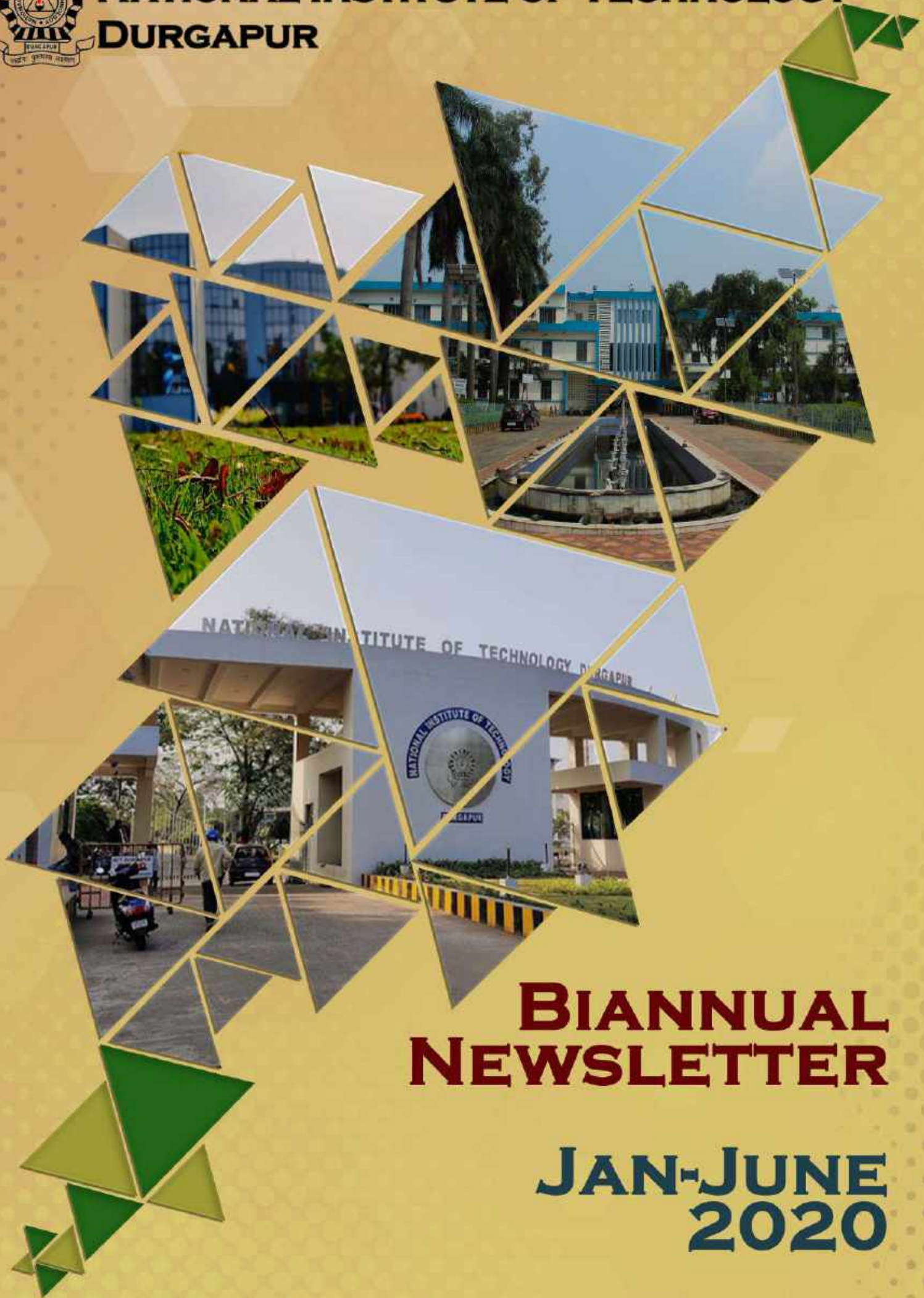


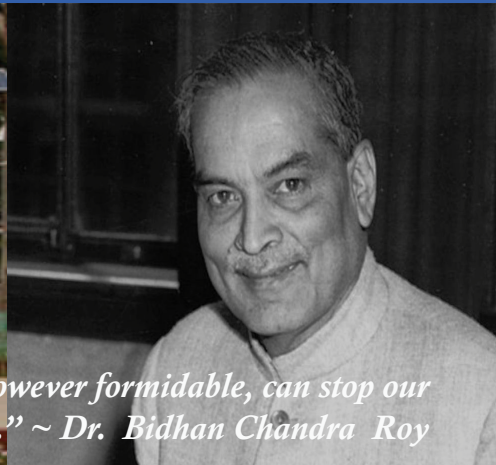


**NATIONAL INSTITUTE OF TECHNOLOGY
DURGAPUR**



**BIANNUAL
NEWSLETTER**

**JAN-JUNE
2020**



“If we exert ourselves with determination, no obstacle, however formidable, can stop our progress.” ~ Dr. Bidhan Chandra Roy

FROM THE DIRECTOR’S DESK

The year 2020 started with cheerfulness and exuberance promising academic commitment from faculty members, staff and students. Seminars, symposium, invited talks were being held without disruption and NITians were aiming at excellence. Extracurricular activities and cultural programmes were also marked by gaiety and spontaneity. However, the sudden outbreak of pandemic and consequent lockdown affected our activities temporarily but the Institute managed such critical situation deftly with due cooperation from all concerned. We have been successful in continuing academic pursuit and our multidisciplinary and multidimensional activities are reflected in this edition (January - June, 2020) of the Institute Newsletter (apart from the COVID Special issue published earlier). All academic activities were performed online and alumni interaction was carried out on virtual platform. I extend sincere acknowledgement to one and all for the perseverance to tide over tough times.



Prof. Anupam Basu, Director, NIT Durgapur



WORKSHOPS ORGANISED

- One-week short-term course on 'Application of Different Simulation Tools in Electrical Engineering' was organized during January 2-6, 2020 by Dr. Aashish Kumar Bohre, Dr. Aniruddha Bhattacharya and Dr. Biman Kumar Saha Roy, Department of Electrical Engineering and Sponsored by TEQIP-III.



