



BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI

INSTITUTE PRAYER

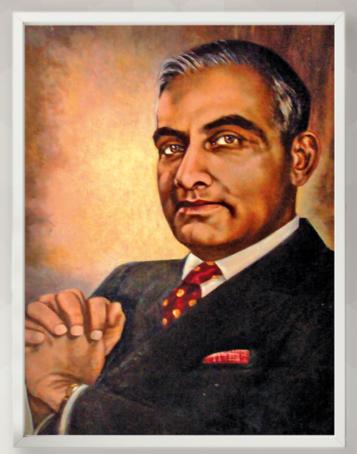
प्रार्थना

यं शैवाः समुपासते शिव इति ब्रह्मोति वेदान्तिनो बौद्धा बुद्ध इति प्रमाणपटवः कर्तेति नैयायिकाः। अर्हन् नित्यथ जैन शासनरताः कर्मेति मीमांसकाः सोऽयं नो विदधातु वांच्छित फलं त्रैलोक्यनाथोहरिः।।

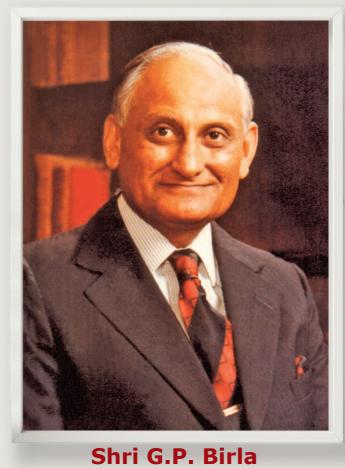
May the Lord of the universe, the remover of evil, whom devotees of Shiva worship as Shiva, the Vedantins as Brahman, the Buddhists as Buddha, the followers of the Nyaya philosophy who are clever in logic as representatives of those devoted to the Jaina doctrines as Arhan, the advocators of the Mimamsa School as Karma-grant us all our hearty desire.

हे जग त्राता, विश्व विधाता, हे सुख शांति निकेतन हे। प्रेम के सिन्धु दीन के बन्धु, दुःख दरिद्र विनाशन हे। नित्य अखण्ड अनन्त अनादि, पूरण ब्रह्म सनातन हे। जगआश्रय जगपति जगवन्दन, अनुपम अलख निरंजन हे। प्राण सखा त्रिभुवन प्रतिपालक, जीवन के अवलंबन हे।

You are the saviour, provider of worldly wisdom & the abode of peace and happiness. You are the ocean of love, the friend of the helpless, the reliever of sorrows and misfortune. You are the eternal, the indivisible and the infinite. You are the complete universe and the prime Being. You are the shelter, the Lord and worshiped by world. You are unparalleled, unseen and blissful. You are friend of the living, the preserver of the universe and the support of our life.



Shri B.M. BirlaFounder of the Institute



Former Chairman of the Board of Governors



Shri C.K. Birla
Chairman of the Board of Governors

ANNUAL REPORT

2018-19



BIRLA INSTITUTE OF TECHNOLOGY

(Deemed to be University)

Mesra, Ranchi - 835 215, Jharkhand, India

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Vice-Chancellor's Report

Birla Institute of Technology, Mesra, Ranchi founded by the philanthropist, industrialist Late Shri B.M. Birla in 1955, attained the status of a Deemed to be University in the year 1986. The rich legacy of the founder has been carried forward by his son Padma Bhushan Late Shri. G.P. Birla and his grandson, the present Chairman of Board of Governors, Shri C.K. Birla through continued emphasis on academic excellence and contribution to nation building.

BIT Mesra, by virtue of the quality of its academic programmes, has consistently been ranked amongst the leading technical Institutes of the country. The Institute offers academic programmes in it's campuses located at Mesra, Lalpur, Patna, Deoghar, Noida and Jaipur. It has 626 faculty members and over 12,000 students spread across different campuses.

The Institute has taken several initiatives to strengthen and expand the Teaching – Learning environment and to generate career opportunities for the students in reputed organizations. Some of these initiatives are the implementation of the choice based credit systems (CBCS), examination reform and encouragement of student research projects, conduction of hackthon at a regular frequency, G P Birla Scholarship Scheme, Best Student's Project Award, Inter Hostel Indoor Sports Award and a strong campus placement programme.

A brief report on important activities of the Institute, undertaken during the year 2018-19 are as follows.

1. Important Academic and Administrative Activities:

Key decisions regarding development of the institute which were approved by the BOG are listed below.

- Revised UG and PG curricula conforming to Outcome-Based Education (OBE)/Choice Based Credit System (CBCS) and revised Ph.D. Ordinance have been made operational in the AY 18-19.
- 9 UG students participated in Immersive Summer Research Experience (ISRE) at Illinois Institute of Technology (IIT), Chicago and 3 at Carnegie Melon University (CMU) with equal sharing of expenses by BIT, BIT Mesra Alumni Association-North America (BITMAA-NA) and the participants
- The 7th CPC stands fully implemented. Arrears of 7th CPC stand fully paid.
- ⇒ 7 distinguished academics/researchers have been inducted as Adjunct Professor/Adjunct Fellow.
- Institute Research Fellowship (IRF) with fellowship amount matching from CSIR, UGC, etc. has been implemented w.e.f. SP-2018 session.
- Additional solar power plant of capacity 700 KW has been commissioned to bring up the installed solar power capacity in the campus to 1 MW.
- Upgradation of existing 11KVA electrical sub-station to 33 KVA sub-station is under progress.

2. Student Placements

The Campus Recruitment Programme for students demonstrates the confidence of the Industry in the quality of graduates of BIT Mesra. In the Academic Year 2018-19, as many as 108 recruiters have visited the campus and generated a total of 614 offers including 190 offers for internship made by different companies. A large Number of Internship offers were received by the Institute across different sectors of the industry.

Major recruiters ranging from Investment Banks to Analytics & Consulting, Automobile to Heavy Engineering and Infrastructure, IT Product to IT Services have visited the campus for placement.

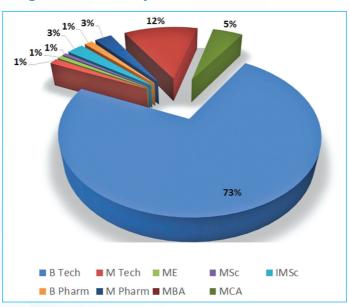
24 companies have visited BIT Mesra for the first time this year and the recruiters who visited last year for the first time have continued this year, and the process yielded satisfactory results. Several meritorious students have received multiple offers.

The BE students of Mesra Campus with a total batch strength of 666 and a total of 554 eligible students, received a total of 398 offers and 380 students have been placed this year. Considering the percentage placement of eligible students, 88% students from BE Computer Science, 73% from BE Electronics & Communication & 94% from BE Information Technology, 56% of the BE Mechanical Engineering, 63% of BE Production Engineering and 62% of BE Electrical Engineering students got offers from different sectors. Likewise, 65%, 52%, 44% and 38% of students from Chemical, Chemical & Polymer, Civil and Bio-Engineering respectively have got placed.

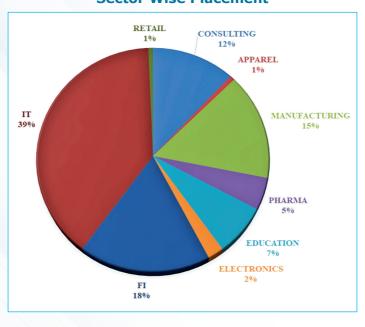
Major Recruiters were Adobe, Microsoft, Salesforce, Amazon, Amazon Development Center, Intuit, Goldman Sachs, Walmart Labs, Vm Ware, Visa, SocieteGenerale, HP, Samsung R&D, Accenture, Axis Bank, Maruti Suzuki, Vedanta, HCL Technologies.

The Average Salary for various programmes is B.E - INR 10.56 L, M.E - INR 5.8 L, M.B.A - INR 4.3 L, M.C.A. - INR 5.28 L, B. Pharm - INR 3.9 L, M. Pharm - INR 4.37 L & IMSc - INR 6.2 L.

Program wise Campus Placement Distribution



Sector Wise Placement



3. GP BIRLA SCHOLARSHIP AND OTHER INITIATIVES

• It is my pleasure to mention that during the last academic year, GP Birla Scholarships worth Rs. 2.25 Crore were awarded to students, and RS. 37.16 Lakhs have been provided to fund the best BE & ME research Projects.

4. ACADEMIC & RESEARCH ACTIVITIES:

- CBCS Course Structure has been implemented for all UG and PG courses at BIT Mesra and its extension centers.
- Dr. Deepak Kumar has successfully completed his Post-Doctoral Research from Aalto University, Finland from July-December 2018.
- Mr. Subrat Kumar Swain has been selected for Ph.D. Programme with a scholarship at Kyungpook National University, South Korea and will be joining in Feb. 2019
- More than 75% of the Programmes being offered by the Institute are accredited by NBA.
- Dr. D.K. Mohanta has been named as Program Committee Member for INTELLI 2017, The Sixth International Conference on Intelligent Systems and Applications, 2018, Nice, France and 31st Canadian Conference on Computer and Electrical Engineering (CCCE18), Quebec City, Canada, 2018
- Industrial Visit to Jindal Steel & Power Limited, Patratu was organized for ME Students of Department of EEE on 12th Dec. 2018
- Ms. Varsha Singh joined as DST Woman Scientist, under the mentorship of Dr. Padmini Padmanabhan
- Dr. D.M. Pandey- Organizing Committee Member in 3rd International Conference on Molecular Biology & Nucleic Acids-2018 scheduled at Toronto, Ontario, Canada from August 27-28, 2018

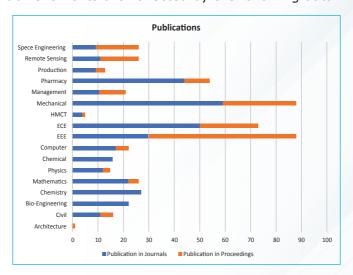
5. R&D ACTIVITIES OF THE INSTITUTE

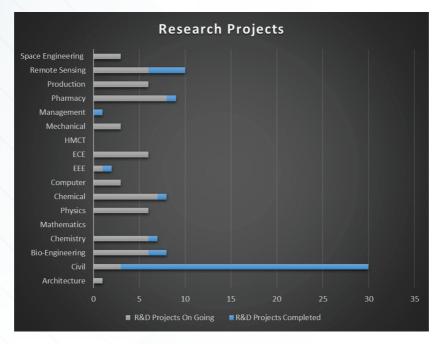
The Institute is committed to high-end R & D activities and supports it through Seed Money, Institute Fellowships and Travel Grants for National & International seminars, symposia, and conferences.

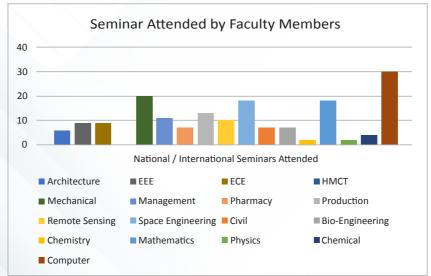
During the period of March 2018 to Feb 2019, 308 faculty members were supported by the Institute to attend National Seminars, and many faculty members were supported financially to attend International Conferences. 44 Ph.D. scholars are being provided with Institute Research Fellowships.

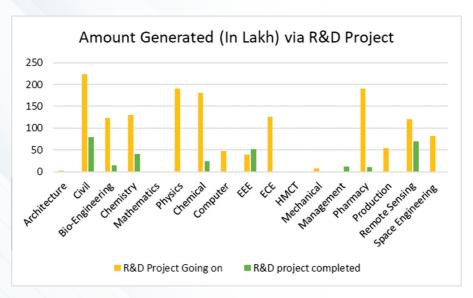
The high Level of Research conducted at BIT Mesra has led to grants from National / International agencies like UGC, CSIR, DST, DAE, BRNS, ISRO, DRDO, ARDB, DBT, AICTE, NAMPET, C-DAC, ICAR, Govt. Of Jharkhand, BMBF through sponsored projects and consultancies.

