripura	January 17-19, 2013
6	Sarkar (Mondal), S.	2 nd International Conference on Mathematical Sciences And Applications”	Mind Reader Publications in association with the International Journal of Mathematical Sciences And Applications.	December 06, 2012.
7	Sarkar (Mondal), S.	Five-day Short Term Program on Exploration, Production and Refining of Petroleum.	Dept. of Chemical Engineering, NIT, Durgapur.	January 7-11, 2013

Department of Mechanical Engineering

SL. NO	Name	Name of the Programme	Organized by	Date of the programme
1	Mitra R. K.	National Workshop on Nonlinear Waves: Theory and Simulation (NWTS-2013).	Department of Mathematics, NIT Durgapur	January 14-18, 2013
2	Patari A.	Exploration, Production and Refining of Petroleum- 2013	Dept of Chemical Engg, NIT Durgapur	January 7-11 2013
3	Roy S.S.	Workshop on “Design and Analysis of Experiments”	ISI, Kolkata	November 19-23, 2012
4	Roy S.S.	Workshop on “NPTEL- Role of the programme in enhancing engineering education”	CET, IIT, Kharagpur	September 20-21, 2012

Department of Metallurgical & Materials Engineering

SL. NO	Name	Name of the Programme	Organized by	Date of the programme
1.	Bera S.	International Workshop on High Performance Steels	BESU Shibpur	November 21-22, 2012
2.	M M Ghosh	Mechanical Property Characterization	IISc, Bangalore	June 25 – July 14, 2012
3.	M M Ghosh	Scanning Electron Microscopy	IISc, Bangalore	Dec 17-22, 2012
4.	M M Ghosh	Essentials of Nanoscience and Nanotechnology	IIT Roorkee	February 18-22, 2013
5.	M M Ghosh	Finite Element Method Using Matlab	MANIT Bhopal	May 06-10, 2013

Department of physics

SL. NO	Name	Name of the Programme	Organized by	Date of the programme
01	Kumbhakar P.	The XXXIII Annual Meeting of the Electron Microscopy Society of India (EMSI 2012)	IISc., Bangalore, India	July 2-4, 2012
02	Kumbhakar P.	Frontiers of Sciences (FOS 2012)	Centre for Natural Sciences and Philosophy and the Critical issues Forum, Kolkata	September 3-4, 2012
03	Kumbhakar P.	National Conference in “Advances in Lasers and Spectroscopy (ALS 2012)”	Dept. of Physics, ISM Dhanbad	November 1-3, 2012
04	Kumbhakar P.	Winter Workshop on Scanning Electron Microscopy	Dept. of Materials Engg., IISc., Bangalore	December 17 - 22, 2012
05	Kumbhakar P.	100th Indian Science Congress	Calcutta University, Kolkata	January 3-7, 2013
06	Kumbhakar P.	National Seminar on “Advanced Functional Materials (NSAFM-2013)”	Central Mechanical Engineering Research Institute, Durgapur	January 24, 2013
07	Meikap A. K.	Second Workshop for Organizers of INSPIRE Internship Camps	DST, GOI, held at YASHADA, Pune	April 13-14, 2012
08	Sahoo S.	The XX DAE-BRNS High Energy Physics Symposium–2013	Visva-Bharati University, Santiniketan, India	January 13–18, 2013

Annexure – 11.7(c) Training of staff members during 2012-13**Library**

SL. NO.	Name	Name of the Programme	Organized by	Date of the programme
1	Sarkar, Susanta	Workshop on Library Automation and Resource Sharing Network (sponsored by MHRD, Govt. of India), a NMEICT Project (National Mission on Education through ICT)	Bose Institute, Kolkata,	July 19-22, 2012

Annexure– 11.8(a) List of programmes offered**11.8. (a). 1. Under-graduate Programmes:**

The Institute offers the following programmes leading to 4 Year (8 Semester) B.Tech. Degree:

Sl. No.	programme Offered	Degree Offered
1	Biotechnology	B. Tech.
2	Chemical Engineering	B. Tech.
3	Civil Engineering	B. Tech.
4	Computer Science & Engineering	B. Tech.
5	Electrical Engineering	B. Tech.
6	Electronics & Communication Engineering	B. Tech.
7	Information Technology	B. Tech.
8	Mechanical Engineering	B. Tech.
9	Metallurgical & Materials Engineering	B. Tech.

11.8. (a). 2. Post – Graduate Programmes:**M. Tech. programmes:**

Dept. / Specialisation	Year of Starting	Full / Part time	Duration	Sanctioned intake
Biotechnology	2009	Full Time	2 years	20
Chemical Engineering	1968	Full Time	2 years	23
		Part Time (Day)	3 years	
Civil Engineering (Structural Engineering)	1971	Full Time	2 years	23
		Part time (Day)	3 years	
Chemistry (Corrosion Science & Technology)	1996	Full Time	2 years	23
		Part time (Day)	3 years	
Computer Science & Engineering	2004	Full Time	2 years	23
Electrical Engineering (Industrial Electrical System)	1969	Full Time	2 years	23
		Part time (Day)	3 years	
Electronics & Communication Engg (Telecommunication Engg)	2005	Full Time	2 years	23
Electronics & Communication Engg (Microelectronics & VLSI)	2008	Full Time	2 years	23
Environmental & Earth Studies – coordinating dept. (Environmental Science & Technology)	2009	Full Time	2 years	20
Information Technology (Information Security)	2008	Full Time	2 years	23
Mathematics (Operations Research)	1990	Full Time	2 Years	23
		Part time (Day)	3 years	
Mechanical Engineering (Design & Production Engineering)	1966	Full Time	2 years	23
		Part time (Day)	3 years	
Metallurgical Engineering (Industrial Metallurgy)	1966	Full Time	2 years	23
		Part time (Day)	3 years	
Metallurgical Engineering (Materials Engg)	1966	Full Time	2 years	23
		Part time (Day)	3 years	
Physics (Advanced Materials Science & Technology)	2006	Full Time	2 years	23

Other programmes:

Dept. / Programme	Full / Part time	Year of Starting	Duration	Sanctioned intake
Management Studies (MBA)	Full Time	2004	2 Years	92
Computer Applications (MCA)	Full Time	2000	3 Years	92
Physics (M. Sc. in Physics)	Full Time	2009	2 Years	20
Chemistry (M. Sc. in Chemistry)	Full Time	2009	2 Years	20
Mathematics (M. Sc. in Mathematics with Computer Applications)	Full Time	2010	2 Years	20
PhD in engineering, science, humanities & social sciences and management disciplines	Full Time Part Time	2004 1966		

Annexure–11.8(b) Programme-wise enrolment with sex and caste break-up**11.8. (b). 1. Enrolment in B. Tech. programmes, 2012– 2013 (Genderwise):**

Semester	BT	ChE	CE	CSE	ECE	EE	IT	ME	MME	Total
B. Tech. I	94 (19)	67 (15)	80 (09)	102 (16)	108 (23)	107 (16)	95 (15)	168 (03)	79 (10)	900 [#] (126)
B. Tech. III	79 (20)	63 (12)	63 (03)	93 (17)	90 (20)	97 (14)	91 (17)	146 (01)	73 (08)	795 (112)
B. Tech. V	57 (12)	59 (06)	67 (04)	91 (14)	96 (21)	93 (16)	82 (14)	143 (05)	63 (11)	751 (103)
B. Tech. VII	39 (09)	52 (11)	50 (06)	97 (13)	92 (23)	83 (19)	85 (16)	129 (06)	53 (07)	689 (110)
Total	269 (60)	241 (44)	260 (22)	383 (60)	386 (87)	380 (65)	353 (62)	586 (15)	268 (36)	3135 (451)

(Number of female students indicated in paranthesis. The total number is inclusive of the number of girl students)

900 = (Actual admission = 883) + (Readmission = 17) .

883 = (from all India quota = 791) + (from Andaman Nicobar quota = 40) + (foreign students = 52)

Semester	BT	ChE	CE	CSE	ECE	EE	IT	ME	MME	Total
B. Tech. II	92 (19)	62 (15)	82 (09)	100 (16)	105 (23)	103 (16)	93 (15)	164 (03)	76 (10)	877 (126)
B. Tech. IV	73 (20)	61 (12)	56 (03)	93 (17)	89 (20)	92 (14)	91 (17)	148 (01)	73 (08)	776 (112)
B. Tech. VI	58 (12)	59 (06)	67 (04)	93 (14)	96 (21)	93 (16)	82 (14)	142 (05)	63 (11)	753 (103)
B. Tech. VIII	39 (09)	52 (11)	50 (06)	97 (13)	92 (23)	83 (19)	85 (16)	129 (06)	53 (07)	680 (110)
Total	262 (60)	234 (44)	255 (22)	383 (60)	382 (87)	371 (65)	351 (62)	583 (15)	265 (36)	3086 (451)

(Number of female students indicated in paranthesis. The total number is inclusive of the number of girl students)

11.8. (b). 2. Enrolment in B. Tech. programmes, 2012– 2013 (Castewise):

Dept.	B. Tech. I Semester					B. Tech. III Semester					B. Tech. V Semester					B. Tech. VII Semester				
	OP	SC	ST	OBC	TOT	OP	SC	ST	OBC	TOT	OP	SC	ST	OBC	TOT	OP	SC	ST	OBC	TOT
BT	51	11	08	24	94	45	10	04	20	79	29	08	05	15	57	16	10	05	08	39
ChE	35	09	06	17	67	34	09	04	16	63	30	07	06	16	59	32	07	03	10	52
CE	46	12	05	17	80	36	06	04	17	63	36	09	04	18	67	33	06	03	08	50
CSE	53	16	08	25	102	50	14	07	22	93	48	14	06	23	91	68	12	04	13	97
ECE	54	19	08	27	108	46	11	07	26	90	50	14	07	25	96	60	12	06	14	92
EE	53	17	08	29	107	50	13	07	27	97	50	14	05	24	93	52	12	06	13	83
IT	47	16	07	25	95	48	13	06	24	91	40	11	07	24	82	52	12	05	16	85
ME	93	24	12	39	168	80	18	09	39	146	80	16	10	37	143	81	16	10	22	129
MME	38	13	07	21	79	38	12	06	17	73	30	09	05	19	63	27	09	05	12	53
Total	470	137	69	224	900	427	106	54	208	795	394	102	54	201	751	421	96	47	116	689

Dept.	B. Tech. II Semester					B. Tech. IV Semester					B. Tech. VI Semester					B. Tech. VIII Semester				
	OP	SC	ST	OBC	TOT	OP	SC	ST	OBC	TOT	OP	SC	ST	OBC	TOT	OP	SC	ST	OBC	TOT
BT	50	08	07	27	92	42	08	03	20	73	30	08	05	15	58	16	10	05	08	39
ChE	32	07	06	17	62	34	07	04	16	61	30	07	06	16	59	32	07	03	10	52
CE	46	12	06	18	82	35	02	03	16	56	36	09	04	18	67	33	06	03	08	50
CSE	53	16	06	25	100	50	14	07	22	93	50	14	06	23	93	68	12	04	13	97
ECE	52	18	08	27	105	45	11	07	26	89	50	14	07	25	96	60	12	06	14	92
EE	53	16	08	26	103	50	10	05	27	92	50	14	05	24	93	52	12	06	13	83
IT	45	17	07	24	93	49	13	06	23	91	40	11	07	24	82	52	12	05	16	85
ME	91	23	10	40	164	81	18	08	41	148	80	15	10	37	142	81	16	10	22	129
MME	35	13	07	21	76	37	12	06	18	73	30	09	05	19	63	27	09	05	12	53
Total	457	130	65	225	877	423	95	49	208	776	396	101	55	201	753	421	96	47	116	680

11.8. (b). 3. Enrolment in M. Tech. & M. Sc. Programmes, 2012– 2013 (Gender wise)