- At the Centre for Biomedical Instrumentation and Assistive Technology, NIT DGP, eminent scientists gathered for the DST-SERB and TEQIP III sponsored one week multi-disciplinary workshop, titled Recent Trends in Biomedical Engineering 2020, during Jan 3-7, 2020. Prof. Anupam Basu chaired the inaugural session, along with Prof. Suresh, CMC Vellore; Prof Bikramjit Basu, IISc Bangalore and Prof. Dhara, IIT KGP. Prof. Suman Chakraborty, IIT KGP and other eminent scientists across the country, catered to the audience on interdisciplinary research areas. Prof. AK Samanta (CE), Dr. M Ghosh (BT), Dr. M Mallik (MME), Dr. S Bera (MME) and Dr. TK Bera (EE) were the coordinators and organizing secretaries.



- One-week workshop entitled 'Women Empowerment in India: Challenging Obstacles and Creating Opportunities' was organized during January 6-10, 2020 by Dr. Sutanuka Banerjee, Dr. Anita Pal and Dr. Hirok Chaudhuri and sponsored by TEQIP-III.



Prof. Ishita Banerjee-Dube, El Colegio de Mexico



IAS Officer Shweta Agarwal

- One-day workshop on 'Beyond Classical: Philosophy and Science' was organized on January 13, 2020 by the Department of Mathematics. Prof. Graham Priest, Distinguished Professor of Philosophy, City University of New York, and Prof. Mihir Chakraborty, Retd. Professor of Mathematics, Calcutta University delivered lectures in the programme.



- A webinar on "Researching Life at the Margins" was organized by the Department of Humanities and Social Sciences, NIT Durgapur on June 15, 2020. Dr. Sutanuka Banerjee and Dr. Debasis Chakraborty were the coordinators.

SEMINARS AND INVITED TALKS

- A seminar on 'Advances in Bioprocess Technology' was organized by the Department of Biotechnology and sponsored by TEQIP-III under Improvement in Student Learning. Dr. U. C. Banerjee, Professor and Head, Department of Pharmaceutical Technology, National Institute of Pharmaceutical Education & Research (NIPER)-Mohali delivered lecture in the programme.



- A seminar on 'Fermentative production of microbial metabolites and their applications' was organized on January 14, 2020 by Dr. Sougata Saha, Dr. Ashish Bhattacharjee and Prof. Surabhi Chaudhuri, Department of Biotechnology.

- A seminar on 'Complex Dynamical Systems in Science and Engineering' was organized on March 3, 2020 by the Department of Mathematics. Prof. Ulrike Feudel, University of Oldenburg, Germany, Prof. Klaus Lehnertz, University of Bonn, Germany, Dr. Syamal Kumar Dana, Jadavpur University, Kolkata, and Dr. Tanmoy Banerjee, Burdwan University delivered lectures in the programme.

- An Invited talk on 'Bacterial transcription terminator, Rho, is a pleiotropic regulator of bacterial physiology and a potential therapeutic target' was organized on February 12, 2020 under the diamond jubilee seminar series. The talk was delivered by Dr. Ranjan Sen, F.N.A. Staff Scientist, Laboratory of Transcription, CDFD, Inner Ring Road, Uppal, Hyderabad.



- Prof. B. C. Paul, Department of Physics, North Bengal University delivered an invited lecture entitled "Gravitational Waves: A New Window in Modern Astronomy" in the Department of Physics on February 03, 2020.

- Prof. M. S. Sinha Colloquium was held on February 10, 2020, in the Department of Physics and Dr. Debiprasad Duari, Director Research and Academics, M. P. Birla Planetarium, Kolkata delivered the invited talk.

INDUSTRY - INSTITUTE INTERACTIONS

- One day seminar on 'Recent advances in Industrial Chemistry' was organized on January 10, 2020 by Dr. Deb Ranjan Banerjee, Assistant Professor, Dept. of Chemistry and Dr. Subhas Ghosal, Assistant Professor, Dept. of Chemistry. Dr. Archan Dey (Reddy's lab, Hyderabad) delivered lecture in the programme.

- One day lecture programme on 'Skills to Improve Employability in Biotechnology Sector' was organized on February 07, 2020 by Prof. Kaustav Aikat with Convenor Prof. Sudit Sekhar Mukhopadhyay and Chairperson Prof. Surabhi Chaudhuri, Dept. of Biotechnology. Mr. Arijit Mukherjee, Senior HR Business Partner, BIOCON Ltd., Bangalore delivered a lecture in this programme.



- One-day lecture programme was organized on January 24, 2020 by Prof. S C Moi, Dr. Subhas Ghosal, and Dr. Deb Ranjan Banerjee, Dept. of Chemistry. Mr. Parimal Dubey, Advisor (Vocational Training), MTPS Meija delivered a lecture in the programme.



- One-day lecture programme on 'Recent advances in drug development in industry' was organized on February 28, 2020. Ms. Sumedha Chattopadhyay, Senior Research Scientist, In - vitro Pharmacology, TCG Lifesciences, Kolkata, India delivered a talk on 'Enzymes as drug targets'.



CONFERENCES ORGANISED

- International Conference titled 'Sustainable Water Resources Management under Changed Climate' was organized during March 13-15, 2020 by School of Water Resources Engineering, Jadavpur University (Under RUSA-2.0; NRDMS, DST, TEQIP-III fund), in Joint collaboration with Women's College Calcutta (Department of Geography) and NIT Durgapur MG Avenue, Durgapur (under TEQIP-III fund).

- International Conference titled 'Water Energy and Environmental Sustainability (WEES 2020)' was organized during January 13-15, 2020 jointly by the Department of Earth and Environmental Studies, Department of Chemical Engineering, Department of Electrical Engineering and Department of Physics and funded by the Centre of Excellence in Advanced Materials (TE-QIP-III). Prof. Kalyan Adhikary was the Conference Chair and Prof. T. K. Saha, Prof. S. Datta and Prof. A K Chakraborty were the Convenors.



WEES 2020

WEES 2020 was organized in association with RMIT University, Australia and addressed some of the most relevant issues that the world is concerned about: clean energy, water and environment for sustainable development. The conference was attended by more than 200 delegates, Research scholars, and students from India and Abroad (viz., Australia, United Kingdom, USA, Poland, and Bangladesh).