The Institutes's research achievements are reflected by the following data:









Publication in Journals	:	344
Publication in Proceedings	:	169
R&D Projects Granted	:	02 (9.1 Lakh)
On-Going R&D Projects	:	60 (14 Crore 25 Lakh)
R&D Projects Completed	:	38 (3 Crore 54 Lakh)
Books Authored/Chapters	:	166
National / International Seminars/ Conference Attended	:	160

During the last few years there has been a lot of thrust on improving the quality of research by faculty members of the Institute. This has resulted in an improvement in the number of citations of our publications. This improvement is reflected in the data presented below

5.1 CITATION IN SCI-EXPANDED, SSCI, A&HCI, ESCI

Year	Total No. of Citations per year	No. of Publications
2016	3345	240
2017	3692	221
2018	4246	239

5.2 SEMINARS/ SYMPOSIA/ SHORT TERM COURSES ORGANISED

The Institute and its other Campuses organized more than 140 Conferences/ Seminars/ Symposia/ Workshops. These include 21 national and 1 International Conferences/ Seminars/ Symposia/ Workshops which were organized in BIT, Mesra, 3 Entrepreneurship Awareness camp organized by Department of Science and Technology, Government of India, and 10 National and 4 International Conferences/ Seminars/ Symposia/ Workshops organized by BIT, Jaipur. Delegates from BIT, Mesra were invited in more than 80 national and 12 international level Conferences/ Seminars/ Symposia/ Workshops. Some of them are:

- The Department of Space Engineering and Rocketry organized the 32nd National Convention of Aerospace Engineers jointly with the Jharkhand State Centre of the Institution of Engineers, India during October 27-28, 2018
- Department of Civil and Environmental Engineering organized a workshop on Mine Slope Stability and Mine Environment Safety on March 21-22, 2018
- Department of Chemical Engg. Organized Workshops on "Industrial Process Simulation" on 16-20 May 2018
- Department of Physics organized Science Academies' Refresher Course on "Experimental Physics" on 14-29 June 2018
- TEQIP has supported to organize, International Conference on Computational Intelligence (ICCI 2018) on 10.12.18 to 11.12.18, Workshop on Outcome-based Education on 18-19 March 18, Workshop on Industrial Process
- Simulation on 16-20 May 18, Workshop on Lab safety: Pitfall & Remedies" by ICT Mumbai on 17 December 2018, Entrepreneurship Development Cell.
- Program Flagship Fest E-Summit 19 on 19.01.19 to 20.01.19, Workshop sessions on "Grab Your Opportunity" by Mr. Waghmare under Twinning program with ICT Mumbai on 28.01.19 to 01.02.19, Mock document verification for NBA visit by ICT Mumbai on 05.11.18 to

06.11.18, Lecture series on "Particle Physics" and "Ceramics" by Mr. Paresh Salame & Mr. Mohan Narayan under Twinning program with ICT Mumbai on 28.01.19 to 28.01.19

- Summer school on Wireless Communication using Network Simulation tool was organized at BIT, Jaipur campus, Jaipur from 14-18 May 2018
- Entrepreneurship Awareness Camp was organized at BIT, Jaipur campus, Jaipur funded by Department of Science & Technology, Govt. of India on 3-5 October 2018
- One day Seminar on Documentary Film Making and Screening of International Animation Films Was organized at BIT, Jaipur campus, Jaipur funded by Jaipur International Film Festival (JIFF) on 21 Jan, 2019. Internationally acclaimed personality, Harikrishna Anandan, from Switzerland, Hussain Nuri, from Iran, ArzuQaderi, from U.K., Amr Gamal, from Yemen, shared their knowledge.

5.3 CONSULTANCY

- Scrutiny of DPRs under PMGSY, 21.2 lakhs, State Technical Agency (STA) Team –
 Prof. Anand Kr. Sinha, Prof. Bindhu Lal, Dr. Arun Kumar
- 3.54 Lakhs INR received from Jharkhand Government for construction and renovation of toilets for government schools in Jharkhand by Dr. Kirti Avishek & Mr. Apurv Ashish.
- Slope Stability Study, 34.0 lakhs, PI Dr.Indrajit Roy
- Slope Stability Study of Fly Ash in Kargali OCP, 1.0 lakhs, PI Prof. Sudeshna Chakravarty
- Vetting of Design of SCERT Building, Mahendru, Patna, 1.35 lakhs, PI Prof. Birendra Kr. Singh
- Vetting of Design of Workshop Building of SDI at Taraboi, Bhubaneswar, 1.33 lakhs, PI Prof. Birendra Kr. Singh
- Consultancy Work of Rural development has been taken by Mr. PK Manoharan Dept of Production Engineering from MASSP, NABARD.

6. NATIONAL AND INTERNATIONAL EXCHANGE PROGRAM

Since its inception in 2017, the Immersive Summer Research Experience in US universities have gained popularity and momentum with students. This program was started with an objective of exposing our students to world-class research in their domain of specialization. There has been immense value addition in the thoughts and concepts of the students from an academic as well as research point of view after completion.

The total cost of the program is shared on the $1/3^{rd}$ basis by our Alumni Association in North America (BITMAA-NA), BIT Mesra, and the students. In 2017, 11 students were sent to Illinois Institute of Technology, Chicago during the summers to undergo the experience. In 2018, Carnegie Mellon University, Pittsburgh was added, and 3 students were sent there in addition to 9 students sent to Illinois Institute of Technology, Chicago. This year another group of 9 students will be sent to Illinois Tech and 5 students to Carnegie Mellon. We are in the process of exploring possibilities to include more such universities in Europe, Japan & Australia. Some of the other details are as follows:

- Mr. Dominik Weckmuller from Heidelberg University visited the Department of Remote Sensing, BIT during 19th May to 8th July 2018 for carrying out his Summer Research Internship funded by DAAD-RISE, Germany
- Prabhat Ranjan Tripathy, Ph.D. Scholar, attended Short Term Project on PCB Design and Power Converter at Nanyang Technological University, Singapore from July Aug.2018
- Dr. Debomita Ghosh has been declared the winner of Main Award in Typhoon HIL'10 for 10 award Program in Feb. 2019

7. INFRASTRUCTURE DEVELOPMENT

- Institute continues to build a state of art infrastructural resources to support academic and extracurricular activity. A few of them are as follows:
- Upgradation of Metallurgy and Metrology Lab Procurement of Muffle furnaces, Specimen cutting equipment, the Surface profile measuring apparatus, Electronic comparator, Gauges, Digital measuring equipment
- CNC milling center was installed for CAM Laboratory
- Energy Management Department is engaged in the Augmentation of Power Distribution System by up-gradation of 11kV Air Insulated Substation to 33kV Gas Insulated Substation along with SCADA to meet the high-power demand of BIT Mesra campus.
- It has also managed the installation of 700kW peak Roof Top Solar Power Plant which is operational from October 2018. After this installation, BIT Mesra campus have 1MW peak Solar Power, Plant
- Department of Civil and Environmental Engineering installed the multi-channel speciation sampler with all in one weather station
- Training and Placement department has been renovated and furnished with the latest technology.
- Music room up-gradation has been completed for student activity.
- A new building for the Club House has been completed. A well equipped Gym, indoor and outdoor game facilities were installed for club activities.
- Various Administrative blocks such as Admission Section, Student Academic Section, Registrar & General office, and Purchase Section has been renovated and furnished.
- Renovation of the Examination Department is going on, and the first phase is completed
- Three Children Parks have been developed with open gym and play equipment for campus residents.
- Girls Hostel No 8 is renovated with one additional floor.
- Renovation of the Institute Guest House and Old Guest House is completed.
- An Indoor Multi-Gym with the latest equipment has been Installed in Physical Education and Sports Department for boys and in Hostel No-8 & 9 for Girls.

8. MOUs / COLLABORATIONS

- International MOU Collaboration with Institute of Molecular and Cell Biology, Biomedical Sciences Institutes, Singapore since 2018 for Medical Chemistry and Drug Discovery
- International MOU Collaboration with Kagoshima University, Japan since 2018 for Antiviral Drug Discovery
- National Collaboration with Department of Pharmaceutical Sciences, Central University of Punjab, Bathinda since 2016-continue in the area of Structural/Biological Studies and Drug Discovery
- National Collaboration with Department of Pharmacy, Central University of Rajasthan Ajmer,
 305817, Rajasthan (India) since 2016-continue in the area of Structural Studies and New Chemical Entity (NCE) Exploration
- National Collaboration with KIIT School of Biotechnology, Bhubaneswar since 2016-Continue in the area of Anti-diabetic Drug Development

- National Collaboration with National Centre for Cell Science (NCCS), Pune, since 2012 in the area of Anti-HIV Drug Development
- Dr. S. Keshri has collaboration with UGC-DAE Consortium for Scientific Research, Kolkata;
 IUAC, New Delhi and with Prof. N. Perov, Moscow State University, Russia
- Dr. S.K. Mukherjee has collaboration with UGC-DAE Consortium for Scientific Research, Indore and with S.N. Bose Institute, Kolkata.
- Dr. S.K. Sinha has collaboration with Surface Modification Technology Pvt. Ltd.
- An MoU has been signed between our Institute and CGC (Centre for Tele-infrastructure Global Capsule), Aarhus University Denmark on 08 Dec 2018 for joint research collaboration.

9. TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME PHASE -III

The third phase of Technical Education Quality Improvement Programme (TEQIP-III) is fully integrated with the Twelfth Five-year Plan objectives for Technical Education as a key component for improving the quality of Engineering Education with a special consideration for Low Income States and Special Category States and support to strengthen few affiliated Technical Universities to improve their policy, academic and management practices. Based on the excellent performance in TEQIP-I and TEQIP-II and on the strength of our Institutional Development Proposal (IDP) for TEQIP-III, our Institute has been selected for TEQIP-III under which the Institute will receive Rs. 15 Crores for Improving quality and equity in engineering education. BIT is under the twinning arrangements to Build Capacity and Improve Performance of the institutions in partnership with the Institute of Chemical Technology, Mumbai.

- The focus is on Induction programme for the benefit of newly joined students of first year B. Tech, Workshops for pedagogy training, improve student learning, Graduate employability, Faculty and Staff development, Joint Research Projects, Research and Development, Mentoring/Twinning, Management Capacity Development, Industry-Institute Interaction etc., Establishment of Infrastructure for SWAYAM PRABHA, enhanced GATE participation rate and Joint activities with Industry are among the main objectives of TEQIP-III. Some of them are as follows:
- The computerized test set up of Single Cylinder Automotive CRDI Dual Fuel Research Engine Test Set-up with Open ECU has been purchased through TEQIP-III for Mechanical Engineering department
- Remotex has been purchased for Central Library
- Terset, Voxler, Watershed Modeling& 3-D Modelling (UAV) processing S/W has been purchased for Remote Sensing Department
- Plaxis Software and SPSS Statistical Software have been purchased for Civil & Env. Engg.
 Dept
- EDS detector has been purchased for Central Instrumentation Facility of the Institute.
- One hundred eighty-two faculty members were financially supported for attending seminars, conferences, workshops, training programmes etc. under TEQIP.
- Out of twenty clubs and societies, some of them were funded for workshops and technical activities by TEQIP-III
- Workshop on Lab safety: Pitfall & Remedies" and Workshop sessions on "Grab Your Opportunity" by ICT Mumbai is supported by TEQIP-III
- International Conference on Computational Intelligence (ICCI 2018) is supported by TEQIP-III

 Prof. R.S Pant of IIT Bombay & adjunct Professor of SE&R dept. Delivered a talk on "Stratospheric airships" and a brief on Preparation and making of Hot Air Balloon" in the Dept. of Space Engg & Rocketry on 29th Oct. 2018.

10. EMINENT VISITORS/DELEGATION FROM OTHER ORGANISATIONS

- Dr. Bhim Singh, Dean (Academic Program), IIT, Delhi, Dr. S. Biswas, Ex-Dean (Academic Program), IIT, Bombay, Dr. N. Nayak, Associate Professor, IIT Kanpur, visited on 25th Jan 2019 for review of Centre of Excellence
- Professor Janat Shah, Professor Puspendu Das & Professor Ramesh Singh visited BIT Mesra as Academic Advisory Board members.
- Dr. Shyama Prasad Das, Professor IIT Kanpur, Dr. R. K. Saket, Professor IIT-BHU, Varanasi and Mr. Sharat Kumar, Chief, Tata Steel Ltd on 07th Jan. 2019 to review Centre of Excellence proposal of the EEE department
- Mr. Sharat Kumar, Chief, Tata Steel Ltd. delivered a guest lecture in the Department of Electrical and Electronics Engineering on Electric Automation in Tata Steel and Technical Advancement on 28th Sept. 2018
- Dr. Ranjit Mahanty, Professor in Dept. of EE, IIT-BHU delivered invited talk on Reactive Power Compensation and Harmonic Filtering on 12th July 2018
- Dr. Peter Hooda and Dr. Rosa Busquets, Kingston University, London, UK visited the Department of Civil and Environmental Engineering.
- Prof. Ramjee Prasad visited the ECE department and delivered an Invited talk on the theme
 of CTIF Global Capsule (CGC) and its Global impact on 12 Dec 2018. He is our alumni,
 and presently he is a Professor of Future Technologies for Business Ecosystem Innovation
 (FT4BI) chair, Aarhus University, Denmark
- Lt. Gen. (Dr.) V. J. Sundaram, PVSM, AVSM, VSM (Retd.), Advisor, Micro and Nano Systems, National Design & Research Forum, Bangalore on Sep. 15, 2018
- Shri S. Somanath, Director VSSC visited on Oct. 27, 2018
- Dr. S.K. Mishra, Director Brahmos visited on Oct. 28, 2018
- Shri. S. Pandian, Director Satish Dhawan Space Center visited on Oct. 27, 2018
- Dr. (Mrs.) Tessy Thomas, DG-Aero DRDO visited on Oct. 27, 2018
- Padmashri R. M. Vasagam, Retired Scientist VSSC visited on Oct. 27-28, 2018
- Prof. Jacob Cohen, Faculty of Aerospace Engineering, Technion-Israel Institute of Technology Haifa visited on Aug. 14, 2018
- A delegation team of Expert Members of National Board of Accreditation (NBA) visited on April 20-22, 2018.
- Dr. Mohammad Jawaid Professor, Laboratory of Biocomposite Technology, Institute of Tropical Forestry & Forest Products (INTROP), University Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia visited on 27th September 2018
- Ms.Mridula Shekhar (Chief Marketing Officer, TATA AIA Life Insurance) visited on 16.02.2019
- Mr. Ravi Pandey, Presales Consultant at Kronos Incorporated visited on 16.02.2019
- Mr. Gyanendra Niraj AGM and Office In-charge, SEBI Ranchi visited on 07.02.2019