Semester	BT	CA	ChE	CH	CE	CSE	EE	ECE (TELE)	ECE (VLSI)	EES (EST)	IT	M	ME	MME (IM)	MME (ME)	PH	TOT
M. Tech. I & II	20 (12)	19 (4)	12 (3)	7 (3)	21 (6)	24* (8)	23 (3)	23 (3)	23 (4)	19 \$ (8)	20	10	23 (1)	16 (1)	15(1)	21 (7)	296 (64)
M. Tech. III & IV	16 (10)	19 (5)	13 (4)	3	17 (7)	24* (6)	16 (1)	22 (3)	21 (10)	17 (11)	20 (6)	17 (5)	21	9(2)	9 (2)	13 (3)	257 (75)
M. Tech. V & VI	0	0	0	1	2(1)	0	0	0	0	0	0	5 (1)	4	3	1	0	16 (2)
M.Sc. I & II	0	0	0	19 (6)	0	0	0	0	0	0	0	13 (1)	0	0	0	18 (5)	50 (12)
M.Sc. III & IV	0	0	0	10 (2)	0	0	0	0	0	0	0	5 (2)	0	0	0	9 (1)	24 (5)

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

11.8. (b). 4. Enrolment in M. Tech. & M. Sc. Programmes, 2012– 2013 (Caste wise)

Dept./ Year	I & II					III & IV					V & VI				
	OP	SC	ST	OBC	TOT	OP	SC	ST	OBC	TOT	OP	SC	ST	OBC	TOT
BT	13(3)	2	1	4(2)	20	10	2	0	4	16	0	0	0	0	0
CA	13(3)	1	1	4(1)	19	12	3	0	4	19	0	0	0	0	0
ChE	9(3)	3	0	0	12	10	1	0	2	13	0	0	0	0	0
CH	4	0	0	3	7	1	1	0	1	3	1	0	0	0	1
CE	13(4)	3(1)	1	4(1)	21	11	2	0	4	17	2(1)	0	0	0	2
CSE	16(8)	3	1	4	24*	16	3	1	4	24*	0	0	0	0	0
EE	14(1)	4(1)	1	4(1)	23	10	3	0	3	16	0	0	0	0	0
ECE (TELE)	16(2)	3	0	4(1)	23	15	3	0	4	22	0	0	0	0	0
ECE (VLSI)	14(2)	3(1)	1	5(1)	23	12	4	0	5	21	0	0	0	0	0
EES (EST)	14(7)	2(1)	0	3(1)	19 \$	13	0	0	4	17	0	0	0	0	0
IT	13	4	1	2	20	13	3	0	4	20	0	0	0	0	0
M	6	0	0	4	10	14	2	0	1	17	5(1)	0	0	0	5
ME	14	4(1)	1	4	23	14	3	0	4	21	4	0	0	0	4
MME (IM)	8(1)	4	0	4	16	6	0	0	3	9	3	0	0	0	3
MME (ME)	8(1)	3	0	4	15	6	1	0	2	9	1	0	0	0	1
PH	11(4)	4(1)	0	6(2)	21	13	0	0	0	13	0	0	0	0	0
M. Sc. (CH)	14(7)	0	0	5	19	11	0	0	1	12	0	0	0	0	0
M.Sc. (Math)	10(1)	0	0	3	13	5	0	0	1	6	0	0	0	0	0
M. Sc. (PH)	12(6)	1	0	5(1)	9	6	0	1	2	9	0	0	0	0	0
Total	222	44	8	72	346	198	31	2	53	230	16	0	0	0	16

* 2 No. QIP (Polytechnic) Students; \$ One foreign student

11.8. (b). 5. Enrolment in MCA programmes, 2012– 2013 (Gender wise)

Master of Computer Applications	I & II Semester	III & IV Semester	V & VI Semester
	85 (30)	87 (28)	59 (7)

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

11.8. (b). 6. Enrolment in MCA programmes, 2012– 2013 (Caste wise)

Dept	MCA I & II					MCA III & IV					MCA V & VI				
	OP	SC	ST	OBC	TOT	OP	SC	ST	OBC	TOT	OP	SC	ST	OBC	TOT
MCA	43	14	6	22	85	45	12	6	24	87	31	9	1	18	59

11.8. (b) 7. Enrolment in MBA programmes 2012– 2013 (Gender wise)

Master of Business Administration	I & II Semester	III & IV Semester
	88 (23)	66(23)

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

11.8. (b). 8. Enrolment in MBA programmes, 2012– 2013 (Caste wise)

Dept	MBA I & II					MBA III & IV				
	OP	SC	ST	OBC	TOT	OP	SC	ST	OBC	TOT
MBA	40	14	5	29	88	41	6	4	15	66

11.8 (b). 9. Enrolment of Research Scholars for PhD during 2012-2013 (Full time & Part time):

SL. NO.	Branch of Research Study	Gender Break Up		Caste Break Up			Total
		Male	Female	SC	ST	OBC	
1	Biotechnology	11	7	2	-	4	18
2	Chemical Engineering	8	4	3	-	1	12
3	Chemistry	5	6	1	-	1	11
4	Civil Engineering	13	2	-	-	3	15
5	Computer Applications	2	1	0	0	0	3
6	Computer Science & Engineering	8	5	1	-	4	13
7	Earth & Environmental Studies	2	1	-	-	-	3
8	Electrical Engineering	13	3	1	-	2	16
9	Electronics & Communications Engineering	16	6	3	-	2	22
10	Humanities & Social Sciences	7	4	-	-	-	11
11	Information Technology	5	3	1	-	2	8
12	Management Studies	9	6	-	-	-	15
13	Mathematics	9	4	-	-	2	13
14	Mechanical Engineering	19	2	-	1	1	21
15	Metallurgical & Materials Engineering	4	2	1	-	-	6
16	Physics	7	1	1	-	-	8
Total		138	58	14	1	22	196

Annexure – 11.8 (c) Admission statistics – UG & PG**11.8 (c) 1. The details of admission to the B. Tech. programmes during 2012-2013**

SI No	State	OP		OP PH		OB		OB PH		SC		SC PH		ST		ST PH		FS		TOTAL		ALL TOTAL
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1	Andaman	16	7			7	4			2	2				2							40
2	Andhra Pradesh	54	3			26	2			6	2				7							100
3	Arunachal Pradesh	6				6									6	1						19
4	Assam	4				1				1												
5	Bihar	23	6	4		30	1	2		31	1											100
6	Chandigarh	1																				1
7	Chattisgarh	1																				1
8	Delhi	5	1			1	1			1												9
9	Goa		1																			1
10	Himachal pradesh	1																				1
11	Jammu & kashmir														1							1
12	Jharkhand	6	4			3				1					2							16
13	Madhya Pradesh	2	2												1							5
14	Maharashtra	1																				1
15	Orissa	4	1																			5
16	Rajasthan	14	1			4				5	1				8							33
17	Tamil nadu	2																				2
18	Uttar Pradesh	36	5		1	28	1				8		1									80
19	West Bengal	156	38	5	1	94	12	2		51	9	1		20	8							397
20	Bangladesh																		2	2		4
21	Bhutan																		4	2		6
22	Ghana																		1			1
23	Iran																		1			1
24	Marititus																		12	1		13
25	Mozambique																		2	1		3
26	Namibia																		1			1
27	Nepal																		15			15
28	Tanzania																		2			2
29	UAE																		1			1
30	USA																		1			1
31	Vietnam																		1			1
32	Zambia																		1			1
33	Zimbabwe																		2			2

1.8 (c) 2. The number of candidates admitted to B. Tech. programmes from rural and urban area during 2012-2013

SI No	State	RURAL					URBAN					Overall Total
		OP	OB	SC	ST	Total	OP	OB	SC	ST	Total	
1	Andaman	1	2	2	3	8					32	40
2	Andhra Pradesh	1	3	5	20	29	60	6	2	3	71	100
3	Arunachal Pradesh	1	1	3	5	10					9	19
4	Assam	0	0	0	1	1					5	6
5	Bihar	5	10	15	21	51					51	102
6	Chandigarh										1	1
7	Chattisgarh										1	1
8	Delhi	0	0	1	0	1					8	9
9	Goa										1	1
10	Himachal pradesh										1	1
11	Jammu & kashmir										1	1
12	Jharkhand	0	0	1	1	2					14	16
13	Madhya Pradesh	0	0	0	1	1					4	5
14	Maharashtra										1	1
15	Orissa	0	0	1	0	1					4	5
16	Rajasthan	1	3	3	4	11					22	33
17	Tamil nadu										2	2
18	Uttar Pradesh	4	5	9	11	29					51	80
19	West Bengal	8	12	20	32	72					332	404
20	Bangladesh					1					3	4
21	Bhutan					1					5	6
22	Ghana										1	1
23	Iran										1	1
24	Marititus					2					11	13
25	Mozambique					2					1	3
26	Namibia										1	1
27	Nepal					2					13	15
28	Tanzania					1					1	2
29	UAE										1	1
30	USA										1	1
31	Vietnam										1	1
32	Zambia										1	1
33	Zimbabwe					1					1	1

11.8 (c) 3. The ranks (AIR) obtained by the first and the last candidates admitted to B. Tech. programmes during 2012-2013

SI No	State	OP		OB		SC		ST	
		1ST	LAST	1ST	LAST	1ST	LAST	1ST	LAST
1	Andaman	18010	172224	69450	229144	105688	663804	369601	520573
2	Andhra Pradesh	7430	46436	14996	50067	50568	151586	92818	150110
3	Arunachal Pradesh	8451	17402	19018	33815			100398	161152
4	Assam	7390	11384	18296		49052			
5	Bihar	8748	322618	12109	305034	24644	106418	78208	81260
6	Chandigarh	37768							
7	Chattisgarh	9682							
8	Delhi	5832	41253	20129	51680	86049			
9	Goa	11226							
10	Himachal pradesh	46628							
11	Jammu & kashmir							83454	
12	Jharkhand	8593	44580	15438	29491	74847			
13	Madhya Pradesh	16608	29644					164847	
14	Maharashtra	9702							
15	Orissa	9517	47123						
16	Rajasthan	8865	39765	51026	50690	112445	71001	167243	
17	Tamil nadu	22573	34174						
18	Uttar Pradesh	6719	307383	14609	52413	62225	545791		
19	West Bengal	4928	267805	18235	679261	28113	712196	93656	332330

11.8(c) 4. The number of candidates admitted to B. Tech. programmes from various income groups during 2012-2013

SI No	State	below 6000	Rs.6001 to 12000	Rs.12001 to 18000	Rs.18001 to 24000	Above 24000	TOTAL
1	Andaman					40	40
2	Andhra Pradesh					100	100
3	Arunachal Pradesh					19	19
4	Assam					6	6
5	Bihar					100	100
6	Chandigarh					1	1
7	Chattisgarh					1	1
8	Delhi					9	9
9	Goa					1	1
10	Himachal pradesh					1	1
11	Jammu & kashmir					1	1
12	Jharkhand					16	16
13	Madhya Pradesh					5	5
14	Maharashtra					1	1
15	Orissa					5	5
16	Rajasthan					33	33
17	Tamil nadu					2	2
18	Uttar Pradesh					80	80
19	West Bengal					397	397
20	Bangladesh					4	4
21	Bhutan					6	6
22	Ghana					1	1
23	Iran					1	1
24	Marititus					13	13
25	Mozambique					3	3
26	Namibia					1	1
27	Nepal					15	15
28	Tanzania					2	2
29	UAE					1	1
30	USA					1	1
31	Vietnam					1	1
32	Zambia					1	1
33	Zimbabwe					2	2

11.8 (c) 5. The details of admission to the M. Tech. & M. Sc. programmes during 2012 - 2013

Sl. No.	Name of the Dept.	Specialisations	Total
1	Biotechnology	Biotechnology	20
2	Chemical Engineering	Chemical Engineering	12
3	Chemistry	Corrosion Science & Technology	7
4	Civil Engineering	Structural Engineering	21
5	Computer Application	Software Engineering	19
6	Computer Science & Engg	Computer Science & Technology	24
7	Earth & Environmental Studies (Coordinating Department)	Environmental Science & Technology	19
8	Electrical Engineering	Electrical System	23
9	Electronics & Communication Engineering	Telecommunication Engineering	23
10	Electronics & Communication Engineering	Microelectronics & VLSI	23
11	Information Technology	Information Security	20
12	Mathematics	Operations Research	10
13	Mechanical Engineering	Design & Production Engineering	23
14	Metallurgical & Materials Engineering	Industrial Metallurgy	16
15	Metallurgical & Materials Engineering	Materials Engineering	15
16	Physics	Advanced Materials Science & Technology	21
17	Chemistry	M.Sc	19
18	Mathematics	M.Sc	13
19	Physic	M.Sc	18
	TOTAL		346