GENERAL CHAIR		
Prof. Anupam Basu Director, NIT Durgapur, India	Prof. Firoz Alam RMIT University, Australia	
PROGRAMME CHAIR		
Prof. Kalyan Adhikari Dept. of Earth and Environmental Studies, NIT Durgapur, India	Dr. Somnath Chattopadhyay, Dept. of Mechanical Engineering, IIT-ISM Dhanbad, India	
CONVENORS		
Prof. Tapas Kumar Saha Dept. of Electrical Engineering, NIT Durgapur, India	Prof. Susmita Dutta Dept. of Chemical Engineering, NIT Durgapur, India	Prof. Amit Kr. Chakraborty Dept. of Physics, NIT Durgapur, India
TREASURER		
Dr. Supriya Bera, Dept. Metallurgical and Material Engineering, NIT Durgapur, India		
EDITORIAL BOARD		
Prof. Kalyan Adhikari	Dept. of Earth and Environmental Studies, NIT Durgapur	
Prof. Tapas Kumar Saha	Dept. of Electrical Engineering, NIT Durgapur	
Prof. Susmita Dutta	Dept. of Chemical Engineering, NIT Durgapur	
Prof. Amit Chakraborty	Dept. of Physics, NIT Durgapur	
Prof. Kaustav Aikat	Dept. of Bio Technology, NIT Durgapur	
Dr. Manoj Kumar Ozha	Dept. of Earth and Environmental Studies, NIT Durgapur	
MEMBERS		
Prof. Surabhi Chaudhuri	Dept. of Bio Technology, NIT Durgapur	
Prof. A. De	Dept. of Bio Technology, NIT Durgapur	
Prof. G. Halder	Dept. of Chemical Engineering, NIT Durgapur	
Dr. S. Lahiri	Dept. of Chemical Engineering, NIT Durgapur	
Dr. M. K. Mandal	Dept. of Chemical Engineering, NIT Durgapur	
Dr. R. Ghosh Chaudhuri	Dept. of Chemical Engineering, NIT Durgapur	
Prof. S. N. Mahatto	Dept. of Electrical Engineering, NIT Durgapur	
Prof. P. Acharjee	Dept. of Electrical Engineering, NIT Durgapur	
Dr. Sandip Mondal	Dept. of Earth and Environmental Studies, NIT Durgapur	
Dr. A. K. Mandal	Dept. of Metallurgical and Material Engineering, NIT Durgapur	
Prof. S. Bhattacharyya	Dept. of Civil Engineering, NIT Durgapur	
Dr. S. Pal	Dept. of Civil Engineering, NIT Durgapur	
Prof. A. Layek	Dept. of Mechanical Engineering, NIT Durgapur	
Prof. R.N. Saha	Dept. of Chemistry, NIT Durgapur	



INVITED TALKS DELIVERED

- Dr. Shri Krishan Rai delivered a talk on ‘The Speech of Subalterns in South Asian Literature: A Critical Overview’ as a plenary speaker in an International Conference on ‘South Asian Literatures and Cultures’, organized by the Dept. of English, Bidhan Chandra College, Asansol, on Jan 05, 2020.



- Prof. Seema Sarkar (Mondal) delivered a talk in a one-week workshop on ‘Women Empowerment in India: Challenging Obstacles and Creating Opportunities’, WE-ICOCO 2020, organized in NIT Durgapur under TEQIP III during January 06-10, 2020.



- Dr. Durba Pal has delivered an invited talk on ‘Women and the Workplace: A Contemporary Perspective’ on January 10, 2020 in the ‘Workshop on Women Empowerment in India: Challenging Obstacles and Creating Opportunities’, during January 6-10, 2020 at NIT Durgapur.

- Dr. Arup Kumar Mandal acted as a speaker on a topic ‘Extraction of Metals from Industrial Wastes by Using Transferred Arc Plasma’ in 33rd National Convention of Metallurgical and Materials Engineers and National Conference on ‘Climate Responsive Technologies vis-a-vis Iron and Steel Production, which is sponsored by Institution of Engineers (India) at IEI, Durgapur Local Chapter during January 17-18, 2020.

- Dr. Gautam Bandyopadhyay, acted as a speaker in ‘Faculty Development Program on Research Methodology’

organized by Department of Management and Business Administration, Aliah University, on January 19, 2020.

- Dr. Arup Kumar Mandal acted as a speaker on a topic ‘Recycling of nonferrous industry Waste materials’ in Short Term Course Waste to Wealth – The Current Scenario & Sustainable Technology, which is sponsored by TEQIP III, MHRD, at MME Department, NIT Durgapur, during January 20-24, 2020.

- Dr. R. P. Nanda acted as a speaker on ‘Advances in Civil Engineering Construction’ at Gandhi Institute for Education & Technology, Bhubaneswar during January 21-22, 2020.

- Prof. Subrata Banerjee delivered a lecture in the National Workshop on ‘Advances in Energy Storage Technologies, Systems and Materials (AESTSM-2020)’ at CSIR-CMERI, Durgapur during January 23-24, 2020.



- On ‘Techniques of Effective Pedagogy’, Dr. Shri Krishan Rai, acts as a Resource person at Faculty Development Centre, ISPGC, The University of Allahabad on January 27, 2020.



- Prof. Rajnarayan Saha has delivered lecture on ‘Green Chemistry approaches for the Minimization of pollution’ on International seminar, B. C. College (Asansol, WB, India), on February 05, 2020.



• Dr. Gautam Bandyopadhyay acted as a speaker on a topic ‘SPSS in Research in Commerce and Management’ for the M.Phil and Ph.D scholars of Kazi Nazrul University, on February 07, 2020.

• Dr. Sutanuka Banerjee, Department of Humanities and Social Sciences, delivered lecture on Behavioral Science on the topic, “Communication and Interpersonal Relationship” along with activities in 3-Days Short Term Training Programme at National Power Training Institute (Eastern Region), Durgapur on February 21, 2020.