- Ms. Smita Chakraborty, Zonal Head Marketing (East), ICICI Securities visited on 17.01.2019
- Dr. Mohan Narayan, Assoc. Professor, Dept. of Physics, ICT, Mumbai visited on 28.01.2019.
- Dr. Paresh Salame, Dept. of Physics ICT, Mumbai visited on 28.01.2019
- Prof. K. Niranjan, Professor, Department of Physics-Andhra University, Visakhapatnam visited on 26.02.2018
- Dr. (Mrs.) Rita Paikaray, Associate Professor, Dept. of Physics, Ravenshaw University Cuttack-753003, Odisha visited on 06.03.2018
- Dr. Subroto Mukherjee, Professor, Associate Dean Academic Institute for Plasma Research,
 Bhatt, Gandhinagar Gujarat, visited on 01.05.2018
- Prof. Ramaswami Srinivasan, Fellow, Indian Academy of Sciences, Bangalore visited on 14.06.2018
- Prof. G. Umesh NITK, Surathkal visited on 15.06.2018.
- Prof. Ram Anjore Yadav, Professor, Dept. of Physics, Institute of Science, Banaras Hindu University, Varanasi 221005 visited on 19.06.2018.
- Prof. S. K. Samdarshi CUJ, Brambe, Jharkhand visited on 25.06.2018
- Prof. P. K. Datta, IIT, Kharagpur (WB) visited on 27.06.2018
- Dr. Japes Bera, Professor & Dean (PD), Dept. of Ceramics Engineering National Institute of Technology, Rourkela, Odisha-769008 visited on 20.07.2018
- Prof. R. K. Mall, Professor, Institute of Environment and Sustainable Development, Banaras Hindu University, Varanasi 221005 visited on 18.08.2018
- Dr. G.N. Singh Director Indian Pharmacopeia Commission Ghaziabad, Dr. Ramakrishna, Dy Drugs Controller, Govt of India and Dr. Kalaiselven Coordinator Pharmacovigilance Programme, Govt of India were the part of CEP program of Pharmacy Council of India in The Department of Pharmaceutical Sciences & Technology.

11. AWARDS/DISTINCTION RECEIVED AND VISITS IN INDIA & ABROAD

- Dr. Anand Kumar Srivastava, Assistant Professor, Physics department presented an Invited lecture entitled "Stationary and Moving Pattern formation in Surface Dielectric Barrier Discharge Plasma" at 106th Indian Science Congress, LPU, Panjab on 5th January 2019.
- Dr. Roopali Sharma, Professor, Management Department received best paper award for research Paper titled "Water Security in India: Linking Role of Institutions, Human Resources & Policy for Sustainability of Operation & Maintenance", presented in International Conference on Innovations in Technology & Management for Achieving Sustainable Development Goals (GDGs) organized by J.K. Laxmipat University, Jaipur on February 1-3, 2019
- Mr. Snehanshu Shekhar, Assistant Professor, ECE Department elected as an executive committee member of IETE Jaipur Center (2018 2020).
- Dr. Danbahadur Pal (TEQIP Faculty) got Research Ratna Award 2019, as "Outstanding Researcher in Performance of catalytic Water Gas Shift Reaction by" Rula Awards
- Prof. Sudip Das received an award of Eminent Engineer 2018 from ASDB, IEI
- Prof. Mohan Varma has been awarded outstanding contribution in reviewing for Propulsion & Power Elsevier Journal

- Dr. Shelly Biswas has been awarded outstanding contribution in reviewing for Fuel Elsevier Journal
- Dr. Sraboni Dutta, Associate Professor, was selected for the AICTE-UKIERI Technical Leadership Programme 2018
- Dr. Anupam Ghosh, Assistant Professor, was elected as Joint Secretary of IIT Alumni Association: Ranchi Chapter (2018-2020)
- Dr. R.N. Gupta received Pharmaceutical Scientist of the Year Award 2018, Prof ML Khorana Best Paper Award, IPA President Oration Award 2018. He has been also elected as National Vice President of Indian Pharmaceutical Association by Indian Pharmacopeia Commission
- Dr. Manik received all India 2nd Rank in Mentoring Educators in Educational Technology FDP301x (MOOC) conducted by IIT Bombay under Pandit Madan Mohan Malaviya National Mission for Teachers and Teaching (PMMMNMTT), MHRD, GoI from May 17th, 2018 to June 27th, 2018
- Dr. C. Jeganathan was selected as one of the Indian Delegates to visit Lancaster University,
 UK to participate in the International workshop. He has delivered lectures and has been
 the keynote speaker in several national and international conferences. Dr. Jeganathan's
 proposal was selected under the DAAD-RISE program, and the fellowship was awarded to
 one German student Mr. Dominik Weckmuller from Heidelberg University.
- Dr. N. Patel received an outstanding reviewer award from a reputed journal called "Remote Sensing of Environment." He is also the associate editor of so many other journals.
- Dr. P.R. Thakura has been working as Vice-Chairman of IETE Ranchi Chapter from Nov. 2018. & been invited as Guest Editor for International Journal of Power & Energy System, Acta Press in Special Issue on "Green Energy Conversion Systems Based on Advanced Modelling and Simulations Techniques," Feb.2019.
- Dr. D.K. Mohanta has been appointed as Associate Editor of IEEE Access, Subject Editor
 of IET Generation, Transmission and Distribution, Guest Editor-in-Chief of Special Issue
 on Emerging Trends in System Integrity Protection Schemes (SIPS) for Improving the
 Performance of Smart Grid, IET Proceedings of Generation, Transmission, and Distribution,
 Editor of Electric Power Components & Systems, Taylor & Francis Publications
- Dr. Chinmay Chakraborty received the Young Research Excellence Award, Global Peer Review Award, Young Faculty Award, Venus International Faculty Awards. He was one of the speakers for AICTE sponsored FDP and CEP Short Term Course
- Dr. V.S. Rathore from Department of Remote Sensing was conferred with the "Samaj Bandu Award" in the category of RS, GIS and Sace Sciences by "Prantik Care The Earth" a non-Governmental organization, Birbhum, West Bengal on 2nd August 2018
- Department of Remote Sensing organized "One Day Workshop on National Information System for Climate and Environment Studies (NICES) Data Products" fully sponsored by National Remote Sensing Center (NRSC, ISRO, Hyderabad) and around 200 participants attended the programme. Dr. Mili Ghosh coordinated the workshop, and Dr. C. Jeganathan and Dr. A.P. Krishna were the conveners

12. STUDENTS' ACTIVITIES

The Institute promotes multi-dimensional growth in different facets related to students. The students showcased their talents and responsibilities by organizing, participating and being victorious in various programmes of social, cultural and technical in nature.

12.1 NSS

Birla Institute of Technology, Mesra offers NSS as a co-curricular subject in all undergraduate programs for 1st and 2nd year students. NSS, BIT Mesra organizes regular and special activities in the ten adopted villages namely, Rudia, Panchauli, Kenduatoli, Humbai, Mesra East, Mesra West, Neori, Chuttu, Kedal, and Navatoli.

NSS provides opportunities to the students to play their role in planning and executing development projects which would not only help in creating durable community assets in rural areas but also result in the improvement of the quality of life of the economically and socially weaker sections of the community. It encourages youth to participate enthusiastically in the process of national development and promote national integration, through corporate living and cooperative actions. Looking at the dedication and dimension of work, the Ministry of Youth Affairs and Sports, Govt. of India has allocated ten units of NSS to the University.

During the period NSS has notable achievements which are as follows:

- NSS President Shalini Lala was selected for the International Youth Delegation Exchange Program 2018 and represented India in China
- A delegation of volunteers was selected from NSS BIT Mesra to represent Jharkhand in the National Integration Camp 2018 held in Ranchi
- A delegation of volunteers was selected from NSS BIT Mesra to represent Jharkhand in the Cultural Exchange Program held under Ek Bharat Shresht Bharat

Besides these, NSS organised National Youth Day, Clothes and Books collection drives, Cashless Awareness program, Swachh Bharat Abhiyan, Blood Donation Camps, Eye check-up Camps, Plantation Drives, Disease Awareness Campaigns, NSS Day, Literacy Program, Awareness program, Rallies, International Yoga Day, Support to Old age home, Orphanage and Cheshire home and Prabhat Pheris.

12.2 CLUBS AND SOCIETIES ACHIEVEMENTS

Some of the achievements of clubs and societies are as follows:

- The Photographic Society of BIT Mesra conducted their annual photo-fest called Utkrisht from the 27th September 2018 to 29th September 2018, incorporating a Photo Gallery showcasing the best of clicks made by the participants.
- Ehsaas-the Dramatics Society of BIT Mesra were the Winners in Street Play Competition, Runners up in Stage Play Competition at IIM Ranchi.
- The Music Club of BIT Mesra won 3rd Position in Mantra-Eastern Battle of Bands, 2nd Position in MI's Got Talent in Mood Indigo'18 IIT Bombay.
- The Music Club of BIT Mesra won 2nd Position in Advaita- Battle of Bands, 3rd Position in Kriti-OC Competition.
- The News and Publication Society won 2nd Prize in 'Reportage' in Mood Indigo, IIT Bombay, Asia's Largest Fest, and 2nd & 3rd Prize in 'A Mighty Pen' in Springfest, IIT Kharagpur.
- Team Aveon Racing's Participated in e-BAJA SAEINDIA Competition 2019 organized by Mahindra in Pithampur, Indore Secured Overall Rank 5th Ranks in the event.
- The team of Firebolt Racing has been declared as Best Team East India in BAJA SAE INDIA.
- The Team Srijan has been declared 11th Overall in Formula Bharat'18.

12.3 SPORTS ACTIVITIES

• Third Annual Sports Fest Vajra and 28th Chetan Devraj Memorial East Zone Inter Technical Institute/College Cricket Tournament was organized from 02.11.18 to 04.11.18. Twenty-six teams participated in this tournament.

- BIT MESRA emerged the winner. BIT Mesra won the championship of 28th Chetan Devraj Memorial East Zone Inter Technical Institute/College Cricket Tournament.
- 33rd Annual Athletic Meet commenced on 1st 3rd February 2019. Ankit Binha of Hostel 6 was awarded as the Best Athlete in men's category while Anupama Kachhap hailing from the 2k17 batch was declared as the Best Athlete in women's category. The award for the Best Performance was presented to Ankit Singh Chauhan for breaking the 51-year-old record in Hammer Throw. The most awaited Sports Person of the Year award was presented to Marshal Soren from the final year.
- Body Building competition 2018 2019 was organized on 04.09.2018. Mr. Mayank Dubey won the Championship and was declared Mr. BIT
- BIT Mesra Institute Team participated in IIT Kanpur Sport's Fest UDGHOSH from 3rd Oct 18 to 9th Oct 18. Badminton(W) team won Bronze Medal in the Finals.

12.4 AWARDS RECEIVED BY STUDENTS

- Chemical students Anamika Sinha and Shreya Sinha bagged 1st rank in TATA Steel Mind over Matter competition.
- Gourav Rakshit and Priyanka Chandra of M. Pharm. 2nd Year have received the second prize in IPA Convention 2018.
- Vibe, a team led by B.E. (Information Technology) student Saakshi Srivastava participated in Smart India Hackathon 2018 organized by the Government of India and stood 2nd under the Department of Post, Ministry of State (IC) of Communication. Other team members were Siddhau Jain, Sree Ashlesh Penisetty, Dhriti Kumari, Ankit Kumar Singh, and Pamireddy Suchritha.
- Aditya Singh, a pre-final year student, got the first rank in the Zonals in the World Skills Competition, organized by the Ministry of Skill Development. He also received a cash prize of Rs. 21, 000/-
- Abhayankar Joshi and Poulomi Chakraborty bagged first and third prize respectively in JAM, organized in Springfest'19 at IIT KGP
- A team of six members from Dhwani- Music Club, BIT Mesra bagged the third prize in Mantra- the eastern battle of the band's competition in Mood Indigo'18, IIT Bombay, Asia's Largest Cultural Fest. The students were Samadrito Bose, AyushKhedia, Md. Shamil Khan, Saket Anand, Nachiket Agni, and Atvik Singh
- Ehsaas Dramatics Society bagged the first position in Street Play Competition and Second Position in Stage Play Competition in Rush, the cultural festival of IIM Ranchi.
- Toshi Priya from Dhwani- Music Club, BIT Mesra bagged the first position in Swar- the solo singing of Kashiyatra- Annual Cultural Fest of IIT BHU.
- Team Aveon Racing participated in e-BAJA SAEINDIA Competition 2019 organized by Mahindra in Pithampur, Indore and secured overall Rank 5th. Ranks in individual events were- 6th in Cost Presentation, 3rd in Sales Presentation, 5th in Design Evaluation, 3rd in Statics and 4th in Endurance.
- Team Arcade of BIT Mesra consisting of Anukriti Jha, Muskan Gupta, Amrita Singh, and Kajal Gupta was declared Runners up in Hack-a-Bit, the hackathon of BIT Mesra.
- BIT Mesra was declared overall champions of Vajra'18- Annual Sports Fest.
- Ankit Binha and Anupama Kachhap were declared best Athlete in Men's and Women's Category respectively in the 33rd Annual Athletic Meet, BIT Mesra.