Annexure – 11.9(a) Scholarships & Stipends: 2012-2013

The following scholarship/Financial benefits have been awarded in NIT, Durgapur

SL NO	NAME OF THE SCHOLARSHIP	HEAD OF SCHOLARSHIP	Rs.	TOTAL
1	GOVT .OF AP	TUITION & OTHER FEE	35,000	3
2	GOVT.OF MP	TUITION & OTHER FEE	41,917	5
3	GOVT.OF.KERALA	TUITION & OTHER FEE	42.485	1
4	O.N.G.C	TUITION & OTHER FEE	60,000	4
5	N.T.S.E	STIPEND	6,000	1
6	N.H.F.D.C	TUITION & OTHER FEE	86,734	1
7	M.E.C.L	STIPEND	2,400	1
8	N.T.P.C Limited	STIPEND	18,000	2
9	W.B.M.D.F.C B-TECH	TUITION & OTHER FEE	40,000	39
10	W.B.M.D.F.C FOR IST YEAR	TUITION & OTHER FEE	50,000	29
11	W.B.SC(OBC, ST)	STIPEND	18,200	41
12	SRI PARESHNATH MANAB SEBA CHARITABLE TRAST	STIPEND	6,500	1
13	W.B.M.C.M	STIPEND	16,800	4
14	ED-CIL	STIPEND	43,200	46
15	I.C.C.R	STIPEND	13,500	41
16	S.N.RAY	STIPEND	12,000	3
17	I.C.C.R	TUITION & OTHER FEE	13,500	40
18	INDIAN OIL	STIPEND	18,000	9
19	VIVEKSINGH MEMORIEAL	STIPEND	12,000	1
20	S.E.I.F	STIPEND	21,200	1
21	N.C.E.R.T	STIPEND	6,000	3
22	STUDENT GYMKHANA	STIPEND	35,000	1
23	I.O.C.L	STIPEND	18,000	13
24	B.L.C	STIPEND FOR SC		
25	NIT DURGAPUR	TUITION FEE WAIVER	35,000	115
26	NIT DURGAPUR	HALF TUITION FEE WAIVER	17,500	54
27	STUDENTS' AID FUND	STIPEND	24,000	63
28	SCHNEDER ELECTRIC INDIA	STIPEND	22,200	1
29	NITYA GOPAL & HIRAMOTI SAHA MEMORIAL AWARD	AWARD	4,000	1

Annexure – 11.9(b) Awards during 2012-13

Chakraborty, A.K., Dept. of Physics, has received an international travel support (ITS) award (approx. 1 lakh) from the DST, GoI, to attend the 2nd International Conference on Small Sciences (ICSS2012), held in Orlando, Florida, USA during December 16-19, 2012 as Invited Speaker.

Chandra, A., Assistant Professor, ECE Department was awarded Marie Curie Fellowship under South Moravian Program (SoMoPro) for Distinguished Researchers to pursue postdoctoral studies in Brno University of Technology, Brno, Czech Republic.

Kumbhakar, P., Dept. of Physics, has received a *Citation Award* Certificate from Elsevier for publication of a paper in the journal Physica-E. The paper has been cited as *Top 20 Most Cited Articles* in the Period 2007-2012.

Prof. S. Kundu, ECE, has been elevated to Senior Member, IEEE in May 2013.

Sanyal, G Professor, CSE was honoured and achieved the award “Distinguished Academician” by Pentagram Research Centre Pvt. Ltd., Hyderabad in recognition of his outstanding contribution to the scientific community and his life time achievement in academics and research and development.

Sarkar (Mondal), S. Associate Professor, Mathematics, had received “Letter of Appreciation” from the “International Journal of Research in Commerce, IT & Management” for publication of a research paper in 2012.

Annexure–11.10 (a) Vocational training

1	Haldia Petrochemicals LTD	29	Hindustan Petroleum Corporation LTD
2	Durgapur Projects LTD	30	Durgapur Chemicals LTD
3	Damodar valley Corporation	31	Bharat Heavy Electricals LTD
4	Exide	32	HAL
5	Bajaj Energy	33	BPCL
6	Enelek Power	34	Defence R & D Organisation
7	TATA Steel LTD	35	HCL
8	Rifle Factory	36	Defence Metallurgical Research Laboratory
9	Indian Oil Corporation LTD	37	National Highways Authority Of India
10	Board Of Practical Training	38	Oil And Natural Gas Corporation LTD
11	C.M.E.R.I	39	BSNL
12	Rail Vikas Nigam LTD	40	Talentedge
13	Durgapur Steel Plant	41	WBPDCCL
14	Oil India LTD	42	Simplex Infrastructures LTD
15	Delhi Metro rail Corporation LTD	43	Airports Authority of India
16	CEEC	44	Centre For Development Of Advanced Computing
17	Paharpur Cooling Towers LTD	45	Hindustan Copper Limited
18	Rites LTD	46	Ultra Tech Cement Limited
19	Vedanta	47	Indian Institute of Technology (BHU)
20	NTPC	48	MCC PTA India Corp. Private Limited
21	Bridge And Roof Co. (India) LTD	49	Baja Group
22	TATA Hitachi	50	Kolkata Project Implementation Unit
23	Rashtriya Ispat Nigam LTD	51	NSPCL
24	Variable Energy Cyclotron Centre	52	Steel Authority Of India Limited
25	Central Salt & Marine Chemicals Research Institute	53	Alloy Steel Plant
26	South Eastern railway	54	PepsiCo.
27	Inoxapps Mobile Solutions	55	BelZabar Software
28	WBSETCL		

Annexure-11.10(b) Placement statistics during 2012 – 2013

SL. No	COMPANY	NUMBER OF STUDENTS PLACED (BRANCH WISE)												
		B.Tech										MCA	M TECH	MBA
		BT	CHE	CE	CSE	ECE	EE	IT	ME	MME	TOTAL			
1	FACE BOOK	-	-	-	0	0	-	0	-	-	0	-	-	-
2	DIRECT I	-	-	-	1	-	-	0	-	-	1	-	1	-
3	ACC	-	4	-	-	-	1	-	3	-	8	-	-	-
4	GOOGLE	-	-	-	-	-	-	-	-	-	-	0	0	-
5	Tata Motors	-	-	-	-	0	2	-	4	-	6	-	-	-
6	NOVELL	-	-	-	1	1	-	1	-	-	3	1	0	-
7	MN Dastur & Co	-	-	2	-	-	-	-	3	-	5	-	-	-
8	Belzabar Software Design Ind Pvt	-	-	-	1	1	-	1	-	-	3	-	-	-
9	Tata Technologies	-	-	-	-	-	-	-	6	-	6	-	-	-
10	MARUTI SUZUKI	-	-	-	-	-	-	-	10	-	10	-	-	-
11	ITC	-	0	-	-	-	0	-	0	-	0	-	-	-
12	CESC	-	-	1	-	-	0	-	2	-	3	-	-	-
13	MU-SIGMA	1	0	0	2	2	1	0	2	1	9	-	-	-
14	C-DOT	-	-	-	3	3	-	-	-	-	6	-	1	-
15	UNISYS	-	-	-	4	1	-	-	-	-	5	-	-	-
16	ESAB INDIA	-	-	-	-	-	0	-	1	0	1	-	-	-
17	IBM	6	2	0	31	26	9	31	1	5	111	12	21	-
18	FUTURES FIRST	0	2	0	1	0	1	0	0	0	4	-	-	-
19	POLARIS	-	-	-	3	2	-	-	-	-	5	-	-	-
20	METAL JUNCTION	-	-	0	-	0	1	-	2	1	4	-	-	-
21	THERMAX	-	-	-	-	-	-	-	5	-	5	-	-	-
22	TELCON	-	-	-	-	-	-	-	1	-	1	-	-	-
23	CAPGEMINI	5	1	2	2	1	0	3	0	0	14	6	5	-
24	ALSTOM	-	-	-	-	-	-	-	6	-	6	-	-	-
25	ITC INFOTECH	-	-	-	3	1	1	6	1	-	12	-	-	-
26	TCE	-	-	-	-	-	2	-	2	-	4	-	-	-
27	MICROSOFT	-	-	-	5	-	-	4	-	-	9	-	-	-
28	Mahindra & Mahindra	-	-	-	-	-	-	-	2	-	2	-	0	-
29	WIPRO	3	0	1	6	12	1	15	0	2	40	-	-	-
30	ORACLE	0	0	1	8	3	0	3	0	-	15	-	1	-
31	SAMSUNG(SEL)	-	-	-	3	-	-	-	-	-	3	-	0	-
32	MANI GROUP	-	-	5	-	-	-	-	-	-	5	-	-	-
33	AMDOCS	-	-	-	2	1	-	2	-	-	5	2	3	-
34	HERO Motor Corp.	-	-	-	-	-	1	-	4	-	5	-	-	-
35	SAPIENT	-	-	-	5	5	1	1	0	-	12	-	-	-
36	NRI FinTech	-	-	-	0	0	-	3	-	-	3	5	5	-
37	ERICSSON	-	-	-	0	8	-	3	-	-	11	-	-	-
38	JSPL	-	-	2	-	2	1	-	3	1	9	-	-	-
39	WBSEDCL	-	-	-	-	-	9	-	-	-	9	-	-	4
40	SCHNEIDER ELECTRIC	-	-	-	2	-	-	1	3	-	6	-	-	-
41	AKASH	-	-	-	-	-	-	-	-	-	-	-	-	-
42	ABB	-	-	-	-	-	3	-	-	-	3	-	-	-
43	RAYMONDS	-	-	-	-	-	-	-	3	2	5	-	-	-
44	HIL.	-	0	0	-	0	0	-	0	-	0	-	-	-
45	AMAZON	-	-	-	-	-	-	-	-	-	-	0	-	-
46	ZS ASSOCIATES	-	-	-	-	-	-	-	-	-	RA*	-	-	-
47	IGATE	-	-	-	-	-	-	-	-	-	-	-	4	-
48	EXIDE	-	3	-	-	-	1	-	0	1	5	-	-	-
49	PRADAN	1	0	1	0	0	0	1	1	0	4	-	2	2
50	LARSEN & TOUBRO	-	-	-	-	-	-	-	2	-	2	-	0	-