• Dr. Sirshendu Mondal, Department of Mechanical Engineering has delivered an invited talk on ‘Asynchronous quenching – a mechanism of open-loop control of thermoacoustic instability’ in the ‘International Workshop on Energy, Environment and Multiphase Flows’, (TWEEM-2020) held during February 24 - 26, 2020 at IIT Kanpur.

• Dr. S. Pal has delivered a lecture on ‘Environmental Geotechnics’ at Dumka Engg. College, Jharkhand on February 28, 2020.

• Dr. Anupam De acted as a guest of honor and speaker in a seminar organized by Management Institute Durgapur, Rajbandh, on February 29, 2020.

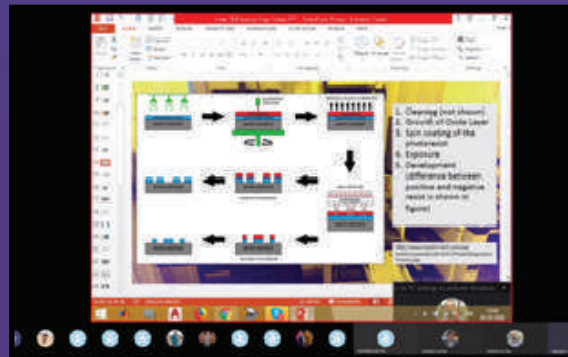
• Prof. Rajnarayan Saha delivered a lecture on ‘Significance of using Advanced Oxidation Processes for Wastewater Treatment’ in International Conference On Sustainable Water Resources Management under Changed Climate held during March 13-15, 2020, organized by School of Water Resources Engineering, Jadavpur University (Under RUSA-2.0; NRDMS, DST; TEQIP III Funded) in Joint Collaboration with Women’s’ College Calcutta (Department of Geography) and NIT Durgapur MG Avenue, Durgapur (under TEQIP III fund).

• Prof. Rajnarayan Saha, has delivered lecture at Sustainable Water Resources Management under Changed Climate in Jadavpur University from 15.03.2020 onward in “Significance of using advanced oxidation processes for waste water treatment”.

• Dr. Aparesh Datta, Department of Mechanical Engineering has delivered a lecture on ‘Application of fluid mechanics in designing micro sink’ to the Department of Mechanical Engineering of Dr. Sudhir Chandra Sur Degree Engineering College on May 01, 2020.



• Dr. Arjyayoti Goswami, Department of Mechanical Engineering has delivered an invited talk on ‘Micro Nano Manufacturing Technologies’ to the Mechanical Engineering students of Asansol Engineering College on May 04, 2020.



• Dr. Gautam Bandyopadhyay, acted as a guest lecturer on a topic ‘Data Analysis Using Application Software’ for MBA 2nd Semester organized by Bharatiya Vidya Bhavan Institute of Management Science, Kolkata on May 16, 2020.

• Prof. Seema Sarkar (Mondal) delivered an invited talk in a Webinar on the topic, “Career Scope of Mathematics, Statistics and Data Science” on May 17, 2020, organized by Department of Mathematics, School of Science, Adamas University, Kolkata.



- Dr. Hirok Chaudhuri, Department of Physics delivered an invited talk in Faculty Development Programme organized during May 18-22, 2020 by JIS College of Engineering.

- Dr. Sutanuka Banerjee delivered an online lecture on the topic 'Gender, Modernity, Morality and Transnationalism in a Bengali magazine Nara-Naree' as part of Gnosis Lecture Series-2020 on May 29, 2020.



- Dr. Anupam De acted as a speaker in the Finance Seminar/Webinar, organized by RITM, University Paris-Saclay, France on June 18, 2020.

- Dr. Sutanuka Banerjee delivered an expert lecture on the topic, "Gender Equality and Women's Right in Focus" in a TEQIP-III Sponsored Webinar at Chaibasa Engineering College on June 18, 2020.



- Dr. Gautam Bandyopadhyay, acted as an invited speaker on the topic, 'Introduction to Statistical Analysis using R and R Studio, organized by Department of Management Studies, Bodoland University on June 22 and 26, 2020.

ACHIEVEMENTS AND AWARDS

- Prof. Subrata Banerjee became Associate Editor of IEEE Access Journal (USA) on February 07, 2020

- Prof. Susmita Dutta of Chemical Engineering was selected as a member of the Editorial Board of the Journal of Environmental Engineering and Landscape Management (Taylor and Francis)

- The paper entitled, 'Studies on reduction behavior of highly fluxed iron ore pellets for application in steel making' by Raj Kumar Dishwar, Arup Kumar Mandal, O.P. Sinha was selected for Best paper award under Process Waste category in International Conference on Management and Recycling of Metallurgical Wastes, MetWaste - 2020, held during February 22 - 23, 2020, Varanasi, India.

- 'New approaches for utilization of iron ore slime and bottom ash' by Ramesh Kumar, A. K. Mandal, Raj K. Dishwar and O.P. Sinha was selected for Best paper award under Fly Ash category in International Conference on Management and Recycling of Metallurgical Wastes, MetWaste - 2020, held during February 22 - 23 2020, Varanasi, India.

- The paper entitled, 'Regularizing multilayer perceptron for generalization using kl-divergence,' by R. Mondal, P. Dey, G. Sharma, and T. Pal was selected for Best paper award in 2020 International Conference on Computer Science, Engineering and Applications (ICCSEA). IEEE, 2020, pp. 1-6.

- Prof. Subrata Banerjee & his team received 'Outstanding Paper Award' in 27th West Bengal State Science & Technology Congress, on Feb 28, 2020.

- Ms. Punam Tiwary, a 8th Semester PhD student of the Department of ECE, jointly supervised by Prof. R Mahapatra of ECE and Prof. A K Chakraborty of Physics won the Best Oral Presentation Award at International Conference on 'Water, Energy and Environmental Sustainability 2020 (WEES 2020)', January 13-15, 2020 at NIT Durgapur.

- Mr. Soham Dey, PhD Scholar in EE Dept., jointly supervised by Prof. Subrata Banerjee & Dr. Jayati Dey, received 'Best Paper in Control System Track' in CALCON, 2020 during February 28-29, 2020.