- Marshal Soren received Best Sportsperson of the year award in the 33rd Annual Athletic Meet.
- Dhwani- Music Club, BIT Mesra bagged 2nd prize in Advaita- Battle of Bands and 3rd Prize in Kriti- OC Competiton in Kashiyatra, the Cultural Festival of IIT BHU.
- News and Publication Society bagged Second Prize in Reportage in Mood Indigo, IIT Bombay,
 Asia's Largest Cultural Festival.
- News and Publication Society bagged second and third prize in A Mighty Pen in Springfest,
- Puronjoy Sen of Music Club bagged second prize in MI's Got Talent in Mood Indigo, IIT Bombay.
- Dance Club, BIT Mesra bagged the third position in Springfest, IIT KGP.
- Priyanshu of Ehsaas Dramatics Society bagged First Prize in Pratidwand at Rendezvous, IIT Delhi.
- Puronjoy Sen, Snehil Baba and Arpan Mitra of Music Club received second, third and third prize respectively in Sanlayan, the instrumental competition of IIT BHU.
- AyushKhedia of Dhwani Music Club- BIT Mesra received the Best Bassist Award in Sargam of Springfest, IIT KGP.
- Dance Club, BIT Mesra bagged first prize in Rush, IIM Ranchi.
- Dance Club, BIT Mesra bagged Second Prize in Valhalla Ensemble, XLRI.
- Ms. Saloni Solanki, department of CSE secured 99.91 percentile in the prestigious Indian Institute of Foreign Trade (IIFT) Entrance examination
- Utkarsh Mishra, Aditya Sharma and Shreeyash Haritashya department of ECE received the best paper award in 61st IETE annual convention held at Amaravati, Maharashtra, on September 29-30, 2018
- Aditya Sharma department of ECE elected as a student representative in the executive committee of IETE Jaipur center (2018 - 2020)
- Manish Soni (Ph. D Scholar) awarded Second Best Conference Paper for the paper entitled "Application of Artificial Neural Networks for fog forecast over Delhi, at Poornima University, Jaipur in National Conference on Innovative Trends in Civil Engineering (NICTCE-2018), 13-14 April 2018.
- Chandan Singh Shekhawat, Anchal Kediyan, and Hansjeet Duggal Students of Animation & Multimedia created an animated short film "FREIHIT" which is honored in ANNECY Film Festival, France from 11th to 16th June 2018. The Film is prepared by one existing student and two passed out students collectively from A & M Dept. BIT Jaipur Campus.
- Archit Agarwal Student of B.Sc. Animation & Multimedia created the film "MAYA" which has been selected in "Best of India Short Film Festival" at Santa Monica, USA. Received award in Dheradun International Film Festival. Also won an award in Kaleidoscope-Catharsis Film Festival 18, BITS Pilani- Hyderabad Campus.
- Sweta Jha & Saket Sagar students of VI Semester secured third place in ARCHUMEN 18-19. The Eastern Interface (India's biggest quiz for the students of architecture) held on 8th February at KIIT, Bhubaneswar.

- Kousumi Mukherje, Roshan Kumar, Samiksha Gupta ranked First in Technical Quiz "IDP Quiz" organized by ICT Mumbai
- Ananya Kant ranked First in Industrial Problem solving named as "Women of Mettle" organized by TATA Steel
- Anamika Sinha ranked First in Industrial Problem solving named as "Mind over matter" organized by TATA Steel
- Anurag Gupta, ME student, received the best paper award in National Conference on Renewable Energy and Environmental Challenges (NCREEC 2018), 26-27 Feb 2018, NIT Jamshedpur, Jharkhand.
- Shreya BE students secured 1st position in Mind Over Matter competition. Pre-placement offer in TATA STEEL and received 1 lakh rupees cash prize which was Organised by Tata Steel R&D Team at Jamshedpur.
- Aditya Singh BE students secured the First rank in the zone in the world skills competition
 Organised by National Skill Development Corporation (NSDC), Ministry of skill development
 and entrepreneurship, Govt. of India held at Bengaluru
- Ms. Swadhina Koley (Ph.D. Scholar of Remote Sensing Department) received the Best Paper Award for her paper "Geospatial technology: the emerging global trend towards the new horizon of sustainable agriculture". presented in the National Conference for Education in Science, Mathematics & Technology, Organised by Taurian World School, Ranchi, 11th August 2018.
- Ms. Vamika Parmar, 4th year, ECE and Ms. Pragya Giyani, 4th year, CSE acquired 1st Prize (Rs. 75000/-) with Incubation offers from 2 organizations in StartUp India Jharkhand -2018 (The Entrepreneurial Idea has been selected for seed money from GoJ Department of E-Governance)
- Mr. Aman Sharma, 4th year, CSE and Mr. Vedant Tibrewal, 3rd Year, IT acquired 2nd Prize (Rs. 50000/-) with Incubation offers from ABVIL in StartUp India Jharkhand -2018 (The Entrepreneurial Idea has been selected for seed money from GoJ Department of E-Governance)
- Vibhor Singh & Team of three 3rd Year students of Dept. EEE received consolation Prize with Incubation offer from Atal Innovation Lab, Noida
- Mr. Chandan Kumar Verma begins a startup named as "Green Factory" which came under 3000 out of 20000 startups in India at a competition held at IIM Kolkata on 16.02.2018. It has been selected for incubation and seed fund from Amazon web services worth Rs. 50000/-. An amount upto Rs. 1000000/- has been sanctioned for a start-up named "GREEN FACTORY Pvt. Lt
- Ms. Suparna Roy Sarkar received best poster award at 6th International Congress of Society
 of Ethnopharmacology for the paper "Title Role of Probiotic in gut dysbiosis associated
 cognitive decline in mice."
- A group of VI-th Semester students of B. Pharm. received 12 Prizes in different categories at IIT Fest held at IIT, BHU
- Mr. Dharmik Joshi received BEST STUDENT EXCELLENCE AWARD by Indian Drug Manufacturer's Association (IDMA)

13. ALUMNI EVENTS

- In the Academic Year 2018-19, the Institute has organized five alumni reunions so far.
- Alumni from the 1962, 1963, 1964 and 1973 batches have attended campus reunions with a total participation of 250. The Images below show the reunion of 1963 and 1964 batches.





- Further our Alumni association in the USA, BITMAA-NA has supported twelve students for ISRE 2018 (Immersive Summer Research Experience) in Carnegie Mellon University, Pittsburgh, USA and Illinois Institute of Technology, Chicago, the USA in this academic year.
- The Institute had also conducted "Ripple, Industry-Academia Symposium," on 31st August 2018 to discuss the significant issue of experiential education and how it can be imparted to the students. Some of our notable alumni from leading organizations had attended the same.

14. AWARD OF DEGREES

• A total of 1337 students are being awarded Degrees in various disciplines, out of which 838 are Graduate Degrees, 387 are Post Graduate Degrees, and 112 are Ph.D. Degree



INTRODUCTION



The Main Building at BIT, Mesra, Ranchi

Birla Institute of Technology, Mesra was established by the renowned philanthropist and visionary industrialist, Late Sri B. M. Birla in July 1955. Initially it was started as an affiliated college of the erstwhile Bihar University and later in 1960 upon creation of the new university in the state; its affiliation was transferred to Ranchi University. In pursuance of the recommendation of the Education Commission Government of India (1964 -1966) and on the basis of the report of a joint selection committee of the UGC and AUDIT, in March 1972, the Institute was granted the status of an 'Autonomous' college by making special provision in Bihar State University Act. The chancellor of the University of Bihar made the rules for its governance.

The achievement of the Institute in terms of research and excellent academic program led to its attaining the status of a deemed university under section 3 of the UGC act in August 1986.

The Institute has constantly improved on its technical facilities as well as in academics in order to keep pace with the fast changing technology scenario, thereby acquiring a pride of place amongst the institutions offering technical education in the country. This Institute celebrated the golden jubilee of its establishment in the year 2005 reaffirming its commitment to the cause of higher education.

Administration

BIT Mesra is a "Deemed to be University" under sec. 3 of the of the U.G.C act 1986. It functions under the overall supervision, direction and control of a high-powered Board of Governors, comprising representatives of all the Ministry of Education, Government of India, the UGC, the state government, the Chancellor, the A.I.C.T.E., the Hindustan Charity Trust and the Institute faculty. The Governor of the state of Jharkhand is the Chancellor of the Institute. Shri C.K. Birla is the chairman of the board of governors, the composition of the board of governors is given in Annexure - II.

The Academic Council decides the academic policy of the Institute. It controls the approves the curriculum the courses and the examination results. It appoints committee like regulation committee for Undergraduate and Post-Graduate Courses, Semester Program Coordination Committee, Admission Committee, Scholarship Committee, Student Welfare Committee etc. and Departmental Board of Studies to look into the specific academic matters arising from time to time. The teaching training and research activities of various Departments at the Institute are constantly under review for both

facilities and standards. The Vice Chancellor of the Institute is the Chairman of the Academic Council. The members of the Academic Council have been enlisted in Annexure - III.

The Finance Committee gives financial advice to the Institute in matters relating to building work as well. The composition of these committees have been given and in Annexure-IV and V.

The Main Campus, Mesra, Ranchi

The main Campus of the Institute is fully residential and is spread over 780 acres. The main building of the Institute itself covers an area of 30, 000 square meters and accommodates the various research and training laboratory, administrative offices and classrooms

The Workshop Annex has built up area of 4,000 square meters. The laboratory and the office of department of space engineering and rocketry are situated for security reason in a sub campus, about half a kilometer away from the main building the. The campuses is self contained amidst well laid lawn with its own protected water supply, marketing centre, dispensary, Bank and schools the first off campus was established in Ranchi City at Lalpur in 1976 with the experience to support with the spirit is it to support the continuing education program for the working engineers and professionals.

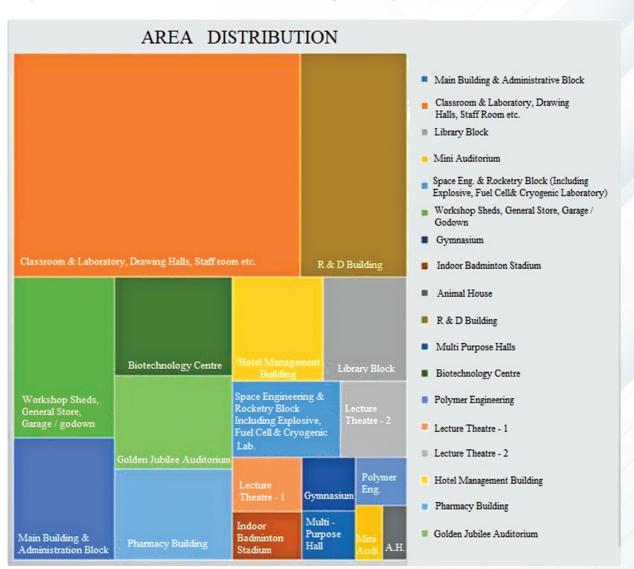


The G.P. Birla Auditorium

	Institute Building	(Sq Mtrs.)
*	Main Building & Administration Block	3700
*	Classroom and Laboratory, Drawing Halls, Staff Room's etc.	19300
*	Library Block	2600
*	Mini-Auditorium	450
*	Space Engg. and Rocketry Block (including Explosive, Fuel Cell and Cryogenic Laboratory)	2490
*	Workshop Sheds, General Stores, Garage/Godown	4880
*	Gymnasium	850
*	Indoor Badminton Stadium	1000
*	Animal House	400
*	R & D Building	7200
*	Multi-Purpose Halls	785

	Institute Building	(Sq Mtrs.)
*	Biotechnology Centre	3477
*	Polymer Engineering	744
*	Lecture Theatre-1	1143
*	Lecture Theatre-2	1535
*	Hotel Management Building	2835
*	Pharmacy Building	3220
*	Golden Jubilee Auditorium	3280
Res	idential Complex	
*	Staff Quarter in Different Categories	422
*	Residential Complex for Supporting Services Guards, Dairy Shopkeepers, Washer Man etc.	116

The campus area distribution is shown in the following treemap visualization.







Staff Residential Block



Student Hostel



The State Bank of India

The NCC Office

Others

- Consumer's Co-operative Stores
- NCC Block
- Rifle Firing Range
- NCC Parade ground



Lecture Hall

IC Arena

Guest Houses

The Institute maintains two Guest houses with a total numbers of 38 furnished rooms and one VIP Guest-House with 3 deluxe bedrooms to accommodate the Institute's Guests.