SL. No	COMPANY	NUMBER OF STUDENTS PLACED (BRANCH WISE)											MCA	MTECH	MBA
		B.Tech										TOTAL			
		BT	CHE	CE	CSE	ECE	EE	IT	ME	MME					
51	RANCORE	-	-	-	2	2	-	-	-	-	4	2	-	-	
52	L&T ECC	-	0	5	-	0	2	-	4	0	11	-	0	-	
53	DCPL	-	-	0	-	-	-	-	-	-	-	-	-	-	
54	Technosoft CS Ltd	-	-	-	2	1	-	-	-	-	3	11	2	-	
55	IDEA CELLULAR	-	-	-	-	4	-	-	-	-	4	-	-	-	
56	Reliance Ind	-	4	-	-	-	-	-	-	-	4	-	-	-	
57	TATA POWER	-	-	0	-	-	1	-	1	-	2	-	-	-	
58	SANKALP	-	-	-	-	-	-	-	-	-	-	-	1	-	
59	CHLORIDE PSS LTD	-	-	-	-	-	-	-	-	-	-	-	3	-	
60	LAFARGE	-	1	-	-	-	0	-	1	-	2	-	-	-	
61	Berger Paints India Ltd	-	0	-	-	-	-	-	-	-	0	-	-	-	
62	Honda 2 Wheeler	-	-	-	-	-	-	-	2	-	2	-	-	-	
63	TATA TINPLATE	-	-	-	-	-	-	-	-	1	1	-	-	-	
64	JSW STEEL	-	3	-	-	-	3	-	5	1	12	-	-	-	
65	ADHUNIK	-	-	-	-	-	1	-	2	2	5	-	-	-	
66	CUMMINS	-	-	-	-	-	2	-	-	-	2	-	-	-	
67	ISMT Ltd	-	-	-	-	-	-	-	-	2	2	-	-	-	
68	Magneti Marelli India Pvt Ltd	-	-	-	-	-	-	-	-	-	RA*	-	-	-	
69	KEROSS	-	-	-	-	-	-	1	-	-	1	-	2	-	
70	ESSEL MINING	-	-	-	-	-	1	-	3	-	4	-	-	-	
71	HPCL	-	-	1	-	-	1	-	2	-	4	-	-	-	
72	BPCL	-	1	-	-	-	-	-	2	-	3	-	-	-	
73	LALWANI FERRO ALLOYS	-	-	-	-	-	-	-	2	2	4	-	-	-	
74	TEJAS NETWORKS	-	-	-	1	0	-	4	-	-	5	-	0	-	
75	PDP	-	-	-	-	-	-	-	-	-	RA*	-	-	-	
76	ITD CEMENTATION	-	-	2	-	-	-	-	-	-	2	-	-	-	
77	FBS	-	-	-	-	-	-	-	-	-	-	-	2	2	
78	IFB GLOBAL	-	-	-	-	-	3	-	2	-	5	-	-	-	
79	POLARIS FINTECH	-	-	-	2	-	-	6	-	-	8	-	-	-	
80	ATOS	-	-	-	1	1	1	1	-	-	4	3	-	-	
81	EVEREADY	-	-	-	-	-	-	-	2	-	2	-	-	-	
82	PAHARPUR COOLING TOWERS Ltd	-	-	3	-	-	-	-	-	-	3	-	-	-	
83	AFCONS	-	-	2	-	-	-	-	2	-	4	-	-	-	
84	Federal Bank	-	-	-	-	-	-	-	-	-	-	-	-	5	
85	VEDANTA ALUMINIUM	-	2	-	-	-	-	-	1	2	5	-	-	-	
86	Daimler India Commercial Vehicles Pvt. Ltd	-	-	-	-	-	-	-	2	-	2	-	-	-	
87	NEC HCL	-	-	-	-	-	-	-	-	-	RA*	-	-	-	
88	DRISHTI SOFT	-	-	-	-	-	-	-	-	-	RA*	-	-	-	
89	WBPDC	-	-	3	-	-	-	-	4	-	7	-	-	-	
90	SOBHA Developers	-	-	0	-	-	-	-	-	-	0	-	-	-	
91	VIRAJ PROFILES Ltd.	-	-	-	-	-	-	-	6	4	10	-	-	-	
92	SAMSUNG(R&D)	-	-	-	7	1	-	1	-	-	9	-	-	-	
93	DVC	-	-	0	0	2	3	0	5	-	10	-	-	-	
94	BHUSHAN STEEL	-	-	-	-	-	5	-	3	4	12	-	-	-	
95	VIZAG STEEL	-	-	-	-	-	3	-	5	5	13	-	-	-	
96	MACKEIL ISPAT	-	1	-	-	-	-	-	-	-	1	-	-	-	
97	KIIT	-	-	-	-	-	-	-	-	-	-	-	1	-	
98	UTTAM GALVA	-	5	-	-	-	10	-	2	5	22	-	-	-	
99	IOCL	-	3	-	-	3	-	-	4	-	10	-	-	-	
100	LSI CORP.	-	-	-	-	1	-	-	-	-	1	-	-	-	
101	TATA STEEL	-	-	-	-	-	1	-	5	1	7	-	-	-	
	Total Placed	16	34	27	73	69	63	71	103	37	493	41	52	12	
	Total Jobs Offered (including 2 nd job)	16	34	31	98	84	72	88	135	42	600	42	54	13	

RA* = Result awaited

Summary

Total number of students placed : 598 (B.Tech- 493)

Total number of second job : 111 (B.Tech- 107)

Annexure – 11.11 (a) Non-Plan grant

Non-Plan Grant received in 2012-2013 – Rs. 4600.00 Lakhs.

Annexure – 11.11(b) Plan grant

Plan (General) Grant received in 2012-2013 – Rs. 4050.00 Lakhs

Annexure – 11.11(c) Sources of grants**Till Financial year 2002-03**

Share of Recurring Expenditure were borne by Government of India and Government of West Bengal in 50:50 basis.

From financial year 2003-04 onward

Entire Recurring and Non-Recurring Grants are borne by Govt. of India.

Annexure – 11.11(d) Expenditure position for last three years

(Rupees in Lakhs)

Plan head Expenditure		Non-Plan head Expenditure	
2009-10	4700.08	2009-10	4713.64
2010-11	3584.70	2010-11	4974.79
2011-12	4474.32	2011-12	5171.32

Plan head Expenditure in 2012-13 (unaudited) – Rs 2395.27 Lakhs

Non-Plan head Expenditure in 2012-13 (unaudited) – Rs 6329.71 Lakhs

Annexure 11.12(a) Construction work completed during the year 2012-13 (Plan grant project)

Sl. No.	Name of the Work	Cost of the Work (in Rs.)
1	740 seated Boys' Hostel (Oversight committee)	26,89,94,000 (CPWD, Kolkata)
2	G+8 Faculty Accommodation	22,56,69,789 (NBCC, Kolkata)
3	Construction of Market Complex	8,49,53,953 (NBCC, Kolkata)
4	Capacity expansion of Hostel No.1	4,90,55,238 (DAPL, Kolkata)
5	Capacity expansion of Hostel No.5	4,41,09,689 (DAPL, Kolkata)

Annexure 11.12(b) Construction work in progress during the year 2012-13(Plan grant projects)

Sl. No.	Name of the Work	Cost of the Work (in Rs.)	Status of the Work
1	Installation of transmission line from DVC to NIT including receiving station, substations & up gradation of existing substations	6,94,82,837	99 % Civil & 97 % Electrical works completed. (CPWD, Kolkata & DVC, Durgapur)
2	Construction of Chemistry Laboratory-cum-Biotechnology Department (Oversight committee)	15,09,26,000	85 % Civil & 35 % Electrical works completed. (CPWD, Kolkata)
3	Academic Block (Oversight committee)	43,49,01,000	80 % Civil & 40 % Electrical works completed. (CPWD, Kolkata)
4	VIP Guest House	17,99,67,000	68 % Civil work completed, Electrical work not yet started. (CPWD, Kolkata)
5	Capacity expansion of Hostel No.2	4,90,55,238	95 % Civil & 90 % Electrical works completed. (DAPL, Kolkata)
6	1500 capacity Auditorium	26,78,46,000	Work order issued to L1 Bidder. Physical work not yet started. (CPWD, Kolkata)
7	International Students Hostel	18,00,00,000	45 % Civil work completed, Electrical work not yet started. (NBCC, Kolkata)
8	Renovation of Academic Building	27,11,27,578	35 % Civil & 25 % Electrical works completed. (DAPL, Kolkata & NBCC, Kolkata)
9	Underground Water Reservoir	85,68,495	20 % Civil work completed. Rectification work under progress. (DAPL, Kolkata)
10	Interior decoration of S.N.Ray Memorial Building	9,00,00,000 (Approximate)	Preliminary Estimate not yet scrutinised by CPWD.
11	1250 seated Boys' Hostel	1,29,86,00,000 (Preliminary Estimate)	Modified drawing not yet submitted by CPWD.
12	340 seated Girls' Hostel	23,51,10,000 (Preliminary Estimate)	Modified drawing not yet submitted by CPWD.

Annexure – 11.13 List of Laboratories

Department	Laboratories
Biotechnology	Biochemistry, Microbiology, Bioinformatics, Molecular Biology & rDNA Technology, Immunology, Fermentation Technology, Bioseparation Technology, Bioprocess Engineering, Plant Biotechnology
Chemical Engineering	Heat Transfer Lab, Mass Transfer Lab, Fluid Flow Lab, Mechanical Operations Lab, Environmental and Membrane Technology Lab, Computing Lab, Energy Lab, Adsorption Lab, Chemical & Bio-Chemical Reaction. Engg. Lab, Process Control Lab, Combustion Engineering Lab, Multi-phase Flow Lab, Process Modelling & Simulation Lab, Central Research Laboratory, Process Equipment Design Lab
Chemistry	Junior Chemistry Laboratory, Senior Chemistry Laboratory, Organic and Inorganic Synthetic Research Laboratory, Environmental and Corrosion Laboratory, Molecular Modelling Laboratory
Civil Engineering	PG Structural Engineering Laboratory, Concrete and Structures Laboratory,, Highway Engineering Laboratory, Surveying Laboratory, Environmental Engineering Laboratory, Soil Mechanics Laboratory, Water Resources Engineering Laboratory, Exciter and FFT 180analyser for Earthquake Laboratory
Computer Applications	Advanced Networking Laboratory, Advanced Software Engineering Laboratory, DBMS Laboratory(Shared with Dept. of CSE), Hardware Laboratory (Shared with Dept. of CSE), Internet Laboratory(Shared with Dept. of CSE), Programming Laboratory (Shared with Dept. of CSE).
Computer Science & Engineering	Project Laboratory, Programming Laboratory-I, Programming Laboratory–II, DBMS Laboratory, Faculty Laboratory, Hardware Laboratory, Networking Laboratory, Computer Vision and Graphics Laboratory
Earth and Environmental Studies	Environmental Laboratory, Research Laboratory, Computer Laboratory, Geology Laboratory
Electrical Engineering	Electrical Machines & Drives Laboratory, Power System Laboratories (I & II), Control Systems Laboratory, Power Electronics Laboratory, Microprocessor and Micro-controller Laboratory, Energy Systems Laboratory, Computing laboratory, Circuits and Measurements Laboratory, Printed Circuit Board Laboratory, Power Audit Laboratory, High Voltage Laboratory, Instrumentation Laboratory
Electronics & Communication Engineering	Electronics Circuit Lab, Network Lab, VLSI Lab, Digital Electronics Lab, Communication Lab, Industrial Electronics Lab, Instrumentation Lab, Microprocessor Lab, Computer architecture Lab, Microwave Lab, PCB Lab, Antenna Lab, Advanced Communication Lab (for PG)
Humanities & Social Sciences	Language Laboratory
Information Technology	System and Networking Lab. Digital Electronics & Microprocessor Lab., Communication Engineering Lab., Application Lab., Embedded system Lab., Project and Research Lab.
Mathematics	Computer Laboratory
Mechanical Engineering	CAD /CAM Laboratory, Heat Power Laboratory, Thermal Energy Laboratory, Simulation Laboratory, Control System Laboratory, Robotics & AI Laboratory, Manufacturing Science Laboratory, Fluid Mechanics & Hydraulic Machines Laboratory, Metrology Laboratory, Machine Computation & Computer Graphics Laboratory, Automobile Laboratory
Metallurgical & Materials Engineering	Numerical analysis on metallurgical processes Lab, Cold Modelling lab of B.O.F and Blast furnace, Chemical Analysis Laboratory, Foundry Laboratory, Heat Treatment Laboratory, Mechanical Testing Laboratory, Metallography and Phase Transformation Laboratory, Thermodynamics of Materials Laboratory, Process Metallurgy Laboratory, Electrometallurgy and Corrosion Laboratory, X-ray Diffraction and Thin Film Laboratory., Mineral Beneficiation lab
Physics	Nano Science Laboratory, Materials Science Laboratory, X-ray Diffraction Laboratory, Low Temperature Characterization Laboratory, Laser & Optoelectronics Laboratory, Electronics Laboratory, Carbon Nanotechnology Laboratory
Central Instrumentation Facility	Scanning Electron Microscope with EDS, X-Ray Diffractometer, Nd:YAG Laser Unit, Spectrum Analyzer

Annexure-11.14 Technical Education Quality Improvement Programme (TEQIP)

The Institute successfully participated in the World Bank assisted TEQIP (phase-I) as a lead institution, An Impact Assessment Survey sponsored by NPIU, Noida placed NIT Durgapur at the top among the NITs and eighth among 127 participating institutions in the country.

It has also been participating in TEQIP-II. A large number of equipment worth Rs. 166.51 lakhs has been procured by different departments to support the postgraduate and research programmes. 20 research scholars are pursuing doctoral research with fellowship under TEQIP II. Total expenditure under different activities is Rs. 193 lakhs.

A Rs 5-crore Centre of Excellence on "Advanced Materials", a multi-disciplinary research centre with participation from Departments of Physics and Metallurgical Engineering, has been approved in TEQIP-II. Mentor and performance auditor of NIT Durgapur for TEQIP II already visited the Institute and reported the Institute's performance for TEQIP II quite satisfactory.

Annexure-11.15 Alumni

NIT Durgapur Alumni Association (NITDAA) was formed in 2002 at the behest of the Board of Governors, RECD. Since then, NITDAA has spread its wings all over the world – setting up chapters in USA UK, UAE, Singapore, etc. apart from various cities and towns in the country. The 11th Annual Global Meet of NITDAA was held in the Institute campus on January 13, 2013. It is closely associated with the development of the Institute. It has instituted Prof S.N. Ray Scholarship for eight students per year. It has extended financial assistance to students for internship abroad. In order to have close relationship with the present students, NITDAA has contributed to the students' technical and cultural programmes as well.