SPONSORED AND CONSULTANCY PROJECTS

• **Title:** Deciphering the metabolic and microbial diversity signature in the fecal microbiota of obese patients to find their correlation with brown versus white adipogenesis pathway

Principal Investigator: Dr. Oindrilla Mukherjee, Dept. of Biotechnology

Co-Principal Investigator: Dr. Debojoti De, Dept. of Biotechnology

Sponsored Agency: Indian Council of Medical Research

• **Title:** Template based fabrication for development of various micro nano structured surfaces and their characterization;

Principal Investigator: Dr. Arjyayoti Goswami, Dept. of Mechanical Engineering

Sponsored Agency: DST, Govt. of India

Sanctioned Amount: INR 23,93,680/-

• **Title:** Technical rate vetting of rural drinking water projects

Principal Investigator: Prof. A.K. Banik, Dept. of Civil Engineering

Sanctioned Amount: Rs. 0.3687 Lakh.

• **Title:** Vetting of Design & Engineering of 20000 litres capacity underground water storage tank

Principal Investigator: Prof. A.K. Banik, Dept. of Civil Engineering

Sanctioned Amount: Rs. 0.295 Lakh.

• **Title:** Testing & Consultancy to G+4 Bldg WSFL, Asansol Police Commissionerate

Principal Investigator: Prof. A.K. Samanta, Dept. of Civil Engineering

Sanctioned Amount: Rs. 0.52 Lakh.

• **Title:** Vetting of Layout & Civil Foundation /Structural drawings -2 Nos and Design Document for Domestic Water plant for IOCL Haldia

Principal Investigator: - Prof. A.K. Samanta, Dept. of Civil Engineering

Sanctioned Amount: Rs. 0.4 Lakh

• **Title:** Mix Design for L& T Construction bankura

Principal Investigator: Prof. A.K. Samanta, Dept. of Civil Engineering

Sanctioned Amount: Rs. 2.7 Lakh

• **Title:** Vetting of design & drawing for launching scheme of Bridge nos. (1) 63D between stations Diyodar and Mitha and (2) 76B between stations Bhabhar and Devgam.

Principal Investigator: Prof. A.K. Samanta, Dept. of Civil Engineering

Sanctioned Amount: Rs. 1.8 Lakh

• **Title:** Vetting 1) G+5 Type-B Qtr. & 2) Transit Block for AAI Agartala

Principal Investigator: - Prof. A.K. Samanta, Dept. of Civil Engineering

Co-Principal Investigator: D. Das, Dept. of Civil Engineering

Sanctioned Amount: Rs. 1.5 Lakh

• **Title:** Consultancy charges for proof-checking/ vetting of erection scheme (cantilever) of Bridge No.: a) 76B (1x76.2m welded through type open web girder) and b) 63D (1x76.2m welded through type open web girder)

Principal Investigator: - Prof. A.K. Samanta, Dept. of Civil Engineering

Co-Principal Investigator: Dr. D. Das, Dept. of Civil Engineering

Sanctioned Amount: Rs. 2.655 Lakh

• **Title:** Consultancy charges for proof-checking/ vetting of erection scheme (cantilever) of Bridge No. 77 (2x45.7m – 25T loading) – cantilever launching scheme

Principal Investigator: Dr. D. Das, Dept. of Civil Engineering

Sanctioned Amount: Rs. 0.708 Lakh

• **Title:** Scientific study of OC mines pit slope, dump slope stability and monitoring of slope at Gourangdih ABC OCP at Raniganj coalfield area.

Principal Investigator: Dr. S. Pal, Dept. of Civil Engineering

Sanctioned Amount: Rs. 7.67 Lakh

• **Title:** Testing and consultancy service for the expansion works for construction of G+3 sports hostel building and indoor sports facility at the University of Burdwan complex.

Principal Investigator: Dr. S. Pal, Dept. of Civil Engineering

Sanctioned Amount: Rs. 5.074 Lakh

• **Title:** Different types of proof checking on structural design and drawing

Principal Investigator: Dr. S. Karmakar, Dept. of Civil Engineering

Sanctioned Amount: Rs. 18.0 Lakh

• **Title:** Different types of proof checking on structural design and drawing

Principal Investigator: Dr. S. Karmakar, Dept. of Civil Engineering

Co-Principal Investigator:- Dr. S. Saha, Dept. of Civil Engineering

Sanctioned Amount: Rs. 13.0 Lakh

OUTREACH ACTIVITIES

• Prof. Partha Pratim Sengupta, Prof. Seema Sarkar (Mondal), Dr. Durba Pal, Dr. Baisakhi Chakraborty, Dr. Dalia Dasgupta, Dr. Anita Pal, Dr. Sayantari Ghosh, Dr. Sutanuka Banerjee acted as resource persons and delivered lectures in TEQIP-III Sponsored One-Week Workshop entitled Women Empowerment in India: Challenging Obstacles and Creating Opportunities during January 6-10, 2020 at NIT Durgapur.

• Dr. Arup Kumar Mandal acted as an Examiner of West Bengal State Council of Technical Education in Sessional and Viva-Voce examination of final year student at Asansol Polytechnic on January 08, 2020.

• Dr. Gautam Bandyopadhyay was invited to Chair a session in the 2nd International Conference on “Emerging Socio-economic Trends and Business Strategy” on January 25, 2020 at ISB&M Kolkata.

• Dr. Anupam De acted as a panelist for conducting Admission Process for the year 2020 of Birla Institute of Management & Technology (BIMTECH), held at Kolkata on February 16, 2020.

• Dr. Gautam Bandyopadhyay acted as a panelist for conducting Admission Process for the year 2020 of Birla Institute of Management & Technology (BIMTECH), held at Kolkata on 16th February, 2020.

• Dr. Hirok Chaudhuri, Department of Physics, Celebrated National Science Day 2020, during February 27-28, 2020 by organizing two days seminar for schoolteachers and school and college students.



• Dr. Sayantari Ghosh (Department of Physics) and Dr. Deb Ranjan Banerjee (Department of Chemistry) delivered invited talks in front of an audience of more than 100 students from different schools and colleges of the city and nearby villages during ‘Science Exhibition 2020’ to spread the awareness on the issue of gender bias in science and celebrate ‘National Science Day 2020’ organized by NIT Durgapur on 27th February, 2020.