Auditorium

The Institute building houses an auditorium having capacity of 350 persons. Larger scale events organized at Golden Jubilee Auditorium having capacity of about 3000 persons.

Games and Sports Complex

The Institute has Highway structure sports facilities for Indoor as well as outdoor games. These are as follows:

*	Gymnasium including Multi Gym	1
*	Stadium for track and field for sports/athletics	1
*	Cricket ground including net	2
*	Football ground	2
*	Hockey ground	2
*	Basketball courts	4
*	Volleyball courts	6
*	Tennis courts	6
*	Badminton courts	8
*	Kho - Kho ground	1
*	Kabaddi Ground	1





The Indoor Stadium

The Volley Ball Court

Dispensary Cum Health Centre Facilities available

	•	
*	OPD services (8 A.M. to 12.00 Noon 4.00 P.M. to 8.00 P.M.)	
*	Emergency services (Round the Clock)	
*	Total number of Beds (Male-9, Female-4)	
*	X-Ray	F-10 10 10 10 10 10 10 10
*	ECG	
*	Oxygen Facility	TOWN TOWN THE PROPERTY OF THE
*	Suction Machine Facility	
*	Ambulance Facility	
*	Pathological Lab Facility	
*	Immunization	

Shopping Centre

A well - maintained Cooperative Store provides the daily requirements of the campus residents. Over past few years, additional Shopping Complexes have been developed to meet the day today Sundry needs.

Hostel Facilities for Students

Since the Institute is completely residential, it has 12 boys and 2 girls hostel for their accommodation. All rooms of the hostel are having internet facility. Borders participate in inter - hostel tournaments, indoor and outdoor games, various competitions and adventure trips. Each hostel is having its own well maintained dining hall and a mess committee being managed by the students under the supervision of Hostel Wardens.

Hostel Accomodation

SI. No.	Hostel	Total Rooms	1 Seater	2 Seater	3 Seater	4 Seater	6 Seater	Total Beds	Occupied Beds
1	Hostel-1	131	131					131	129
2	Hostel-2	140	137	3				143	134
3	Hostel-3	153	153					153	149
4	Hostel-4	154	153		1			156	148
5	Hostel-5	333	333					333	316
6	Hostel-6	299	298	1				300	288
7	Hostel-7	312	312					312	298
8	Hostel-8	353	8	326	14	1	4	730	643
9	Hostel-9	373	48	324		1		700	653
10	Hostel-10	426		397	27	2		883	821
11	Hostel-11	426	377	20	25	4		508	465
12	Hostel-12	238	229	9				247	237
13	Hostel-13	273	263	10				283	283
14	Hostel-14	112	112					112	88
		3723	2554	1090	67	8	4	4991	4652

Student Intake and Admissions

Admission in UG Programmes 2018-19 (Mesra Campus)

SI. No.	Co	ourse	No of Seats	Received Application Form	Numbers of Admissions	
1.	B.Tech*	JOSAA				
		NRI	780	*	684	
		EBC/OBC				
		GOI (J&K)				
2.	B.Arch*	JOSAA	40	*		
		NRI			33	
		EBC/OBC				
3.	B. Pharm.		60	472	56	
4.	4. HMCT		40	119	29	
	Total:		920	591	802	

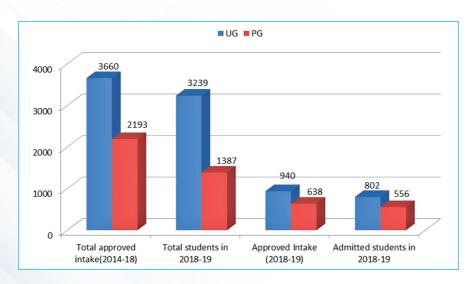
^{*}Since, admission to these programmes is through JoSAA/CSAB. We do not have any data.

SI. No.	Branch	Numbers of Admissions
1	Architecture	33
2	Biotechnology	28
3	Chemical Engineering	48
4	Chemical Engineering(P&P)	34
5	Civil Engineering	54
6	Computer Sc. & Engineering	123
7	Electronics & Communication Engg.	117
8	Electrical & Electronics Engg.	58
9	Mechanical Engineering	117
10	Information Technology	59
11	Production Engineering	46
12	B. Pharmacy	56
13	ВНМСТ	29
	Total:	802

Admission in PG Programmes 2018-19 (Mesra Campus)

SI. No.	C	Course	No of Seats	Numbers of Admissions	
1	MBA			95	
2	MCA		60	52	
3	M. Tech Automated Manufacturing Systems			05	
4	M. Tech Chemical Engineering		18	00	
5	M. Toch Civil Engineering	a). Soil Mech. & Found	12		
Э	M. Tech Civil Engineering	b). Structural Engg.	12	22	
6	M. Tech CAAD		18	03	
		a). Power Elect.	18		
7	M. Tech - EEE	b). Control System	12	19	
		c). Power System	12		
		a). Wireless Comm.	18	12	
8	M. Tech - ECE	b). Microwave	12		
		c). Instrumentation & Control	12		
9	M. Tech Mechanical Engineering	a). Heat Power	12		
	M. Techniechamear Engineering	b). Design of Mechanical Equipment	12	14	
10	M. Tech - SER	a). Aerodynamics	12		
		b). Rocket Propulsion	12	08	
11	M.Tech Bio - Technology		18	04	
12	M.Tech Computer Science & En	gineering	16	13	
13	M.Tech Information Security			02	
14	M.Tech Information Technology			07	
15	M.Tech Energy Technology			04	
16	M.Tech Env. Science & Engg.		18	04	

SI. No.	Course	No of Seats	Numbers of Admissions
17	M.Tech Remote Sensing	18	08
18	M.Sc. Chemistry	15	05
19	M.Sc. Mathematics	15	06
20	M.Sc. Physics	15	11
21	M.Sc. Biotechnology	30	21
22	M.Sc. Geo – Informatics	20	07
23	M.Pharm	75	58
24	MUP	12	12
25	Integrated M.Sc. Chemistry	40	13
26	Integrated M.Sc. Physics	60	46
27	Integrated M.Sc. Mathematics	80	88
28	Integrated M.Sc. Food Tech.	30	17
	Total :	913	556



Students Distribution for Academic Year 2018-19

Admission in Ph.D Programme - 2018 (MO-2018)

SI. No.	Departments	No. of Seats	Numbers
1	Architecture	05	00
2	Bio - Engineering	23	04
3	Computer Science & Engineering	39	10
4	Chemistry	26	03
5	Chemical Engineering	22	00
6	Civil & Environmental Engineering	17	05
7	Electrical and Electronics Engineering	08	06
8	Electronics and Communication Engineering	27	05
9	Mechanical Engineering	16	06
10	Mathematics	17	01

SI. No.	Departments	No. of Seats	Numbers
12	Production Engineering	11	02
13	Physics	21	02
14	Pharmaceutical Science & Technology	104	08
15	Remote Sensing	12	00
16	Space Engineering and Rocketry	09	00
	Total:	357	52

Admission in Ph.D Programme - 2019 (SP-2019)

SI. No.	Department	Number of Seats	Number of Admitted Candidates
1	Architecture	07	01
2	Bio Engineering	20	05
3	Computer Science & Engineering	24	03
4	Chemistry	10	01
5	Chemical Engineering & Tech.	25	03
6	Civil & Env. Engineering	11	04
7	EEE	07	03
8	ECE	21	04
9	Mechanical Engineering	18	02
10	Mathematics	08	01
11	Management	00	00
12	Production Engineering	12	01
13	Physics	14	03
14	Pharmaceutical Sc. & Tech.	22	04
15	Remote Sensing	08	02
16	SER	10	00
	Total	217	37

Convocations, Results and Gold Medalist

Gold Medalist in Convocation – 2018 (BIT, Mesra)

SL.NO.		ROLL NO.	NAME	CGPA		
BACHELOR OF	BACHELOR OF ARCHITECTURE					
1	R	BARCH/10027/13	VALLARY GUPTA	8.85		
BACHELOR OF	ENG	GINEERING (BIOTECHNOL	OGY)			
2	R	BE/10364/14	MAHESHWARI CHALA	8.41		
BACHELOR OF	ENG	GINEERING (CHEMICAL)				
3		BE/10061/14	SANJANA ROY	8.69		
BACHELOR OF	ENG	GINEERING (CHEMICAL EN	GINEERING, PLASTICS AND PO	LYMER)		
4	R	BE/10683/14	VORUGANTI SINDHUJA	8.53		
BACHELOR OF	ENG	GINEERING (CIVIL)				
5	R	BE/10471/14	ABHISHEK ROY	8.84		
BACHELOR OF	ENG	GINEERING (ELECTRICAL 8	& ELECTRONICS)			
6	R	BE/10286/14	GARIMA SHARMA	9.27		

SL.NO.		ROLL NO.	NAME	CGPA
BACHELOR OF				
7	R	BE/10080/14	SHASHANK SHEKHAR	8.89
BACHELOR OF	ENG	SINEERING (MECHANICAL		
8		IR/2K14-23	SHIVANGI CHOPRA	9.04
BACHELOR OF	ENG	GINEERING (PRODUCTION)	
9	R	BE/10592/14	VIKRAM RAJ AMAN	8.62
BACHELOR OF	HO	TEL MANAGEMENT AND CA	TERING TECHNOLOGY	
10	R	BHMCT/10032/14	SAMRIDHI MISHRA	9.16
BACHELOR OF	PH/	ARMACY		
11	R	BPH/10001/14	GAURAV RANJAN	8.62

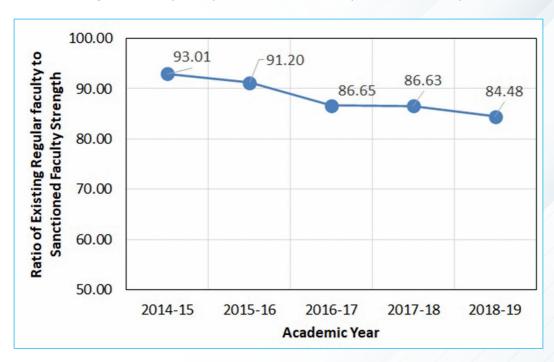
	Degree	Department				Total
		Architecture				1
		Engineering				39
		Management				5
1	Doctor of Philosophy	Pharmacy				22
		Science				30
		Technology				14
				Total		111
2	Post-Graduate Degrees		ID	I	II	Total
		Chemistry	3	6	3	12
	Integrated Master of Science	Mathematics & Computing	3	15	3	21
		Physics	2	4	3	9
	Master of Business Administra		11	77	8	96
	Master of Computer Application		14	12	0	26
		Automated Manufacturing System	3	2	0	5
		Chemical	2	0	0	2
		Civil Electrical	14	1	0	15
	Master of Engineering	2100011001	16	10	1	27
		Electronics & Communication	17	14	0	31
		Mechanical	14	2	0	16
		Space Engineering & Rocketry	7	1	0	8
	Master of Pharmacy		23	6	0	29
		Biotechnology	4	6	0	10
	Master of Science	Chemistry	4	1	3	8
	Master of Science	Geo-Informatics	1	5	0	6
		Physics	6	2	1	9
		Bio-Medical Instrumentation	0	0	1	1
		Biotechnology	3	2	0	5
		Computer Science	7	8	0	15
		Energy Technology	7	1	0	8
	Master of Technology	Environmental Science & Engineering	4	1	0	5
		Information Security	4	1	0	5
		Information Technology	2	2	0	4
		Remote Sensing	4	2	0	6
				_		

	Degree	Department				Total
	Master of Urban Planning		4	4	2	10
			Total			389
3	Under-Graduate Degrees		ID	I	II	Total
	Bachelor of Architecture		26	5	0	31
		Biotechnology	12	4	3	19
		Chemical	38	16	1	55
		Chemical Engg Plastics and Polymer	20	21	5	46
		Civil	43	14	3	60
	Dechalor of Fraincering	Computer Science	94	38	6	138
	Bachelor of Engineering	Electrical & Electronics		10	4	62
		Electronics & Communication		45	4	131
		Information Technology		6	3	56
		Mechanical	90	29	4	123
		Production	37	7	1	45
	Bachelor of Hotel Managemer	nt & Catering Technology	8	7	2	17
	Bachelor of Pharmacy		23	22	4	49
		Chemistry	3	3	0	6
	Bachelor of Science	Mathematics and Computing	1	0	0	1
		Physics		2	0	12
				Total		851
					otal	1351

*ID: I, II

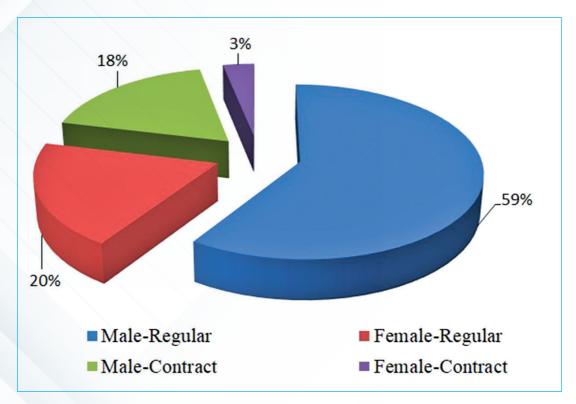
Faculty Strength:

The faculty percentage in terms of total sanctioned post for last five years is presented in the following chart. The faculty segregation based on gender and regular / contractual TEQIP Faculties are also presented in the next figure. Finally a department wise faculty distribution is provided

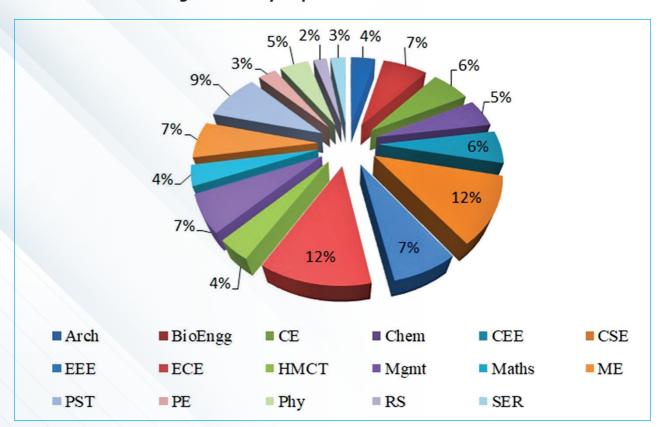


Total Faculty Strength

Total Faculty (Regular and Contract) Gender Distribution



Regular Faculty Department Wise Distribution



DEPARTMENTS

Department of Architecture

SECTION 1

DEPARTMENTAL PROFILE





About the Department:

The Department of Architecture was established at BIT Mesra in the year 1993, in keeping with the multifarious scope of Architecture as the art and science of designing spaces and adding value to a meaningful, built environment. It is a subject which is a combination of faculties of engineering, science as well as arts. The programme is a balanced combination of all these streams, yet follows a unique pedagogical methodology that is its hallmark.

Department of Architecture, BIT Mesra, a leading center for research and teaching in architecture, urban design, and sustainable design, is one of the top-ranking Architecture Department in the country. The department is noted for its meticulous teaching leading to fundamental, applied research and collaboration with leading experts from practice and industry. Since its inception in 1993 with start of B. Arch and 2007 with start of Masters in Urban Planning and PhD, the Department has made substantial contribution in national and international arena by rendering academic and professional services.

The course structure in undergraduate and post graduate is poised between theoretical knowledge and its practical application with ample application-based lab subjects evenly distributed throughout the syllabus. The practical orientation of working in an actual office is also taken care of in the Practical Training subject in the final year of the course.

The Architecture Department has ranked 10 among all Architecture colleges in India as per

NIRF 2019. The Department ranked 6th among all colleges of Architecture in India as per India Today 2019 survey. The Department ranked 2nd among all colleges of Architecture in India as per the survey of GHRDC in 2019.

The Department is a seat of learning powered by state of art laboratories. Architecture students spend time in laboratories and design studios working on a wide variety of projects.

The department houses within its laboratories various softwares including:

- AUTOCAD
- Rhinoceros
- ⊃ NVMET 4.0
- ⇒ ARCGIS 10.4.1
- Bentley -BIM
- ⇒ IBM SPSS Statistics 24

The department also houses a Building Science Laboratory which accommodates within it state of art instruments namely

- Total weather station
- Surface temperature measuring gun
- Data logger
- Light meter
- Indoor Air Quality Handled meter

The Model making workshop accommodates updated instrument like Zodiac Cut Curve 442. The department is also facilitated by A0 printing and scanning facility.

SECTION 2 RESEARCH PROJECTS

- 1. Sponsored Projects (Research and Consultancy)
 - a) Ongoing Projects

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
1.	Developing a Toolkit for Assessing Housing Needs for Scheduled Tribes in Urban Areas	PI: Dr. Smriti Mishra Co PI: Amila Smriti Surin	Birla Institute of Technology, Mesra, Ranchi [under SEED Money Scheme]	July 2019	INR 2,00,000/-	2 years

SECTION 3 SEMINAR / CONFERENCE

2. Conferences / Seminars / Workshops / Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Mrs. Ritu Agrawal	National Information System for climate and Environment Studies (NICES) Data Products	NRSC (ISRO) Hyderabad	Department of Remote Sensing, BIT, Mesra, Ranchi	BIT, Mesra, Ranchi	31 Jan 2019
2.	Dr. Smriti Mishra	National Information System for climate and Environment Studies (NICES) Data Products	NRSC (ISRO) Hyderabad	Department of Remote Sensing, BIT, Mesra, Ranchi	BIT, Mesra, Ranchi	31 Jan 2019
3.	Dr. Bimal Chandra Roy	National Information System for climate and Environment Studies (NICES) Data Products	NRSC (ISRO) Hyderabad	Department of Remote Sensing, BIT, Mesra, Ranchi	BIT, Mesra, Ranchi	31 Jan 2019
4.	Mr. Rajan Chandra Sinha	National Information System for climate and Environment Studies (NICES) Data Products	NRSC (ISRO) Hyderabad	Department of Remote Sensing, BIT, Mesra, Ranchi	BIT, Mesra, Ranchi	31 Jan 2019
5.	Prof. Rizwan Kazmi	"Lime Workshop- A Hands on Experience"	Department of Youth, Art & Culture, GoB	Bihar Heritage Development Society & NIT, Patna	NIT, Patna	06 - 10.04.2019
6.	Prof. Rizwan Kazmi	GIAN Course on "Transdisciplinary Climate Services to prepare for Climate Changes"	MHRD, GoI	NIT, Patna	NIT, Patna	17 - 21.12.2018

SECTION 4 RESEARCH PUBLICATIONS

3. Publications in Journals : (International/National)

1. Sinha Rajan Chandra, Sarkar Satyaki & Mandal Nikhil Ranjan (2018). Development of quality indicators for multi-family residential buildings in India – a Delphi analysis. International Journal of Sustainable Society. 10 (2), 96-122.

SECTION 5

ACTIVITIES/ FACULTY MEMBERS / BOS

4. Departmental Students' Activities

SI. No.	Name of the Activity	Students' Co- Ordinator (If any)	Faculty Co-ordinator (if any)	Date / Duration
1.	2-day workshop on Green Building and Sustainable Practice by GRIHA		Dr. Manjari Chakraborty	30-31 October 2018
2.	2 day Bamboo Workshop by Mr. Ghani Zaman		Dr. Debajyoti Biswas	31 st August – 1 st September 2018
3	2 day Hands on training workshop for construction of brick arches by Axis.edu		Dr. Satyaki Sarkar	30 th – 31 st March 2019

5. List of Faculties

SI. No.	Name	Designation		
1	Dr. Satyaki Sarkar	Assoc. Prof & HOD		
2	Dr. Manjari Chakraborty	Professor		
3	Dr. Debajyoti Biswas	Professor		
4	Mrs. Ritu Agrawal	Asst. Professor		
5	Dr. Smriti Mishra	Asst. Professor		
6	Dr. Bimal Chandra Roy	Asst. Professor		
7	Mr. Rajan Chandra Sinha	Asst. Professor		
8	Mr. Anuj Toppo	Asst. Professor		
9	Mr. Apurv Ashish	Asst. Professor		
10	Ms. Anila Surin	Asst. Professor		
11	Mr. Mrinal Pathak	Asst. Professor		
12	Mr. Pawan Kumar Tiwari	Asst. Professor		
13	Ms. Anjali Pathak	Asst. Professor		
14	Mr. Rizwan Kazmi	Asst. Professor		
15	Ms. Shama Parween	Asst. Professor		

6. List of Adjunct Faculties

SI. No.	Name	Designation	Affiliation
1.	Dr Niraj Verma	Adjunct Professor	L. Douglas Wilder School of Government and Public Affairs, Virginia Commonwealth University

7. Board of Studies

SI. No.	Name of the Member	Designation	Role
1.	Dr. Satyaki Sarkar,	Associate Professor & HOD	Chairman (Ex-Officio)
2.	Dr. M. Chakraborty	Professor	Internal Member
3	Dr. D. J. Biswas	Professor	Internal Member
4	Mrs. Ritu Agrawal	Assist. Prof.	Internal Member
5	Head Dept. of CEE, BIT, Mesra	Professor	External Member
6	Head Dept. of Remote Sensing, BIT, Mesra	Professor	External Member
7	In-charge Dept. Architecture, BIT, Patna	Prof. In-charge	External Member
8	In-charge Dept. Architecture, BIT, RAK	Prof. In-charge	External Member
9	Prof. Swati Saha	Professor, IIEST Shibpur	External Member
10	Ar. Sandeep Jha	Chief Architect, AXIS Ranchi	External Member

SECTION 6 OTHER INFORMATION

8. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
1	Prof. B.K. Sengupta, IIT Kharagpur	07.09.2018	
2.	Ar. Saikat Roy, Gensler Bangalore	26.10.2018	
3.	Dr. Sanghamitra Basu, IIT Kharagpur	07.12.2018	
4.	Ar. Geeta Balakrishnan, Ethos India!	07.12.2018	
5.	Dr. N.R. Mandal, SPA Bhopal	03.05.2019	O O O O O O O O O O O O O O O O O O O



9. List of Distinguished Alumni

SI. No.	Name, Batch and Affiliation	Short Description
1	Tanay Kumar, B.Arch 11/95	B. Arch (BIT Mesra), MVC – (IIT Mumbai), CEO & Creative Director, Fractal Ink Design Studio Email: tanay.kumar@fractalink.com
2	Anijo Punnem Mathew, B.Arch 13/95	B. Arch (BIT Mesra),, M.Des (Havard University) PhD (USA), Academic Director, Illinois Institute of Technology, USA, Email: anijomathew@hotmail.com
3	Subhrendu Das, B.Arch 6/96	B. Arch (BIT Mesra), Masters (Kansas State University), Regional Head, East, Edifice Consultants Pvt. Ltd. Email: subhrendu.d@edifice.co.in
4	Gourab Kar, B.Arch 1/99	B. Arch (BIT Mesra), M.des (IIT Delhi), PhD (Georgia Tech, USA), Research Assistant at Cornell University USA, Email: gourab_kar@yahoo.com
5	Arpita Ray, B.Arch 8/2000	B. Arch (BIT Mesra), MCRP (Iowa State University, USA), Senior General Manager – Change Management, CBRE. Email: arpita.ray@gmail.com



Department of Bioengineering

SECTION 1

DEPARTMENTAL PROFILE





1. About the Department

The Department of Biotechnology was established in 2002 with financial support from the Department of Agriculture, Government of Jharkhand, with objectives like providing education and training facilities, carrying out application-oriented research, developing inhouse technologies and promoting consultancy services in various areas of Biotechnology.

Department at a glance

- Independent building about 35000 sq. ft.
- Young, dynamic and learned faculty
- 1 UG, 2 PG and, Ph.D. Program
- A Center of Excellence (COE) under TEQIP, Phase II sponsored by World Bank
- BTISnet SubDIC Bioinformatics center for Jharkhand
- More than 50 externally funded projects from funding agencies like DST, DBT, UGC, AICTE, ICMR, CSIR etc.
- A mixed balanced of well recognized faculty members
- Rich academic and research profile
- All faculties with minimum Doctoral degree

Programmes offered at a glance

 B.Tech. Biotechnology (4 years) - Accredited by The National Board of Accreditation (NBA)

- M.Sc. Biotechnology (2 years)
- M.Tech. Biotechnology (2 years) - Accredited by The National Board of Accreditation (NBA)
- Ph.D.

Infrastructure for Research

- 12 well-equipped high-end research laboratories dedicated to Molecular Biology, Genetic Engineering and Cell Biology, Plant and Animal Biotechnology, Microbiology, Biochemistry, Proteomics, Molecular Plant Physiology, Bioinformatics, Bioprocess Engineering, Chemical Engineering, Environmental Biotechnology, Biomedical Instrumentation and Imaging
- The new 'state-of-the-art' instrumentation facilities include: GC-Mass Spectrophotometer, Real Time PCR, FPLC, HPLC, UPLC-QTOF, UPLC-MS/MS, Spray dryer, Rotary evaporator, Ultra water purification system, Typhoon Laser imager, Lypholizer, Thermal cyclers, Gene pulser, Microplate reader, 2D electrophoresis SCF extraction system, system, Spectrophotometers, Fluorimeters, Modern microscope with digital imaging system, Stereo microscope with colony counter, Fluorescence microscope, Lab and Pilot scale Bioreactors

Research

The department has a vision to develop a "Centre for Excellence" in Biotechnology for carrying out basic research on Biofuels, Biodiversity conservation, Cultivation endangered medicinal plants of Jharkhand, to create a Biotech Information Hub and Entrepreneur Park. Moreover, some new areas like Proteomics and Genomics, Drug Discovery and Vaccine Development, IPR and Patenting in Biotechnology are of special interest to this department. The department has expertise in all areas of Biotechnology involved in research and teaching. It has proactively taken the lead to provide academic and scientific support to various institutions like NITs and Universities for setting up academic and research facility.