Annexure-11.16 Other relevant information

Annexure 11.16 (a): Books authored during 2012-13

Department of Biotechnology

Author	Title of the book	Publisher	Date of Publication
Sar, P., Kazy, S. K., Paul, D., Sarkar, A.	Metal bioremediation by thermophilic bacteria: Mechanism of metal-bacteria interactions and their application in clean up processes (Book Chapter) in Thermophiles in Environmental Biotechnology, (Eds) Satyanarayana, Littlechild and Kawarabayas	Springer ©Springer Science+Business Media Dordrecht	DOI 10.1007/978-94- 007-5899-5_6 (2013)

Department of Chemical Engineering

Author	Title of the book	Publisher	Date of Publication
Bhattacharyya, A., Basu, S., Dutta, S.	Recycling and Reuse of Materials and Their Products (Vol 3): Chapter-11; (Eds): Grohens, Y., Sadasivuni, K. K., Boudenne, A.	Apple Academic Press (CRC Press, Taylor Francis Group)	January, 2013
Chatterjee, S. Dutta, S., Basu, S.	Recycling and Reuse of Materials and Their Products (Vol 3): Chapter-9; (Eds): Grohens, Y., Sadasivuni, K. K., Boudenne, A.		

Department of Computer Applications

Author	Title of the book	Publisher	Date of Publication
Sarkar, A.	Designing, Engineering, and Analyzing Reliable and Efficient Software	IGI Global Publications	February, 2013

Department of Humanities & Social Sciences

Author	Title of the book	Publisher	Date of Publication
Rai, S. K.	Salman Khurshid's Sons of Babur: An attempt to consolidate 'Nationalism' in An Anthology on Indian English Drama	Author Press	2013

Department of Mathematics

Author	Title of the book	Publisher	Date of Publication
Kar, S.	Some Selected Topics on Discrete Mathematics	U.N.Dhar & Sons Publications	July, 2012
Basu, K., Kar, S.	Advances in Computational Optimization and Applications	Narosa Publishing House	December, 2012
Hossain, A., Kar, S.	Recent trends in Operations Research	Narosa Publishing House	March, 2013

Department of Mechanical Engineering

Author	Title of the book	Publisher	Date of Publication
Mullick, A N	Studies of Flow through Air Intakes using Artificial Intelligence (ISBN Number 978-3-659-32278-5)	LAP LAMBERT Academic Publishing	January, 2013
Roy S.S., Pratihari D.K..	Modeling and Analysis of Six-legged Robots	LAP LAMBERT Academic Publishing, Germany	April, 2012

Department of Metallurgical & Materials Engineering

Author	Title of the book	Publisher	Date of Publication
Maity, J.	Joining of aluminium based metal matrix composites (Book Chapter: pp. 329-354) in Engineered Metal Matrix Composites: Forming Methods, Material Properties and Industrial Applications, (Editor) Luca Magagnin	NOVA Science Publishers, Inc., New York, USA	2012

Department of Physics

Author	Title of the book	Publisher	Date of Publication
Chakraborty, S., Kole, A. K., Kumbhakar, P.	A chapter (pp. 169-181) in Advanced Nanomaterials and Nanotechnology	Springer Berlin Heidelberg	January, 2013
Kole, A. K., Kumbhakar, P.	A chapter (pp. 249-259) in Advanced Nanomaterials and Nanotechnology	Springer Berlin Heidelberg	January, 2013

Kumbhakar, P., Matty, A., Sarkar, R., Mitra, A. K.	A chapter (pp. 19-40) in Nanomaterials: Synthesis, Characterization, and Applications (Eds) Haghi, A.K., Zachariah, A.K., Kalariakkal, N.	Apple Academic Press Inc	March, 2013
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Annexure 11.16 (b) i. Reviews of manuscripts for publication in journals during 2012-13

Department of Biotechnology

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Chaudhuri, S.	Food Chemistry	Elsevier	March, 2013
Chaudhuri, S.	Food & Bioprocess Technology	Springer	January, 2013
Das, P.	Chemical Engineering Journal	Elsevier	June, 2012; January 02, 2013
Das, P.	Bioremediation Journal	Taylor & Francis Journal	August, 2012; February, 2013
Das, P.	Separation Science & Technology	Taylor & Francis	December, 2012
Das, P.	Environmental Progress & Sustainable Energy	AICHE Journal	August, 2012
Das, P.	Journal of Environmental Management	Elsvier	July, 2012; September, 2012; December, 2012; January, 2013; March, 2013
Das, P.	Desalination & Water Treatment		December, 2012; February, 2013; March, 2013
Das, P.	Bioresource Technology	Elsvier	June 2012, Aug 2012, Sep 2012, Oct 2012, Dec 2012, Jan 2-13, March 2013
Das, P.	Fuel	Elsvier	September, 2012
Das, P.	Water, Air, Soil Pollution	Springer	December, 2012
Das, P.	The Environmentalist	Springer	June, 2012
Das, P.	Asia Pacific Journal of Chemical Engineering	Wiley	August, 2012
Dutta, D.	Journal of Food Science and Technology	Springer	October, 2012
Dutta, D.	Journal of Food Science and Technology	Springer	August, 2012
Dutta, D.	Bioprocess and Biosystems Engineering	Springer	February, 2012
Roy Barman, S.	Journal of Biopharmaceutics and Biotechnology	American Scientific Publishers	March, 2013

Department of Chemical Engineering

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Dutta, S.	Chemical Engineering Journal	Elsevier	February, 2013
Dutta, S.	Journal of Hazardous Material	Elsevier	November, 2012
Dutta, S.	Desalination and Water Treatment	Taylor and Francis	November, 2012

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Ghanta, K.C.	Desalination and Water Treatment	Taylor & Francis	August 19, 2012
Gupta, P.	Advanced Powder Technology	Elsevier Science	May 10, 2012
Gupta, P.	Journal of Heat & Mass Transfer	Elsevier Science	May 26, 2012
Gupta, P.	Energy & Fuels	American Chemical Society	June 29, 2012
Gupta, P.	Journal of Applied & Analytical Pyrolysis	Elsevier Science	June 30, 2012
Gupta, P.	Fuel	Elsevier Science	July 17, 2012
Gupta, P.	Combustion Science & Technogy	Taylor & Francis	July 25, 2012
Gupta, P.	Energy & Fuels	American Chemical Society	October 07, 2012
Gupta, P.	Chemical Engineering Communications	Taylor & Francis	November 24, 2012
Gupta, P.	International Journal of Hydrogen Energy	Elsevier Science	December 22, 2012
Gupta, P.	Energy & Fuels	American Chemical Society	January 21, 2013
Gupta, P.	Journal of Heat & Mass Transfer	Elsevier Science	February 04, 2013
Kumar, T.	Journal of Canadian Petroleum Technology	SPE, USA	December 09, 2012
Narayanan, C. M.	Energy Conversion and Management	Elsevier	September, 2012; February, 2013
Narayanan, C M	Heat and Mass Transfer	Springer	October, 2012; January, 2013
Pal, P.	Environment, Development & Sustainability	Springer	June 23, 2012
Pal, P.	Polymer Bulletin	Springer	May 3, 2012
Pal, P.	Biotechnology bioprocess Engg	Springer	May 25, 2012
Pal, P.	Journal of Membrane Science	Elsevier Sci	July 22, 2012
Pal, P.	Desalination	Elsevier Sci	July 24, 2012
Pal, P.	Water Env. Res.	Water Env. Federation	September 8, 2012
Pal, P.	Journal of Membrane Science	Elsevier Sci	September 30, 2012
Pal, P.	Bioresource Technology	Elsevier Sc.	April 17, 2012
Pal, P.	International J. of Ind. Chemistry	Springer	October 11, 2012
Pal, P.	Water Research	Elsevier	October 15, 2012
Pal, P.	Journal of Membrane Sc.	Elsevier	November 30, 2012
Pal, P.	Journal of Cleaner Production	Elsevier	December 02, 2012
Pal, P.	Industrial Engg. Chemistry Research	ACS	November 30, 2012
Pal, P.	Applied Energy	Elsevier	January 03, 2013
Pal, P.	Chemical Engineering Science	Elsevier	December 17, 2012
Pal, P.	Journal of Cleaner Production	Elsevier	January 01, 2013
Pal, P.	Chemical Engg. & Processing	Elsevier	March 09, 2013

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Pal, P.	Journal of Membrane Science	Elsevier Sc.	March 24, 2013
Pal, P.	Journal of Chemical Technology Biotechnology	Wiley	May 27, 2012

Department of Chemistry

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Panja, S. S.	New Journal of Chemistry	Royal Society of Chemistry	July, 2012

Department of Computer Applications

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Changder, S.	Journal of Systems and Software	JSS-D-11-00707R2	May, 2012

Department of Earth and Environmental Studies

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Adhikari, K.	Environmental Monitoring and Assessment	Springer	March, 2013
Adhikari, K.	Journal of Earth Science, University of China,	Springer	November, 2012
Adhikari, K.	Applied Water Science	Springer	November, 2012

Department of Electrical Engineering

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Ghoshal, S.P.	IJEPES	Elsevier	June 12, 2012 August 25, 2012 July 27, 2012 May 30, 2012
Ghoshal, S.P.	Journal of Institution of Engineers(I)	JIE(I)	February, 2013
Banerjee, S	Institute of Engineers (India)	Springer	September,2012
Banerjee, S	Asian Journal of Control	Wiley	January, 2013
Banerjee, S	Asian Journal of Control	Wiley	March, 2013
Mahato, S. N.	Electric Power Components and Systems	Taylor & Francis	December, 2012
Bhowmik, P. S.	Journal of Electric Power Components and Systems	Taylor & Francis	July 19, 2012
Bhowmik, P. S.	Journal of Electrical Engineering	Springer	March 14, 2013
Bhowmik, P. S.	International Journal of Electrical Power & Energy Systems	Elsevier	March 14, 2013

Department of Electronics and Communication Engineering

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Chandra, A.	International Journal of Electronics & Communication (AEU)	Elsevier	May 24, 2012
Chandra, A.	Optics and Lasers in Engineering	Elsevier	February 16, 2013
Chandra, A.	Computers & Electrical Engineering	Elsevier	December 04, 2012
Chandra, A.	International Journal of Communication Systems	Wiley	November 06, 2012 December 21, 2012 January 15, 2013 January 30, 2013
Chandra, A.	IEEE Potentials	IEEE	April 25, 2012 June 26, 2012 September 04, 2012
Chandra, A.	International Journal of Electronics	Taylor & Francis	February 04, 2013
Chandra, A.	IET Communications	IET	June 20, 2012 December 17, 2012 February 11, 2013
Kundu, S.	International Journal on Communication Systems (IJCS)	Wiley	March, 2013
Kundu, S.	Computer Communication	Elsevier	February, 2013
Kundu, S.	IEEE Sensor Journal	IEEE	February, 2013
Kundu, S.	IEEE Wireless Communication Magazine	IEEE	December, 2012
Kundu, S.	International Journal of Distributed Sensor Networks, Hindawi Publishers Review: Nov-Dec 12	Hindawi	December, 2012
Mahanti, G.K.	Progress in Electromagnetics Research	EM Academy	September, 2012
Mahanti, G.K.	IEEE Antennas and Wireless Propagation Letter	IEEE	July, 2012

Department of Humanities & Social Sciences

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Sengupta, P. P	IRJPSCCLC	www.interestjournals.org	August, 2012
Sengupta, P. P	IRJJMC	www.interestjournals.org	August 31, 2012
Sengupta, P. P	International Journal of Management and Business Studies	www.internationaljournal.org	
Sengupta, P. P	Education Research		September 10, 2012
Sengupta, P. P	Universal Journal of Marketing and Business Research		

Department of Management Studies

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Banerjee, N.	Journal of Business and Management	Chapman University's (USA) Argyros School of Business and Economics	2012
De, A.	Economic Change and Restructuring	Springer	March 20, 2013