- Dr. Partha Pratim Gopmandal, delivered 5 hours invited lectures in the short-term course on ‘Mathematical Tools for Boundary Value Problems and applications’, organized by Department of Mathematics, IIT Kharagpur, held during March 09-13, 2020.
- Dr. Anupam De acted as a member of the Selection Committee as a subject expert for recruitment of teachers, held at DAV Model School, Durgapur on March 15, 2020.

- Prof. Subrata Banerjee has examined one PhD Thesis of Electrical Engineering, VNIT Nagpur on 20th April, 2020.
- Dr. Durba Pal has acted as an External Subject Matter Expert in an online focus group discussion in connection to the evaluation of the psychometric properties of a set of questionnaires at Indian Institute of Psychometry, Calcutta-700108 in June 2020.
- Prof. Kaustav Aikat reviewed two international journal papers:
 1. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects published by Taylor and Francis review date: 10-02-2020
 2. Industrial Crops and Products published by Elsevier review date: 18-05-2020
- Dr. Anita Pal, Associate Professor, Department of Mathematics, examined 6 theses of various institutes and acted as external examiner for PhD viva voice of 2 candidates.

COLLABORATIVE RESEARCH ACTIVITIES

- Dr. Supriya Pal, Department of Civil Engineering, has undertaken collaborative work with Eastern Coalfields Ltd regarding the scientific study on OC mines workings and West Bengal Mineral Development Corporation Limited regarding the scientific study on OC mines workings. He has carried out collaborative work with Jadavpur University on the topic “Groundwater pollution”. He has also collaborated with TPU, Russia on the topic “Water Resources and Pollution Treatment”. He has undertaken further collaborative work with TPU, Russia, ECUT, China, Federal University of Rio de Janeiro, Brazil and Hohai University, China on the topic “Water Resources and Pollution Treatment”.
- Prof. A. K. Samanta, Department of Civil Engineering has carried out collaborative work with HIT Haldia on Research purpose as Joint PhD supervisor.
- Dr. Diptesh Das, Department of Civil Engineering collaborated with IEST Shibpur on the topic ‘Vibration Control of Structures under Multi-hazard Scenario’.
- Prof. S. Karmakar, Department of Civil Engineering collaborated with IIT Bhubaneswar on the topic “Traffic control”. He has carried out collaborative work with IIT Kharagpur on the topic “FEM-SPH Coupling”.
- Dr. Ujjwal Kanti Paul, Department of Management Studies, has undertaken collaborative work with Dr. A. K. Mandal & Prof. O.P. Sinha of IIT-BHU, Varanasi on the topic “Iron and Steel making”.
- Achintya Kumar Pramanick, Dept. of Mechanical Engineering has undertaken collaborative work with University of Stuttgart, Germany on the topic Thermodynamics in January 2020. He has started collaboration with Duke University, USA, University of Lorraine, France, Universidade Do Vale Do Rio Dos Sinos, Brazil on the topic Thermodynamics in January 2020. He has also collaborated with Central Mechanical Engineering Research Institute, Durgapur on Heat Transfer in January 2020.

- Dr. Sirshendu Mondal, Dept. of Mechanical Engineering collaborated with IIT Madras and Jadavpur University on ‘Thermoacoustic instability and lean blowout’ in January 2020. He also collaborated with Shiv Nadar University, Noida on the topic synchronization on aero-elastic systems and with University of Liège, Belgium on the topic Modeling vortex induced vibrations.

- Dr. Aparesh Datta, Dept. of Mechanical Engineering has undertaken collaborative work with NIT Calicut on the topic Pool boiling heat transfer in January 2020 and with Jadavpur University on the topic Magneto-hydrodynamic flow; Bio convection. He has also collaborated with NIT Agartala on the topic Microchannel heat transfer.

- Department of Mathematics, NIT Durgapur has conducted collaborative activities with Hiroshi Yanagihara, Dept. of Applied Science, Yamaguchi University, Japan and Allu Vasudevarao, School of Basic Science, IIT Bhubaneswar, India, January 2020.

- Prof. Pathik Kumbhakar, Department of Physics collaborated with Dr. Sougata Ghosh, Department of Microbiology, RK University Rajkot, Chandra Sekhar Tiwary and Dr. Tarun Kumar Kundu, Department of Metallurgical and Materials Engineering, Indian Institute of Technology Kharagpur for publication.

- Dr. Hirok Chaudhuri, Department of Physics, NIT Durgapur initiated formal collaboration with Prof. Bikash Sinha, INSA Senior Scientist, VECC, Kolkata. A joint meeting was held on February 25, 2020.



- Dr. Sayantari Ghosh, Department of Physics, NIT durgapur has collaborated with Dr. Saumik Bhattacharya, Indian Institute of Technology, Kharagpur and Prof. Yatindra Nath Singh, Indian Institute of Technology Kanpur in June 2020 for publication.

- Prof. Subrata Banerjee is carrying out joint collaborative research work with CSIR-CMERI Durgapur and IIT Delhi.

STUDENTS ACTIVITIES

ACADEMIC ACTIVITIES :

- Sayanti Dey published a conference paper, titled “Antimicrobial activity and mechanism of action from Curcuma amada” in “International Conference on Environment and Bioengineering” (ICEBE 2020) at Kyoto University, 19-22 January.

- Pratyay Sengupta was selected for the Direct PhD Programme at Department of Biotechnology, Bhupat and Jyoti Mehta School of Biosciences, Indian Institute of Technology Madras on August 2020.

- Mouchandra Paul has received Direct PhD admission offer at Chemical Engineering Department, IIT Kanpur on June 2020.

- Sourav Dutta was selected for Master’s study in

Biomedical Engineering in University of Florida, 2020.

- One student was selected as Business Development Trainee (BDT) in BYJU’S The Learning App.

- Sima layek got job offer in 4IITEENS.

- Students received offers for MSc in Biochemistry, The University of Edinburgh, MSc in Biochemistry, The University of Manchester, MRes in Molecular and Cellular Biology, University of Birmingham.

- Sayari Mukherjee was selected for Full time PhD program in Kusuma School of biological sciences, IIT Delhi.