Fields of Study/ Research:

- Agriculture & Plant Biotechnology
- Algal Biotechnology

- Animal & Plant Tissue Culture
- Biofuel Production
- Bioinformatics
- Biomedical instrumentation
- Bioprocess Engineering
- Biosensor & Nano-biotechnology
- Down Stream Processing
- Environmental Biotechnology
- Food Biotechnology
- Industrial Biotechnology
- Medicinal Plant
- Microbial Resources
- Microbial Biotransformation
- Value Addition to Biomass & Waste Materials

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

a. Ongoing Projects

SI. No.	Project Title	PI / Co PI / Collaborator	Funding Agency	Date of Sanction	Sanctioned Amount (Lakh)	Duration of the Project
1.	To Study the Structure and Blood Flow of Chorioretinal Complex in Human Using Optical Coherence Angiography	Dr Raju Poddar	ICMR GOI	25/03/2017	37.06	3 years
2	Identification and molecular characterization of SNARE genes in wheat (Triticum aestivum L.) in response to leaf rust disease	Dr. Kunal Mukhopadhyay/ Dr. M. Kumar	DST SERB	23-01-2017	14.79	3 Years
3	Towards development of a novel high resolution and high contrast in-vivo imaging technique based on Swept Source Optical	Dr. Raju Poddar	DST-SERB	23-02-2017	30.42	3 Years

SI. No.	Project Title	PI / Co PI / Collaborator	Funding Agency	Date of Sanction	Sanctioned Amount (Lakh)	Duration of the Project
4	Identification of the most active cocoonase of sericigenous insects through molecular characterization	Dr. D.M. Pandey	DBT New Delhi, GOI	21.02.2018	22.93	3 Years
6	Bioprocess Development for efficient Triclosan Degradation	Dr. Shaswati Ghosh Sachan (Co-PI)	CSIR	01.07.2016	17.80	3 Years

b) Projects Completed

SI. No.	Project Title	PI / Co PI / Collaborator	Funding Agency	Date of Sanction	Sanctioned Amount	Date of completion of the Project
1.	Process Development for the Production of UV-protective, Antioxidative and Antimicrobial Pigments from Bacterial Source Using Dairy Waste	Dr. S.K. Jha (PI), Dr. H.R. Singh (Co-PI), Dr. V.K. Nigam (Co-PI)	BIRAC, DBT, GOI	01.04.2017	6.30	30.09.2018
2.	Development of Android mobile Based System for Monitoring of Plant Pathogen Infection Using Foldscope (File No: BT/IN/Indo-US/ Foldscope/39/2015).	PI: Dr. Santosh Kr. Jha & Co- PI: Dr. H.R. Singh	Department of Biotechnology, Gov. of India	April 2018	8.0	April 2019

SECTION 3

SEMINAR / CONFERENCE

3. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Dr. D M Pandey	Workshop on Biotechnology Startup Ecosystem	DBT Project	DBT GOI	CTR & TI, Piska, Nagari, Ranchi	March 18, 2019
2	Dr. D M Pandey	National Workshop on "NGS Analysis Pre-Conference Workshop-Genomics India 2019, The Chancery Pavilion, Bangalore, India	DBT project	Genotype Co. Pvt. Ltd	ITC Gardenia, Bengaluru	

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
		January 23, 2019 and Genomics India 2019' (GIC 2019) conference from 24- 25 January, 2019 at ITC Gardenia, Bengaluru.				23 th -25 th January, 2019
3.	Dr D M Pandey	4 th International Plant Physiology Congress Lucknow scheduled from Dec 2 nd to 5 th , 2018	TEQIP-III	NBRI Lucknow		Dec 2 nd to 5 th , 2018
4	Dr Shubha Rani Sharma					19 th - 22 nd November, 2018
5	Dr. Kunal Mukhopadhyay	International Conference on Bioinformatics (InCoB2018) at JNU, New Delhi, 25 th -28 th Sept, 2018	TEQIP-III	JNU, New Delhi	JNU, New Delhi	25 th – 28 th Sept, 2018
6	Dr. Manish Kumar	International Conference on Bioinformatics (InCoB2018) at JNU, New Delhi, 25 th -28 th Sept, 2018	TEQIP-III	JNU, New Delhi	JNU, New Delhi	25 th – 28 th Sept, 2018
7	Dr. Shubha Rani Sharma	International Conference on Bioinformatics (InCoB2018) at JNU, New Delhi, 25 th -28 th Sept, 2018	rence TEQIP-III JNU, New JNU, New Delhi Delhi		JNU, New Delhi	25 th – 28 th Sept, 2018

SECTION 4 RESEARCH PUBLICATIONS

4. Publications in Journals : (International/National)

- 1. Anjum N, Chandra R (2018) Endophytic bacteria of Catharanthus roseus as an alternative source of vindoline and application of response surface methodology to enhance its production. ARCHIVES OF BIOLOGICAL SCIENCES, ISSN: 1821-4339.
- 2. Smita S, Katiyar A, Dalal M, Lenka SK, Kumar A, Mahtha SK, Yadav G, Chinnusamy V, Pandey DM, Bansal KC (2019) Gene network modules associated with abiotic stress response in tolerant rice genotypes identified by transcriptome meta-analysis. Functional & Integrative Genomics (MS. ID: FIGE-D-18-00071 June 2019, Accepted)
- 3. Anand P, Singh S, Prajapati GK, Pandey DM (2019) Computational characterization of lipoxygenase and hydroperoxide lyase enzymes and Real Time PCR-based expression analysis of their encoding genes in peanut under heat and drought stress. Research Journal of Biotechnology. (MS ID: WRA-RJBT-2018-0092 June 12, 2019-Accepted).
- 4. Pandey B, Gupta S, Rao AR, Pandey DM, Chatrath R (2019) Extrapolating the effect of nonsynonymous SNP in bread wheat *HSP16.9B* gene: a molecular modeling and dynamics study. IJBRA (MS ID: IJBRA 0020-Accepted: In Press).
- 5. Prajapati GK, Pandey B, Mishra AK, Baek K-H, Pandey DM (2019) Identification of GCC-box and TCC-box motifs in the promoters of differentially expressed genes in rice (Oryza sativa L.): Experimental and computational approaches. PLoS ONE 14(4): e0214964. April 26, 2019



- 6. Kumar G, Ghosh M, Pandey DM (2019) Method development for optimized green synthesis of gold nanoparticles from *Millettia pinnata* and their activity in Non-small cell lung cancer cell lines. IET Nanobiotechnology. 10.1049/iet-nbt.2018.5410. April 23, 2019-Accepted
- 7. Noopur Khare, Sheela Chandra; (2018) Stevioside mediated chemosensitization studies and cytotoxicity assay on breast cancer cell lines MDA-MB-231 and SKBR3, Saudi Journal of Biological Sciences. https://doi.org/10.1016/j.sjbs.2018.10.009. Oct 09, 2018
- 8. Annie Jessica Toppo, Sheela Chandra, Dhruv Jha, Papiya Mitra Mazumder (2019) In vitro evaluation of anti-acetylcholinesterase and free radical scavenging potential of leaf extracts of some selected medicinal plants; Asian Pacific Journal of Tropical Biomedicine, 9(2), 60-65 (2019). (Feb 1, 2019)
- 9. Sheela Chandra, Kazim Askari, Madhumita Kumari; (2018) "Optimization of indole acetic acid production by isolated bacteria from Stevia rebaudiana rhizosphere and its effects on plant growth," Journal of Genetic Engineering and Biotechnology 16, 581–586 (2018).
- M Basu, R Poddar (2019) An amplitude variation Field subtraction technique for visualization of vasculature of the human eye, Biomedical Signal Processing and Control 54, 101573, 2019. (May 26, 2019-Accepted)
- 11. M Mohan, VK Nigam, R Poddar (2019) Towards characterization of bacterial colonies and biofilms: An approach based on swept source optical coherence tomography, Optik 185, 592-598, 2019. May 01, 2019
- 12. N Chawda, S Mishra, M Basu, H Chander, R Poddar, S Mahapatra, I Banerjee, (2019) Synthesis of gadolinium oxide nanocuboides for in vitro bioimaging applications, Materials Research Express, April 26, 2019.
- 13. Dutta S, Jha S, Prabhu KV, Kumar M, Mukhopadhyay K (2019) Leaf rust (Puccinia triticina) mediated RNAi in wheat (Triticum aestivum L.) prompting host susceptibility. Functional & Integrative Genomics 19(3):437-452 DOI:10.1007/s10142-019-00655-6 January 22, 2019.
- 14. Dutta S, Kumar M, Mukhopadhyay K (2019) Development of a rapid RNA extraction procedure from urediniospores of the leaf rust fungus, *Puccinia triticina*. Journal of Microbiological Methods DOI: 10.1016/j.mimet.2019.01.010. January 22, 2019
- 15. Adya R, Mohan M, Mukhopadhyay K, Poddar R (2019) Investigation of *Puccinia triticina* contagion on wheat leaves using swept source optical coherence tomography. Optik 178: 932-937 DOI: 10.1016/j.ijleo.2018.10.005. (October 2018)
- 16. Nanthakumar Arumugam, Peter Biely, Vladimir Puchart, Abe Gerrano, Koel De Mukherjee, Suren Singh, Santhosh Kumar Pillai (2019) Xylan from bambara and cowpea biomass and their structural elucidation.. International Journal of Biological Macromolecules (Accepted: IJBIOMAC_2019_710). (April 2019)
- 17. Pandey A., Nigam V. K. and Balani K. (2018) Multi-length scale tribology of hydroxyapatite reinforced with ceria and silver. Wear, 404-405, 12-21. (June 15, 2018)
- 18. Naha A., Singh H.R., Jha S.K. (2018) L-DOPA a Promising Pro-Drug against Parkinson Disease: Present and Future Perspective. Research Journal of Biotechnology, (Accepted). (September 2019)
- 19. Banerjee A., Rudra S G., Mazumder K., Nigam V K and Bandopadhyay R. (2018) Structural and functional properties of exopolysaccharide excreted by a novel Bacillus anthracis (Strain PFAB2) of hot spring origin. Indian Journal of Microbiology, 58, 39-50. (March 2018)
- Akansha K, Chakraborty D, Ghosh Sachan S (2019) Decolorization and degradation of methyl orange by Bacillus stratosphericus SCA1007, Biocatalysis and Agricultural Biotechnology 18: 101044. (March 2019)

- 21. Singh A, Mukhopadhyay K, Ghosh Sachan S (2018) Biotransformation of eugenol to vanillin by a novel strain Bacillus safensis SMS1003, Biocatalysis and Biotransformation, DOI: 10.1080/10242422.2018.1544245. (Dec 20, 2018)
- 22. Kumari R, Ghosh Sachan S (2018) Bioconversion of toxic micropollutant triclosan to 2, 4-dichlorophenol using a wastewater isolate Pseudomonas aeruginosa KS2002, International Journal of Environmental Science and Technology, DOI 10.1007/s13762-018-2129-5 (November 27, 2018)

5. Book:

- Chapter(s) in Edited Book
- 1. Jain A, Yadav S, Nigam VK, Sharma SR (2018), Fungal-Mediated Solid Waste Management: A Review. In: Prasad R. (eds) Mycoremediation and Environmental Sustainability. Fungal Biology. Springer, Cham, Page 153-170. ISSN 2198-7777.
- Sharma SR (2018), Bioremediation of Polythenes and Plastics: A Microbial Approach In: Prasad R. (eds) Approaches in Bioremediation, The New Era of Environmental Microbiology and Nanobiotechnology, Springer, Cham, Page 94-114. ISSN 2523-8027

SECTION 5

AWARD / PATENT / COLLABORATIONS

6. Award / Recognition Bestowed on Faculties (State / National / International)

SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
1.	Dr. Dinesh Prasad	Visiting professor under	University of	International	35 days
		Erasmus plus program at	Padova, Italy		
		Department, DAFNAE, from			
		6 th Sep. to 12 th Oct. 2018.			