Department of Mathematics

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Dey, L. K.	Journal of Nonlinear Evolution Equations and Applications (JNEEA)	ISSN 2161-3680	September, 2012
Pal, A.	Mathematical Review	American Mathematical Society	May, 2012; August, 2012; November, 2012
Pal, A.	Journal of Applied Mathematics and computing	Elsevier	June, 2012; September, 2012; January, 2013

Department of Mechanical Engineering

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Mullick, A N	Science Journal of Mathematics & Statistics	Springer	May, 2012
Roy S.S.	Robotica	Cambridge University Press	October, 2012

Department of Metallurgical & Materials Engineering

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Ghosh, K.S.	Progress in Natural Science – Materials International		
Ghosh, K.S.	Journal of Alloys and Compounds		
Ghosh, K.S.	Journal of Engineering Manufacture		
Ghosh, K.S.	Applied Surface Science		
Ghosh, K.S.	Journal of Surface & Coating Technology		
Maity, J.	Metallurgical and Materials Transactions A	ASM international, USA	May 10, 2012
Maity, J.	Steel Research International	WILEY-VCH Verlag, Germany	June 25, 2012
Maity, J.	Journal of Materials Engineering and Performance	ASM international, USA	August 12, 2012
Maity, J.	Metallurgical and Materials Transactions A	ASM international, USA	October 15, 2012
Maity, J.	Acta Metallurgica Sinica (English Letters)	Elsevier	November 04, 2012
Maity, J.	Science and Engineering of Composite Materials	De Gruyter Publisher, Germany	November 09, 2012
Maity, J.	Encyclopedia Of Iron, Steel, And Their Alloys	Taylor and Francis, New York	December 10, 2012
Maity, J.	Metallurgical and Materials Transactions A	ASM international, USA	December 16, 2012
Maity, J.	Journal of Alloys and Compounds	Elsevier	January 13, 2013
Maity, J.	Journal of Alloys and Compounds	Elsevier	January 31, 2013
Maity, J.	Journal of Materials Engineering and Performance	ASM international, USA	February 19, 2013
Maity, J.	Steel Research International	WILEY-VCHVerlag, Germany	February 24, 2013
Maity, J.	Journal of Materials Engineering and Performance	ASM international, USA	February 28, 2013
Maity, J.	Metallurgical and Materials Transactions A	ASM international, USA	March 25, 2013
Maity, J.	Journal of Materials Engineering and Performance	ASM international, USA	March 30, 2013
Bera, S.	Bulletin of Materials Science	Springer	September 09, 2012
Bera, S.	Metallurgical and Materials Transactions A	ASM International	October 31, 2012

Department of Physics

Reviewer	Name of the Journal	Publisher	Date (of Final Review)
Chakraborty, A. K.	Composites: Part B	Elsevier	December, 2012
Chakraborty, A. K.	Journal of Nanoparticle Research	Springer	December, 2012
Chakraborty, A.K.	Journal of Materials Chemistry	Royal Society of Chemistry	July, 2012
Kumbhakar, P.	ISRN Nanomaterials	Hindwai	June, 2012
Kumbhakar, P.	ISRN Nanomaterials	Hindwai	July, 2012
Kumbhakar, P.	Optics Letters	OSA (USA)	February, 2013
Kumbhakar, P.	Physica Scripta	IOP	April, 2013
Kumbhakar, P.	Journal of Alloys and Compounds	Elsevier	April, 2013
Kumbhakar, P.	Journal of Alloys and Compounds	Elsevier	April, 2012
Kumbhakar, P.	Journal of Alloys and Compounds	Elsevier	May, 2012
Kumbhakar, P.	Journal of Alloys and Compounds	Elsevier	August, 2012
Kumbhakar, P.	Journal of Alloys and Compounds	Elsevier	November, 2012
Kumbhakar, P.	Journal of Alloys and Compounds	Elsevier	December, 2012
Kumbhakar, P.	Colloids and Surfaces B: Biointerfaces	Elsevier	September, 2012
Kumbhakar, P.	Colloids and Surfaces B: Biointerfaces	Elsevier	December, 2012
Kumbhakar, P.	Optics Express	OSA (USA)	April, 2012
Meikap, A. K.	Polymer Engineering & Science	John Wiley & Sons	January, 2013
Meikap, A. K.	RSC Advances	Royal Society of Chemistry	February, 2013
Meikap, A. K.	Materials Chemistry and Physics	Elsevier	February, 2013
Sahoo, S.	Indian Journal of Physics	Springer	July, 2012

Annexure 11.16 (b).ii: Reviews of books during 2012-13**Department of Civil Engineering**

Reviewer	Name and author of the book	Publisher	Date
Datta, A.K.	Advanced Mechanics of Solids (third edition) by L. S. Srinath	Tata-McGraw Hill	December, 2012

Department of Electrical Engineering

Reviewer	Name and author of the book	Publisher	Date
Mahato, S. N.	Electric Machines	Tata McGraw Hill	November, 2012

Department of Information Technology

Reviewer	Name and author of the book	Publisher	Date
Howlader, J.	Cryptography and Network Security 2 nd Edition: Behrouz A. Forouzan, Debdeep Mukhopadhyay	McGraw Hill	December, 2012

Department of Management Studies

Reviewer	Name and author of the book	Publisher	Date
De, A.	Cost Accounting, 14th Edition	Pearson Education (International Edition)	September, 2012

Department of Mathematics

Reviewer	Name and author of the book	Publisher	Date
Dey L. K.	Engineering Mathematics	Cengage Learning	April, 2012

Department of Mechanical Engineering

Reviewer	Name and author of the book	Publisher	Date
Banerjee Nilotpal	Engineering Drawing,	Tata-McGraw Hill	August 28, 2012
Roy S.S.	Introduction to Robotics, S.K.Saha	Tata-McGraw Hill	March, 2013

Annexure 11.16 (c). Participation in National Committees/ visits during 2012-13**Department of Biotechnology**

Name of the faculty	Name of the committee	Place of visit	Date
Chattopadhyay S.	Programme Monitoring Committee, DBT, Govt. of India	DBT, New Delhi	2012
Chattopadhyay S.	Programme Monitoring Committee, DST, Govt. of India	DST, New Delhi	2012
Chattopadhyay S.	Programme Monitoring Committee, Tea Board, Govt. of India	Tea Board, Kolkata	2012
Chattopadhyay S.	Member of the Sectional Committee, Indian National Science Academy (INSA), new Delhi	INSA, New Delhi	2012

Department of Chemical Engineering

Name of the faculty	Name of the committee	Place of visit	Date
Dutta S.	Expert in connection with the inspection of a college affiliated to West Bengal University of Technology	Calcutta Institute of Technology	May 13, 2012
Gupta P.	Eastern Regional Committee of AICTE	Kolkata	March 03, 2013
Gupta P.	Advisory Committee of SPFU, West Bengal	Kolkata	December 12, 2012
Pal P.	Ministry of Defence, GOI	Kharagpur	February 15, 2013

Department of Electrical Engineering

Name of the faculty	Name of the committee	Place of visit	Date
Roy N.K.	Project review Committee DSIR, Govt of India	M/S Sonodyne Technologies Pvt Ltd, Kolkata	June 2012

Department of Management Studies

Name of the faculty	Name of the committee	Place of visit	Date
Dutta A.	Committee appointed by AICTE to suggest measures to redesign the programme of Finishing School throughout the country.	AICTE Head Quarters, New Delhi	April 30, 2012
Dutta A.	Scrutiny Committee appointed by AICTE to scrutinize the applications received for registration of Institute and SKPs under NVEQF scheme of the council.	AICTE Head Quarters, New Delhi	December 7-8, 2012
Dutta A.	Sectoral Committee appointed by AICTE to verify infrastructure and other required facilities or registration of Institute and SKPs under NVEQE	AICTE Head Quarters, New Delhi	December 11-12 & 17, 2012

Department of Mechanical Engineering

Name of the faculty	Name of the committee	Place of visit	Date
Basak I.	NBA visiting team for accreditation	JNTUA College of Engineering, Anantapur, AP	October 12-14, 2012

Annexure 11.16 (d): Invited Examiners/ Paper-setters/ Board of Studies during 2012-13**Department of Biotechnology**

Name of the faculty	Name of the examination	University/Institute	Date
Dutta D.	Ph. D. examiner of thesis titled " <i>In vitro</i> response of animal and microbial cells to antimicrobial peptides"	Rashtrasant Tukadoji Maharaj Nagpur University	July 2012
Chaudhuri S.	M.Sc. Microbiology	Vidyasagar University	November 2012
Chattopadhyay S.	CSIR-UGC JRF Exam	CCMB, Hyderabad	2012
Mukhopadhyay S.S.	M.Sc final year practical for Genetics	Burdwan University	May 2012

Department of Chemical Engineering

Name of the faculty	Name of the examination	University/Institute	Date
Gupta P.	External Examiner for M. Tech. Thesis & Viva voce	Department of Chemical Engg, IIT Kharagpur	May 07, 2012
Gupta P.	External Expert of BOS	Department of Chemical Engg, BIT Mesra	December 06, 2012
Kumar, T.	Ph. D. examiner of thesis titled "Development of improved process for transesterification of vegetable oil"	Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, (Punjab), India	December 04, 2012
Kumar, T.	Paper Setter B. Tech	Jawaharlal Nehru Technological University Kakinada, A.P., India	March, 2013
Pal P.	Ph.D. thesis	NIT Warangal	February, 2013
Mandal M.K.	Ph.D. thesis	CSJM University, Kanpur	January, 2013
Narayanan C.M.	AMIE (Paper Setter – 04 subjects)	The Institution of Engineers (I)	February, 2013

Department of Chemistry

Name of the faculty	Name of the examination	University/Institute	Date
Chakrabarty J.	Integrated M.Sc. Practical	Visva Bharati University	April, 2012
Panja S. S.	Question moderator	Visva Bharati University	November, 2012
Saha R.N.	Chemistry Practical Examination, Inorganic General (P-CGP-105)	Burdwan University	February 19, 22 & 25, 2013
Saha R.N.	M.Sc. practical examination (Sem I and Sem II) in Conservation Biology	Durgapur Government College under Burdwan University	July 27, 2012 & February 14, 2013
Saha R.N.	M.Sc. practical examination in Environmental Science	Visva Bharati University	December 13, 2012

Department of Civil Engineering

Name of the faculty	Name of the examination	University/Institute	Date
Datta A.K.	Paper Setter and Examiner of Solid Mechanics for Winter Session	Indian Institute of Welding	December 2012

Department of Electrical Engineering

Name of the faculty	Name of the examination	University/Institute	Date
Banerjee S.	M.Tech Viva-voce and Thesis evaluation	IIT Kharagpur	May 2012
Banerjee S.	Assessment of Progress of PhD work	ISM Dhanbad	October10,2012
Banerjee S.	M.Tech Thesis Examination	CMERI Durgapur	June 2012
Banerjee S.	PG Council Meeting	Dr.B.C.Roy Engg.	February14, 2013
Banerjee S.	Paper setter, AMIE	Institute of Engineers(I)	August 2012
Bhowmik P. S.	Examiners & Paper Setters (Applied Electronics & Instrumentation)	College of Agricultural Engineering & Post Harvest Technology (Central Agricultural University) Gangtok, Sikkim	May 28, 2012
Ghoshal S.P.	AMIE(I)	IE(I)	August 2012
Roy N. K.	Member of Academic Committee, GKCIET, Malda	GKCIET, Malda	June 2012

Department of Electronics and Communication Engineering

Name of the faculty	Name of the examination	University/Institute	Date
Chandra, A.	External Examiner for Master of Engineering (ME) Thesis	Jadavpur University, Kolkata	June 04, 2012

Department of Humanities & Social Sciences

Name of the faculty	Name of the examination	University/Institute	Date
Sengupta, P. P.		Visva-Bharati Board of Studies	
Sengupta, P. P.		West Bengal Council of Technical Education	

Department of Information Technology

Name of the faculty	Name of the examination	University/Institute	Date
Mitra D.	External Expert in M.Tech Project Viva Voce	PDSIT, Bengal Engineering & Science University, Shibpur	May, 2012
Mitra D.	Paper setter in B.Tech 3 rd Semester Examination	Mizoram University	September, 2012

Department of Mathematics

Name of the faculty	Name of the examination	University/Institute	Date
Bagchi S.	B. Sc. 4 th Semester	North Bengal University, W.B.	November, 2012
Dey L. K.	B. Sc. 4 th Semester	North Bengal University, W.B.	November, 2012

Department of Metallurgical & Materials Engineering

Name of the faculty	Name of the examination	University/Institute	Date
Mondal M.K	Indian Institute of Metals Asso-Caiate ship exam	IIM	June & December 2012
Pramanik S.	Indian Institute of Metals Asso-Caiate ship exam	IIM	June & December 2012
Ghosh K.S.	PhD thesis	Osmania University, Hyderabad	2012
Ghosh K.S.	PhD thesis	Jawaharlal Nehru Technological University (JNTU), University, Hyderabad	February, 2013

Department of Physics.