- Students got admissions in MS and PhD in various universities are listed below.
- MS admit in Molecular and Cellular Biology (MCB) at University of Illinois at Urbana-Champaign, Month and Year: December, 2019.
- PhD admit in Cellular and Molecular Biology (CMB) at Florida State University Month and Year: March, 2020.
- MS admit in Molecular and Cell Biology (MCB) at University of Texas at Dallas Month and Year: March, 2020.
- MS (by Research) admit in Department of Biological Sciences at University at Buffalo, Month and Year: March, 2020.
- Students received project opportunity at Indian Institute of Technology (IIT) Delhi as SRF for performing Computational studies of viral protein conformation of Chikungunya Virus (CHIKV) Duration of project: August-November, 2020.
- Tiasha Ghosh, a 7th semester B. Tech student received (1)

DAAD WISE (Working Internships in Science and Engineering), Fellowship for internship in Germany, Scholarship Programme 2020, on March, 2020 and (2) Science Academies Summer Research Fellowship Programme 2020.

- Ambica Agarwal, a 7th semester B. Tech student, was awarded CCU summer Fellowship in Taiwan.

EXTRACURRICULAR ACTIVITIES :

- Kambathula Preethi Rishitha is involved in NGO Bihari More Education Project, as Senior coordinator.
- Subhrajyoti Biswas, 2nd year BTech, has started a new YouTube channel based on education.
- Purnima, 7th sem B Tech is a volunteer for Innovate for India, Waste to Wealth campaign.
- Shreyoshi Karmakar, 7thsem B Tech does online Freelancing on Upwork.

EVENTS CELEBRATED

- The Team of ICC, NIT Durgapur organized a Webinar on Gender Bias and Stereotyping, Gender Equality and Women's Rights on June 26, 2020 via Microsoft Teams platform. Hon'ble Director Prof. Anupam Basu was the Guest of Honor. The speaker was Dr. Ranjita Biswas who is a psychiatrist by professional training. Her areas of interest are mental health, gender and sexuality. She has completed her M. Phil. and Ph. D in Women's Studies from Jadavpur University, Kolkata.



- The institute celebrated "Matribhasha Saptah" from February 21 - 27, 2020 by organising different cuisines, dresses and artform exhibitions of all the varied state cultures across India.



EMINENT ALUMNI LECTURES

Online Eminent Alumni Lecture (EAL)

INSTITUTE TO INDUSTRY: HOW TO AIM BEYOND THE HORIZON

By **Mr. Aditya Bhattarjee**
Senior Technical Specialist, Watney, London, UK

B.E. Electrical, RE College Durgapur/Now NIT Durgapur, Batch of 1979
M.Tech. IT College Durgapur/Now NIT Durgapur, Batch of 1982

Organized by SAI Cell, CAAIR, NIT Durgapur

09 May 2020 11:00am(IST) Join Skype Meeting: <https://join.skype.com/9249W5Ud>

Online Eminent Alumni Lecture (EAL)

RECESSION-PROOF CAREER STRATEGIES

By **Mr. Deepal Kanti Das**
Business Operations and Analytics Manager, Dell Technologies, Singapore

B.Tech/Mechanical, NIT Durgapur, Batch of 2000

MS and MPhil/MSI, National University of Singapore

Organized by SAI Cell, CAAIR, NIT Durgapur

09 Jun 2020 1:00pm(IST) Join Skype Meeting: <https://join.skype.com/20w9V0Dnse>

ONLINE EMINENT ALUMNI LECTURE (EAL)

"Choosing right career path in Technology amongst ever-changing global trends"

BY:

Mr. Anirban Sengupta
Head - Digital Application Services
Global Process, Manufacturing, Analytics & Education (GMA) at Wipro Digital
B.E. Mechanical Engineering (Gold Medalist), 1998

About
Mr. Anirban Sengupta is the Founder Head for a strategic business unit in application modernization services. He is responsible for overall business vision and execution strategy to drive Technology Services growth in Americas for several accounts. Leading integrated teams of Technical Services, Solution, Pre-sales and Delivery teams to deliver world class Technology Services to customers.

<https://join.skype.com/20w9V0Dnse>

06.06.2020, Saturday, 7:00 PM IST

SCAN THIS QR

- Eminent Alumni Lecture (EAL) on "Mechanistic Models and Machine Learning in Metal Printing" by Prof. T. Deb Roy (Materials Science and Engineering, Penn State University, USA) organized as a programme coordinator on dated 26.06.20 at 16:00 hrs (IST) through MS Team platform.

Dept. of Metallurgical and Materials Engineering
in association with
Centre of Alumni Affairs & International Relations (CAAIR)

Presents
Online Eminent Alumni Lecture (EAL)
on
MECHANISTIC MODELS & MACHINE LEARNING IN METAL PRINTING

By **Prof. Tarasankar DebRoy**
Professor of Pennsylvania State University, USA
Alumnus, Batch of 1988 (Metallurgical and Materials Engg.)

26 Jun 2020 16:00pm(IST) Join Microsoft Teams Meeting: [scan the qr code](https://join.skype.com/9249W5Ud)

- Eminent Alumni Lecture (EAL) by Prof K.K. Sankaran, Faculty of Materials Science and Engineering Dept., University of North Texas, USA and Adjunct Instructor of Department of Mechanical Engineering and Materials Science, Washington University, USA, organized as a programme coordinator on dated 29.06.2020 at 7 pm (IST) through MS Team platform.

Dept. of Metallurgical and Materials Engineering
in association with
Centre of Alumni Affairs & International Relations (CAAIR)

Presents
Online Eminent Alumni Lecture (EAL)
on
METALLURGY & DESIGN OF ALLOYS

By **Prof. K. K. Sankaran**
Adjunct Professor, University of North Texas, USA
Ex-Senior Technical Fellow, Boeing, USA
Alumnus, Batch of 1970 (Metallurgical Engg.)

29 Jun 2020 7:00pm(IST) Join Microsoft Teams Meeting: [scan the qr code](https://join.skype.com/9249W5Ud)

INSTITUTE CLUB EVENTS

MATHS 'N' TECH CLUB

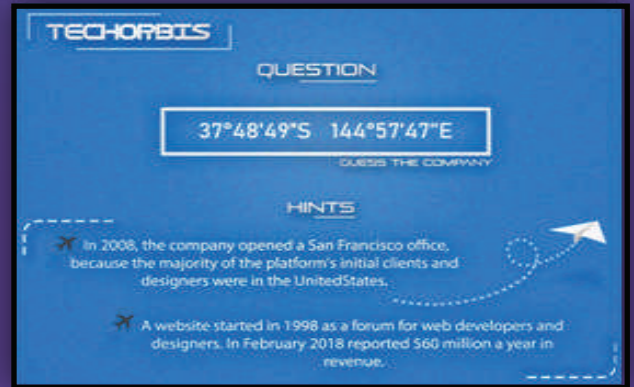
- Faculty Advisor: Dr. Anita Pal, Prof. Seema Sarkar (Mondal) organized treasure Hunt on January 12, 2020.



- Opportunity for GATE Aspirants Seminar on career options through GATE and ESE by MADE EASY on January 20, 2020.

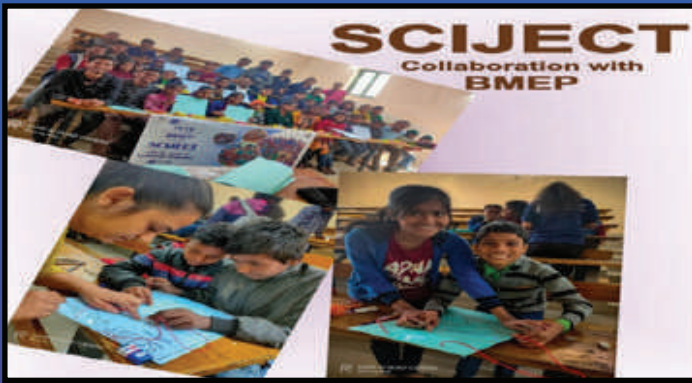


- TECHORBIS, an Online Quiz was organised on April 8, 2020.

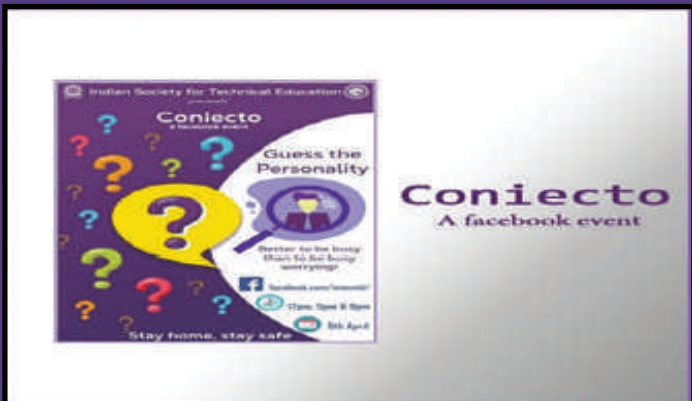


ISTE NIT DURGAPUR CHAPTER

- Dr. Anita Pal in association with ISTE NIT Durgapur Students' Chapter in association with BMEP team organized SCIJECT, a workshop cum competition with the motto of "Technology Integration for enhancing tech-learning experience, on 9th February 2020. Here, unprivileged kids around NIT Durgapur were tested via various ways like puzzles, aptitudes, general knowledge and prepared a working quiz board model using electric wires, bulbs, batteries and other gadgets. ISTE NIT Durgapur provided a promising platform to all NIT DGPians to gain and inculcate their skills with a two-day workshop on Data Analytics on 29th February and 1st March. Eminent professors Dr. Kaushik Mondal, Dr. Prasenjit Choudhury, Dr. Gautam Bandhopadhyay and Dr. Debasis Chakraborty from NIT Durgapur, specialized in this field delivered lectures.



• ISTE NIT Durgapur Students Chapter organized CONIECTO - an online Facebook event, on 6th April 2020 following social distancing norms.



• ISTE NIT Durgapur organized a webinar on 'Data Science and Analytics' by Mr. Vijay Pravin Maharajan, a leading data storyteller based in Germany. He has been named among the 'Top 40 data scientists under 40' in India and has also been nominated as '20+ data scientists to follow in 2020' by AI Time Journal, USA.



• ISTE NIT Calicut in association with NIT Durgapur, ISTE GCET, ISTE NIRMA organized Spectrum. It was conducted with enlightening and fun events that tested various skills of students. Students were given an opportunity to put forth their oratory skills through events such as Beat the Talk, acting skills through Tech Charades, analytical skills through CSI, or marketing abilities through Admania.



PRAKRITI, ENVIRONMENT CLUB

NIT Durgapur celebrated RuNIT'20—The City Marathon on February 29, 2020 for a cause to promote 'Safeguard of Natural Habitat and prevention of forest fire. Combined efforts for sustainable Health Development of Society and Environment as a whole.' Around 450+ participants—the students of NIT Durgapur with the residents of Durgapur ran the 7 km track, with their adrenaline rush depicting the lush green beauty of nature. On this day, a step was taken for inspiring mankind to gift a nourishing environment to upcoming generations.



- Team Prakriti organized Roll Up Rags- the annual campus cleaning drive on February 23, 2020.



STROKES, PHOTOGRAPHY CLUB

- Titled “The Philosopher’s Battle”, it is a sculpture mainly composed of papier-mâché, now housed permanently at the entrance of the Main Academic Building.



- An exhibition for the TEQIP-III sponsored one week Workshop entitled “Women Empowerment in India”, displaying theme-based quality artworks and photographs.

SPICMACAY NIT DURGAPUR CHAPTER

- Virasat, the annual fest of SpicMacay, a three day event comprising of art, dance, instrumental and classical music was celebrated on 28th, 29th February and 1st March, 2020. Maestros like Janhabi Behera, Anant Malakar, Mandira Lahiri, Mysore Brothers, Tejendra Narayan Majumder, Geeta Chandran graced the event with their performances.



Shola Workshop was conducted by Anant Malakar





• Uttarayan, a kite flying festival was celebrated on January 19, 2020 on occasion of Makar Sankranti.



राष्ट्रीय प्रौद्योगिकी संस्थान दुर्गापुर NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

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