Name of the faculty	Name of the examination	University/Institute	Date
Chakraborty, A.K.	External Paper Setter, M. Sc. exam. in Physics (four papers)	ISERC, Visvabharati, Shantiniketan	November 10, 2012
Chakraborty, A.K.	External Paper Setter, M. Sc. exam. in Physics (two papers)	ISERC, Visvabharati, Shantiniketan	April 8, 2012
Chakraborty, A.K.	External Paper Setter, M. Sc. exam. in Physics (one paper)	Assam University, Silchar	October 10, 2012
Chakraborty, A.K.	External expert for evaluating the synopsis of a Ph.D. thesis	Assam University, Silchar	September 10, 2012
Kumbhakar, P.	Member of the Board of Moderators, M.Sc. 2 nd & 4th Sem. Examination 2012 in Physics	Burdwan University, Burdwan	May 25, 2012
Kumbhakar, P.	External expert for the appointment of Lecturer of Physics	Bidhan Chandra Institution, C V Raman Avenue, Durgapur-713205	June 24, 2012
Kumbhakar, P.	Member of the Board of Examiners, M.Sc. 4th Sem. Physics Practical Exam. 2012, (Spl., Laser Physics)	Burdwan University, Burdwan	July 12, 2012
Kumbhakar, P.	External Examiner in Physics, Term Paper for the Ph.D. course work 2011-2012 Examination	Burdwan University, Burdwan	July 16, 2012
Meikap A. K.	Examiner of Ph.D Thesis	University of Burdwan, Burdwan	August 2012
Meikap A. K.	Paper setter for M.Sc I-Sem in Physics Examination	University of Burdwan, Burdwan	January 2013
Meikap A. K.	Paper setter and Examiner for IIM Examination in Physics	Indian Institute of Metals, Kolkata	February 2013
Sahoo S.	Paper setter for 1 st Sem. B. Tech.	Veera Surendra Sai University of Technology, Burla, Orissa	October 2012
Sahoo S.	Paper setter for 2 nd Sem. B. Tech.	Veera Surendra Sai University of Technology, Burla, Orissa	March 2013

Annexure 11.16 (e): Invited experts in selection committee during 2012-13**Department of Chemical Engineering**

Name of the faculty	Discipline	University/Institute	Date
Ghanta K.C.	Selection of Technical Staff	CMERI	September 21, 2012
Gupta P.	Faculty Selection committee, Chemical Engg	NIT Surathkal	January 12, 2013
Halder G. N.	Selection of Candidate for MBA Program	NIT Durgapur	May 14, 2013
Mandal M. K.	Selection of Candidate for MBA Program	NIT Durgapur	May 14, 2013
Pal P.	Chemical Engg.	CMERI	September 21, 2012

Department of Electrical Engineering

Name of the faculty	Discipline	University/Institute	Date
Banerjee S.	Selection of Faculty in Electrical Engineering	BUIE, Bankura	July 10, 2012
Banerjee S.	SRF selection	CMERI Durgapur	July 16, 2012
Roy N.K.	Selection of Faculty in Electrical Engineering	National Power Training Institute , Durgapur	June 2012
Roy N.K .	Selection of Faculty in Electrical and Electronics	Sikkim Manipal Institute of Technology, Sikkim	July 2012

Department of Humanities & Social Sciences

Name of the faculty	Discipline	University/Institute	Date
Sengupta, P P.	Member, Expert Committee	WBUT	

Department of Mathematics

Name of the faculty	Discipline	University/Institute	Date
Basu K.	Selection of faculty in Mathematics	B.C.Roy Engineering college,Durgapur N.P.T.I. Durgapur	June 2012 December 2012

Department of Mechanical Engineering

Name of the faculty	Discipline	University/Institute	Date
Banerjee N.	Selection of Faculty in Mechanical Engineering	Institute of Engineering and Industrial Technology, Malandhighi, Durgapur	2012
Basak I.	Admission to PhD (Engg) in AcSIR-CSIR	CMERI- Durgapur	June 26, 2012
Basak I.	Selection of Faculty	NSHM- Durgapur	July 07, 2012
Basak I.	Selection of Junior Research Fellow	CMERI- Durgapur	July 16, 2012
Basak I.	Selection of Project Assistant	CMERI- Durgapur	April 24, 2012
Basak I.	Selection of Technical Officer	CMERI- Durgapur	October 12, 2012

Annexure 11.16 (f): Invited lectures during 2012-13**Department of Biotechnology**

Name of the faculty	Title of the lecture	Programme	Place	Date
Mukhopadhyay S.S.	Engineering of Life	UGC-Refresher Course on "Analytical Instruments: Techniques and their Applications"	Jadavpur Universtiy	March 16, 2013

Department of Chemical Engineering

Name of the faculty	Title of the lecture	Programme	Place	Date
Kumar, T.	Energy Security of India – Role of Fossil and Renewable Energy	Presented as plenary lecture at the CHEMCON-2012, International Conference	Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, (Punjab), India	December 27-30, 2012
Kumar, T.	Fundamentals of Reservoir Engineering	Presented as key note address: Reservoir Engineering-Retrospect and prospect at the Workshop	Jawaharlal Nehru Technological University Kakinada, A.P., India	March 15-16, 2013

Department of Chemistry

Name of the faculty	Title of the lecture	Programme	Place	Date
Saha R.N.	Wastewater treatment	UGC-Sponsored National Seminar entitled "Conservation of Blue Carbon Sink: An approach towards Safe Environment"	Dept. of Environmental Science, Netaji mahavidyalaya, Hooghly, WB	April 12, 2012
Saha R.N.	Industrial Symbiosys for Waste management	National Seminar on Recent Advancement in Environmental management	Durgapur Institute of Management & Science	February 27, 2013

Department of Civil Engineering

Name of the faculty	Title of the lecture	Programme	Place	Date
Datta A.K.	i) Present Research Trend in Civil Engineering ii) Earthquake Resistant Design of Structures	TEQIP- Phase II Lecture Series for Faculty Members at Birbhum Institute of Engineering and Technology	Siuri, Birbhum, West Bengal	May 11, 2012
Topdar P.	An Introduction to Finite Element Analysis	Invited Lecture for Faculty Members at Birbhum Institute of Engineering and Technology	Siuri, Birbhum, West Bengal	May 11, 2012

Department of Electrical Engineering

Name of the faculty	Title of the lecture	Programme	Place	Date
Ghoshal S.P.	Evolutionary optimization applied to some power System problems	Emerging trends in Science, Engineering and Technology	B.U.I.E Bankura	February 8-9, 2013

Department of Electronics & Communication Engineering

Name of the faculty	Title of the lecture	Programme	Place	Date
Chandra A.	Green wireless communication	Guest Lecture at Emerging Topics on Communication Systems (IEEE ETCOMS)	Jadavpur University (JU), Kolkata	February 02, 2013
Chandra A.	Green wireless communication with relays	Keynote Lecture in International Conference on Advances in Mobile Network, Communication and its Applications (IEEE MNCApps)	Bangalore	August 01, 2012
Chandra A.	Modelling wireless communication channels	Two Day National Workshop on Recent Trends in Communication Systems (NWRTCs)	Birbhum Institute of Engineering & Technology (BIET), Suri	August 11-12, 2012
Chandra A.	MATLAB and SIMULINK for electrical/electronics engineers	Two day training program from Micro-Pro	Sikkim Manipal Institute of Technology (SMIT), Sikkim	May 21-22, 2012
Chandra A.	Green wireless communication	Guest Lecture at Recent Trends in Microwave and Wireless Communication Systems (RTMWCS)	Bengal College of Engineering & Technology (BCET), Durgapur	September 01, 2012
Kundu S.	Cognitive Radio Networks with Dynamic Spectrum Access	TEQIP sponsored seminar on " Mobile Computing and Network Communication	Bankura Unnayani Instt of Engg, Bankura, West Bengal	March 24, 2013
Kundu S.	Cognitive Radio Networks		Bengal College of Engg & technology , Durgapur.	September 01, 2012
Majumder A.	Brain MRI Segmentation for Tumor Detection	TEQIP II sponsored seminar on Image Processing and Pattern Recognition.	Bankura Unnayani Instt of Engg, Bankura, West Bengal	February 8-9, 2013

Department of Humanities & Social Sciences

Name of the faculty	Title of the lecture	Programme	Place	Date
Banerjee J.	Professional Communication	Orientation Programme for TGT Teachers of Jawahar Navodaya Vidyalaya from the States of Bihar, Jharkhand and West Bengal	Jawahar Navodaya Vidyalaya, Durgapur	May 2012
Modak A.	Communication in the English Language in the Indian Context	Orientation Programme for TGT Teachers of Jawahar Navodaya Vidyalaya from the States of Bihar, Jharkhand and West Bengal	Jawahar Navodaya Vidyalaya, Durgapur	May 09, 2012
Rai S. K.	Methods of Speaking through Audio-Visual	Orientation Programme for TGT Teachers of Jawahar Navodaya Vidyalaya,	Jawahar Navodaya Vidyalaya,	May 2012

Name of the faculty	Title of the lecture	Programme	Place	Date
		Vidyalaya from the States of Bihar, Jharkhand and West Bengal		

Department of Information Technology

Name of the faculty	Title of the lecture	Programme	Place	Date
Nandi D.	Ultrasound image via super-resolution and speckle reduction	Emerging Trends in Science, Engineering and Technology	Bankura Unnayani Institute of Engineering, Bankura	February 8, 2013

Department of Management Studies

Name of the faculty	Title of the lecture	Programme	Place	Date
Bandyopadhyay G.	Non-Linear Programming	For MCOM Students	GourBanga University, Malda	September 25-28, 2012
Bandyopadhyay G.	Research Methodology	PhD Course Work	Vidyasagar University	December 10-11, 2012
Bandyopadhyay G.	Application of SPSS	Faculty Development programme	Vidyasagar University	February 19-20, 2013
Bandyopadhyay G.	Non-Linearity&its application	National Seminar jointly organised by Applied Mathematics and Economics Department of Calcutta University	Economics Department CU	March 13-14, 2013
Bandyopadhyay G.	Research Methodology	PhD course work	Alipore Campus, Calcutta University	September 8 &15, 2012
De A.	WorkingCapital Management and Money market Orientation	Training programme for Management Trainee of Bokaro Power Supply Co. Ltd.	National Power Training Institute (NPTI), Eastern Region (Ministry of Power, Govt. of India), Durgapur	September 10, 2012

Department of Mathematics

Name of the faculty	Title of the lecture	Programme	Place	Date
Pal A.	Application of Transformation	Guest Lecturer at Caledonian college of engineering, Oman, Muscat	Oman, Muscat	November 30-December 5, 2012
Kar S.	Fuzzy Multi-criteria Decision Making	Application of Fuzzy Mathematics and other Relevant Fields	Jamalpur, Bihar	April 11-12, 2013
Kar S.	Complex Network in Ecological Dynamics	Advancement of Computing in Engineering Research	GITM, Krisnanagar	March 22-23, 2013
Kar S.	Nonlinear dynamics in complex bio-systems and their synchronization in complex network	Mathematics for Nonlinear Equations	Visvabharati	March 17-18, 2013

Kar S.	Dynamical Modelling on Sustainable Development of Degradation of Ecosystems: A Study on Keoladeo National Park, India	Advances in Mathematics and Applications	Burdwan University	March 6-7, 2013
Kar S.	Introduction to Complex network and its application to Wetland Ecosystem	Recent Trends in Mathematical Analysis and Modelling	BIT Patna, Bihar	December 3-4, 2012
Kar S.	Fuzzy Logic and Fuzzy Sets	Special Talk	Istanbul University, Turkey	October 16, 2012
Kar S.	Group Decision Making in Medical System using Two Different Fuzzy Approaches	Recent Trends in Operations Research	PKHNMB, Howrah	August 2-3, 2012
Basu K.	Two days lecture on Queueing theory & ANOVA Analysis	Guest Lecture	University of Calcutta	July 12 & 13 2012

Department of Mechanical Engineering

Name of the faculty	Title of the lecture	Programme	Place	Date
Banerjee N.	Statistical Quality Control	Quality Circle Training for Engineers of Eastern Coalfields Limited conducted by Quality Circle Forum of India Durgapur Chapter.	Durgapur	January 2013

Department of Metallurgical & Materials Engineering

Name of the faculty	Title of the lecture	Programme	Place	Date
Ghosh K.S.	Short Term Program in Exploration, Production and Refining of Petroleum (EPRP)	Winter School organised by Dept of Chemical Engineering,	NIT Durgapur	January 7-11, 2013

Department of Physics

Name of the faculty	Title of the lecture	Programme	Place	Date
Chakraborty A.K.	Epoxy nanocomposites reinforced with carbon nanotube and graphene	2nd International Conference on Small Sciences (ICSS2012)	Walt Disney World Resort, Orlando, Florida, USA	December 16-19, 2012
Kumbhakar P.	Invited Talk on Some Undoped and Doped II-VI Semiconductor Nanostructures: Synthesis, Characterization, Linear and Nonlinear Optical Properties	National Conference in "Advances in Lasers and Spectroscopy (ALS 2012)",	ISM Dhanbad	November 1-3, 2012

Kumbhakar P.	Some Semiconductor Nanostructures for Optoelectronic Applications	Central Mechanical Engineering Research Institute (CSIR-CMERI), Durgapur	Durgapur	January 24, 2013
Sahoo S.	Higgs boson at the LHC	Invited lecture	Durgapur Children's Academy of Culture, Durgapur	July 25, 2012
Sahoo S.	Discovery of Higgs boson at the LHC	Invited lecture	Acharya P. C. Ray Science Society, Durgapur and The Institution of Engineers (India), Durgapur center	September 2, 2012

Annexure 11.16 (g): Session chair/convenor during 2012-13

Department of Chemical Engineering

Name of the faculty	Session Chair/ convenor	Programme	Place	Session	Date
Narayanan C.M.	Session Chair	International Conference on Natural Polymers and Biomaterials	Kottayam	Biopolymers	October 26-28, 2012
Narayanan C.M.	Session Chair	Chemical Engineering Congress	Jalandhar	Environmental Engineering	December 27-30, 2012
Narayanan C.M.	Session Chair	ACHEMA – 2012	Frankfurt, Germany	Biotechnology	June 18-22, 2012

Department of Electrical Engineering

Name of the faculty	Session Chair/ convenor	Programme	Place	Session	Date
Acharjee P.	Session Chair	ISGT Europe 2012 Conference	Berlin, Germany	Modeling of load & Battery Resources	October 17, 2012
Banerjee S.	Session Chair	38th Annual Conference of the IEEE Industrial Electronics Society (IECON 2012)	Montreal, Canada	Digital Control of Power Electronics: TT07g	October 26, 2012
Banerjee S.	Session Chair	1st National Conference on Power Electronics Systems & Applications, PESA 2013	NIT Rourkela	Power Electronics	March, 17 2013

Department of Electronics & Communication Engineering

Name of the faculty	Session Chair/ convenor	Programme	Place	Session	Date
Kundu S.	Session Chair	International Conference on signal processing communication & computing	HongKong Polytechnique University	Wireless Comm	August 12-15, 2012

Department of Humanities & Social Sciences

Name of the faculty	Session Chair/ conenor	Programme	Place	Session	Date
Banerjee J.	Session Chair	International Conference on Voices from the Margin: Society, Culture and Exclusion	Central University of Jharkhand, Ranchi	Voices from the Margin: Society, Culture and Exclusion	February 20 - 22, 2013
Rai S. K.	Session Chair	International Conference on Voices from the Margin: Society, Culture and Exclusion	Central University of Jharkhand, Ranchi	Voices from the Margin: Society, Culture and Exclusion	February 20-22, 2013

Department of Information Technology

Name of the faculty	Session Chair/ conenor	Programme	Place	Session	Date
Chakraborty B.	Session Chair	10 th . IEEE Conference on Industrial Informatics, IEEE INDIN 2011	Beijing, China	Knowledge Management Applications in Service Engineering	July 26-29, 2011
Das D.	Conference Judge	All India Students' Engineering Congress 2012 Durgapur Chapter	Durgapur Club	Session-III	February 4-5, 2012
Das D.	Conference Judge	All India Students' Engineering Congress 2012 Durgapur Chapter	Durgapur Club	Session-III	February 23-24, 2013

Department of Physics

Name of the faculty	Session Chair/ conenor	Programme	Place	Session	Date
Kumbhakar P.	Organising Secretary	Anveshan: AIU Student Research Convention 2012-13 (East Zone), held at NIT Durgapur	NIT Durgapur		February 19-21, 2013
Mandal M. K.	Session Chair	Seminar on Recent Trends in Communication Technology - RTCT 2013	IETE Burdwan Sub Centre, The University of Burdwan	Interactive Poster Session - in RTCT 2013	March 22, 2013

Annexure 11.17 The Eighth Convocation 2012

The eighth Convocation of the Institute was held on November 10, 2012. Professor Sushanta Dattagupta, Vice Chancellor, Visva Bharati, Santiniketan delivered the Convocation Address as the Chief Guest. The Guests of Honour were Dr. Nigel S. Lockyer, Director, TRIUMF, Canada's National Laboratory of Particle and Nuclear Physics and Professor in Department of Physics and Astronomy, University of British Columbia and Dr. Rüdiger Voss, Senior Physicist, Head, International Relations Office, CERN, Geneva, Switzerland. Professor Bikash Sinha, Chairman, Board of Governors, presided over the function. In the eighth convocation, 590 B. Tech, 194 M. Tech., 52 MBA, 61 MCA, 23 M. Sc. and 19 PhD degrees were awarded.

Annexure 11.18 Other information

- Prof. T. Kumar, Director, is serving as Member of the following reputed Government / Public Sectors / Organizations/ Institutions:
 - Member, Board of Directors of Uranium Corporation of India Ltd., Jadugoda
 - Member, Board of Directors of Neyveli Lignite Corporation Ltd. – NTPL, Tamil nadu
 - Member, Governing Council of AIU, New Delhi
 - Member, Staff Affairs Committee of AIU, New Delhi
 - Member, Coordination Committee of AIU, New Delhi
 - Member, Board of Governors, Dr. B. C. Roy Engineering College, Durgapur
 - Member, Board of Governors, Bengal College Engineering & Technology, Durgapur
 - Academic Expert for the Academic Council of Birbhum Institute of Engineering & Technology, Suri, Birbhum.
- Dr.K. Aikat, Associate Professor, Biotechnology, is in the editorial team of Journal of Brewing and Distilling, Academic Journals.
- Professor C. M. Narayanan of Dept. of Chemical Engineering guided University of Calicut in development of PG Course curriculum in Computer Aided Design
- Professor Parimal Pal of Chemical Engineering Department appointed Editor of Journal of Membrane and Separation Technology, Life Science Global, Tokyo, Japan.
- Dr. G.N. Halder of Chemical Engineering Department delivered a lecture on “Prospects of Coalbed Methane in India” in the seminar Exploration, Production and Refining of Petroleum (EPRP-2013) during January 2013.
- Department of Chemistry organised visit of M.Tech., M.Sc., and Ph.D. students to Mejia Thermal Power Station of DVC on 26th February, 2013 under the supervision of Dr. S.C. Moi.
- Dr. V.K. Dwivedi, Professor, Civil Engineering Department acted as State Co-ordinator for State Technical Agency for Pradhman Mantri Gram Sarak Yojana for West Bengal.
- Dr. Anirban Sarkar, Assistant Professor, Department of Computer Applications, acted as a IPC member of International Conference on Eco-friendly Computing and Communication Systems (ICECCS), 2012 to be held at Cochin, Kerala, India.
- Dr. Anirban Sarkar acted as a IPC member of 3rd International Conference on Computer and Communication Technology (ICCT2012), 2012 to be held at MNNIT, Allhabad, India.
- Dr. Anirban Sarkar Organized Special session Titled “*Engineering of Industrial Software Products*” in IEEE 7th International Conference in Information Technology, PP 1834 – 1839, Cape Town (SA), February 25 – 27, 2013
- Prof. S.P. Ghoshal, Dept.of Electrical Engineering, acted as WBUT and AICTE expert for inspection of four private engineering colleges in West Bengal.

- Dr. A. Chandra of ECE Department was awarded Marie Curie Fellowship under South Moravian Program (SoMoPro) for Distinguished Researchers to pursue postdoctoral studies in Brno University of Technology, Brno, Czech Republic.
- Prof. S. Kundu of ECE Department has been elevated to Senior Member, IEEE in May 2013.
- Dr. Debasis Mitra, Assistant Professor, Information Technology, received his Ph. D. Degree in January, 2013.
- Dr. Debashis Nandi of Dept. of Information Technology acts as an expert in connection with the inspection of autonomous status of Bankura Unnayani Institute of Engineering and College of Engineering & Management, Kolaghat.
- Dr. Debashis Nandi acts as an expert for inspection of colleges (i) Bengal Engineering College of Engineering & Technology, Durgapur ; Kanksa Academy of Technolgy and Management, Kanksa, Burdwan; Management Institute of Durgapur.
- Dr. Avijan Dutta, Associate Professor, Management Studies, acted as Expert for West Bengal University of Technology for visits to different colleges affiliated to WBUT.
- Dr. Gautam Bandyopadhyay, Associate Professor, Management Studies, acted as Expert for West Bengal University of Technology for visits to different colleges affiliated to WBUT.
- Dr. S. Sarkar (Mondal), Associate Professor, Mathematics, received “Letter of Appreciation” from the “International Journal of Research in Commerce, IT & Management” for publication of a research paper in 2012.
- Dr. I. Basak, Professor, Mechanical Engineering, acted as Observer of AIEEE-2012 conducted by CBSE, New Delhi on April, 2012.
- Dr. Nilotpal Banerjee, Assistant Professor, Department of Mechanical Engineering, acted as AICTE observer for Common Management Admission Test (CMAT) held in February 2013.
- Dr. Nilotpal Banerjee acted as judge to the All India Convention of Quality Circle forum of India, Durgapur Chapter.
- Dr. Nilotpal Banerjee acted as judge to the National Convention of Quality Circle forum of India held at IIT, Kanpur, December 2012.
- Dr. Nilotpal Banerjee acted as Member of advisory board of ABS Polytechnic, Durgapur.
- Dr. Nilotpal Banerjee acted as member of inspection team for opening five new polytechnics on behalf of WB State council for Technical Education.
- Dr. Nilotpal Banerjee acted as Member of selection committee for Faculty for Engineering College under WBUT.
- Dr. Nilotpal Banerjee has been invited to act as a member of National advisory committee of 1st international and 16th National Conference in Machines and Mechanisms (iNaCoMM 2013) to be held at IIT, Roorkey, December 2013.
- Ranjan Kumar Mitra, Assistant Professor, Mechanical Engineering, acted as AIEEE Observer conducted by CBSE, New Delhi for several years.
- Department of Metallurgical and Materials Engineering appointed MOS Chair Professor
- Dr. K.S. Ghosh, Dept. of MME, Reviewed of Video Course on “Environmental Degradation of Materials” Indian Institute of Technology of the Scheme of NP-TEL.
- Dr. A. K. Chakraborty of Dept. of Physics, has been appointed as an Associate Editor of the forthcoming international journal named “Chemistry of Graphene”, Versita publishers.

- Dr. A. K. Chakraborty is an Editorial board member of the international journal named “Carbon – Science & Technology”, Applied Science Innovations (ASI) publisher.
- Dr. A K Chakraborty received an international travel support (ITS) award (approx. 1 lakh) from the DST, GoI, to attend the 2nd International Conference on Small Sciences (ICSS2012), held in Orlando, Florida, USA during December 16-19, 2012 as Invited Speaker.
- Dr. P. Kumbhakar, Dept. of Physics, is serving as Editorial/Advisory Board Member of the following reputed international journals
 - Nanotechnology and Nanoscience, Bioinfo publications since 2012.
 - ISRN Nanomaterials (Hindwai) since 2012.

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