7. MoUs / Collaborations Between:

SI. No.	Name of Organisation / University	Purpose / Area	Year / Duration
1.	Department, DAFNAE, University of Padova, Italy	Bioscience and Bio-Engineering	2017-2019

SECTION 6

ACTIVITIES/ FACULTY MEMBERS / BOS

8. List of Faculties

SI. No.	Name	Designation
1	Dr. Ramesh Chandra	Professor
2	Dr. P. Padmanabhan	Professor
3	Dr. Kunal Mukhopadhyay	Professor
4	Dr. Rakesh Kumar Sinha	Professor
5	Dr. D.M. Pandey	Associate Professor
6	Dr. V.K. Nigam	Associate Professor
7	Dr. Manish Kumar	Associate Professor
8	Dr. Raju Poddar	Assistant Professor
9	Dr. Shashwati Ghosh Sachan	Assistant Professor
10	Dr. Sheela Chandra	Assistant Professor

SI. No.	Name	Designation
11	Dr. Santosh Kumar Jha	Assistant Professor
12	Dr. Koel Mukherjee	Assistant Professor
13	Dr. Shubha Rani Sharma	Assistant Professor
14	Dr. Hare Ram Singh	Assistant Professor
15	Dr. Dinesh Prasad	Assistant Professor
16	Dr. Yogender Aggarwal	Assistant Professor
17	Dr. Anjana Dwivedi	Assistant Professor
18	Dr. Soham Chattopadhyay	Assistant Professor

9. Board of Studies

SI. No.	Name of the Member	Designation	Role
1.	Dr. Ramesh Chandra	Professor	Chairman (Ex-Officio)
2.	Dr. T.R. Sharma	Director, IIAB Namukum, Ranchi, Jharkhand	External Expert
3	Dr. Sudipta Goswami	Professor	Member
4	Dr. S.Samanta	Professor	Member
5	Dr. Kunal Mukhopadhyay	Professor	Member
6	Dr. Rakesh Kumar Sinha	Professor	Member
7	Dr. Padmini Padmanabhan	Professor	Member
8	Dr. Vinod Kumar Nigam	Associate Professor	Member
9	Dr. Raju Poddar	Assistant Professor	Member

SECTION 7 OTHER INFORMATION

10. Achievements of Students

Sr. No	Name of Student	Achievement/ Position/Award etc	Organised by	Date and Venue	
1.	Rahul Kumar	Trainee	NUS, SIngapore	Singapore	
2.	Gaurav Kumar Sinha	Young Researcher	European Commission	University of Padova, Italy	
3	Rashmi Kumari	Young Researcher	European Commission	University of Padova, Italy	

11. Distinguished Visitors from Industry/Academia/Research organizations

Sr. No	Name of Visitor with Affiliation	Date of Visit	Picture
1.	Prof. Antonio Masi, DAFNAE, University of Padova, Italy	Feb 13, 2019 to Feb 21, 2019	
			0 3



Department of Chemical Engineering

SECTION 1

DEPARTMENTAL PROFILE



1. About the Department/Campus:

Department of Engineering" with well qualified faculty provides high standard of education in the diversified fields of Chemical Engineering. The Department has immense strength in the area of Chemical and Polymer Engineering. The Department received national recognition by winning the Gold Trophy for Plasticon Award 2012 in the category of Best Educational Institution Contributing to Plastics. The Plasticon Award was conferred on 1st February 2012, at 8th International Plastics Exhibition and conference. The programme was supported by Ministry of Chemicals and Fertilizers, Department of Chemicals and Petrochemicals, Government of India. Faculty members are working on sponsored projects and collaborative research with various organizations. The Department is also recognized under DST-FIST.

The Department has modern and sophisticated laboratories and workshop facilities such as **Chemical Engineering**

Unit Operation laboratory, Chemical Reaction Engineering Laboratory, **Process Control Laboratory, Synthesis** Laboratory, Energy **Engineering** Laboratory, Polymer Characterization **Laboratory** etc. The Department has excellent facilities in Polymer Processing Workshop and Product Development Laboratory. The various materials Characterization facilities include **Instron** Universal Testing Machine, Rigaku wide angle X-Ray diffractometer, ATLAS accelerated weathering testing system, **HAAKE Rheometers**. The students are trained in various CAE applications in the field of product and process design with various software such as ASPEN PLUS, **Accelrys, Material Studio for molecular** simulation, MATLAB, PROENGINEER, ANSYS, CATIA, FLUENT, POLYFLOW, and MOLDFLOW.

There are several Projects sponsored by DRDL, DST, Ministry of New and Renewable Energy, Coir Board etc. to the credit of

the Department. Major research areas are: Nanotechnology, Advanced Polymer Composites, Alternative Energy, Bioresources Utilization, Pollution Control, Water Treatment Technologies, Polymer Blends and Interpenetrating Polymer Networks, Nano filtration Membrane, Recycling of Polymer Waste, Specialty Polymer, Colloids and Interfacial Science, Tissue Engineering, Sensors, Fuel Cell Membrane.

The Department of Chemical Engineering offers Undergraduate four-year Programmes, and Postgraduate Programmes as well as Doctoral Programmes. The department also runs one five-year Integrated M.Sc. Food Technology Programme.

UG Programmes:

- BE (Chemical Engineering)
- BE (Chemical Engineering (Plastics and Polymer)

PG Programme:

- M.E. (Chemical Engineering)
- Integrated M.Sc. Food Technology (10 Semesters)

Doctoral Programmes:

 Doctoral Programme in the fields of Chemical Engineering, Polymer Science and Engineering, Food Processing Technology etc.

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

a) Ongoing Projects:

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
1.	Development of advanced polybenzimidazole based nanocomposite materials for potential defense applications	PI- Dr. Arup Choudhury Co-PI Dr. Gautam Sarkhel	NRB, DRDO	24.02.15	Rs 24.95 Lakhs	3 Years
2.	Development of Electronic Nose for detection of biomarker vapor blends using conductive polymer nanocomposite sensors	PI- Dr. G. T. Mohanraj	DST-SERB	30.06.2017	Rs. 39.64 Lakhs	4 Years
3.	Development of process technology for enhanced resistant starch content in rice and rice based snack (Puffed rice)	PI-Dr. Anupam Roy	DST-SERB	06-06-19	Rs. 53.06 Lakhs	3 Years
4	Development of nanofiller reinforced ionomer-based polymer nano-composite for radio frequency absorber	PI- Nirupama Co-PI Dr. Gautam Sarkhel	NPIU, TEQIP 3	18.06.2019	Rs. 14.60 Lakhs	1 Year
5	5 Transition metal(s) PI- Y. N.		NPIU, TEQIP 3	18.06.2019	Rs. 16.58 Lakhs	1 Year

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
6	Deep Eutectic Solvents as Electrolytes for Nanomaterials-based high-performance Supercapacitors	PI- Dr. Anand Bharati Co-PI - Dr. G.T Mohanraj	NPIU, TEQIP 3	18.06.2019	Rs. 15.45 Lakhs	1 Year
7	Synthesis and characterization of biomaterial and nanomaterial and its application in heavy metal removal	PI- Dr. Dhanbahadur Pal Co-PI Dr. Dharmendra Pandey	NPIU, TEQIP 3	18.06.2019	Rs. 16.24 Lakhs	1 Year

b) Projects Completed:

SI. No.	Project Title	Coll	/ Co abo if ar	PI / rator, iy	Funding Agency			Date of completion of the Project
1	Development of	PI-	Dr.	Akhil	DRDO	27.09.2016	Rs. 23.71	31.03.2019
	Organophosphorus flame	Sen					Lakhs	
	retardant for Epoxy and							
	Vinyl ester Resin							

SECTION 3 SEMINAR / CONFERENCE

3. Seminar / Conferences / Short – Term Courses Conducted by the Department/Campus:

SI. No.	Title of Seminar/ Conference/ Short Term Courses/ Workshop	Coordinator	Funding / Sponsoring Agency	Date of Event
1.	NRB, DRDO Sponsored One Day Workshop of "Awareness of Fire Safety" on 29 th March 2019		DRDO	29.03.2019

4. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Mrs. D Ghosh	National Conference on Computational Modeling of Fluid dynamics problems (CMFDP-2019)	TEQIP III	NIT Warangal, India	NIT Warangal, India	18 - 20.01. 2019
2	Dr. Anupam Roy Dr. Amit Tiwary Dr. B C Ruidas Mrs. D Ghosh	95 th Orientation Programme (10/06/2019 to 30/06/2019)	BIT Mesra	Human	Ranchi University Morabadi	10- 30.06.2019



SI. No.		Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
3.	Dr. Anupam Roy	NPTEL online course "Novel Technologies for food Processing and shelf life Extension"	BIT Mesra	NPTEL	Online	Jan-April 2019

SECTION 4 RESEARCH PUBLICATIONS

5. Publications in Journals:

- Published in International Journals:
- Baban Dey, Ahmad, Md. Wasi, Gautam Sarkhel, Dibyendu Sekhar Bag, and Arup Choudhury. 2019. "Exfoliated Graphene Reinforced Polybenzimidazole Nanocomposites with High Dielectric Permittivity at Low Percolation Threshold." Journal of Molecular Structure 1177:491–98.
- Baban Dey, Ahmad, Md Wasi, Gautam Sarkhel, Dibyendu Sekhar Bag, and Arup Choudhury. 2019. "Exfoliated Graphene Reinforced Polybenzimidazole Nanocomposite with Improved Electrical, Mechanical and Thermal Properties." Materials Chemistry and Physics 223:426-33.
- Bharti, Anand, Rupesh Verma, Prerna, Sarvesh Namdeo, Abhigyan Malviya, Tamal Banerjee, and Stanley I. Sandler. 2018. "Liquid-Liquid Equilibria and COSMO-SAC Modeling of Organic Solvent/Ionic Liquid - Hydroxyacetone - Water Mixtures." Fluid Phase Equilibria 462:73-84.
- 4. Choudhury, Arup, Baban Dey, Susanta Sinha Mahapatra, Doo-Won Kim, Kap-Seung Yang, and Duck-Joo Yang. 2018. "Flexible and Freestanding Supercapacitor Based on Nanostructured Poly(m-Aminophenol)/Carbon Nanofiber Hybrid Mats with High Energy and Power Densities." Nanotechnology 29(16):165401.
- Ghosh, Debasree and Chandan Guha.
 2019. "Numerical and Experimental Investigation of Paraffin Wax Melting

- in Spherical Cavity." Heat and Mass Transfer 55(5):1427–37.
- 6. Ghosh, Debasree, Chandan Guha, and Joyjeet Ghose. 2019. "Numerical Investigation of Paraffin Wax Solidification in Spherical and Rectangular Cavity." Heat and Mass Transfer 1–13.
- 7. Jadhav, A. S., G. T. Mohanraj, S. Mayadevi, and A. N. Gokarn. 2018. "Synthesis and Influence of Feret Diameter on Particle Morphology of Activated Carbon Derived from Agrowastes." Asian Journal of Materials Chemistry 3(1–2):28–36.
- 8. Jadhav, Abhijit, Ashok Gokarn, S. Mayadevi, and GT Mohanraj. 2018. "Synthesis of Coconut Shell Derived Activated Carbon NBR Composite for Automobile Application." Proceedings of the World Congress on Engineering and Computer Science Vol II.
- Jadhav, Abhijit, Govindaraj Thangaraj Mohanraj, Ashok Gokarn, and Suseeladevi Mayadevi. 2018. "Synthesis of Biomass Waste Derived Activated Carbon-NBR Composites for Automobile Application." Chemistry & Chemical Technology 12(2):236–43.
- 10. Kumar, Rahul, Kaushik Kumar, Sumit Bhowmik, and Gautam Sarkhel. 2019. "Tailoring the Performance of Bamboo Filler Reinforced Epoxy Composite: Insights into Fracture Properties and Fracture Mechanism." Journal of Polymer Research 26(2):54.
- 11. Pal, D. B., R. Lavania, P. Srivastava, P. Singh, K. R. Srivastava, S. Madhav, and P. K. Mishra. 2018. "Photo-Catalytic

- Degradation of Methyl Tertiary Butyl Ether from Wastewater Using CuO/CeO2 Composite Nanofiber Catalyst." Journal of Environmental Chemical Engineering 6(2):2577–87.
- 12. Pandey, Dharmendra, Koustuv Ray, Rahul Bhardwaj, Sreedhar Bojja, K. V. R. Chary, and Goutam Deo. 2018. "Promotion of Unsupported Nickel Catalyst Using Iron for CO2 Methanation." International Journal of Hydrogen Energy 43(10):4987–5000.
- 13. Pattanayak, Satarupa and Sumit Kumar Jana. 2018. "Controllable Aqueous Synthesis of Near-IR-Plasmonic Anisotropic Gold Nanoparticles in the Hydrazine Concentration Assisted: Hydrazine-Citrate Hydrogen-Bonded Network at Room Temperature and Application in Highly Sensitive SERS-Based Detection of Pb (II) Species." Inorganic and Nano-Metal Chemistry 48(11):535–40.
- 14. Roy, Anupam, Onur Bulut, Sudip Some, Amit Kumar Mandal, and M. Deniz Yilmaz. 2019. "Green Synthesis of Silver Nanoparticles: Biomolecule-Nanoparticle Organizations Targeting Antimicrobial Activity." RSC Advances 9(5):2673–2702.
- 15. Shree, Vibha and A. K. Sen. 2018. "Study of Thermal and Flame Behavior

- of Phosphorus-Based Silica for Epoxy Composites." Journal of Sol-Gel Science and Technology 85(2):269–79.
- 16. Verma, Rupesh, Pyarimohan Dehury, Anand Bharti, and Tamal Banerjee. 2018. "Liquid-Liquid Extraction, COSMO-SAC Predictions and Process Flow Sheeting of 1-Butanol Enhancement Using Mesitylene and Oleyl Alcohol." Journal of Molecular Liquids 265:824–39.

6. Book:

Chapter(s) in Edited Book:

- Polymer in Communication, P Datta, Sanjay Kumar, Gautam Sarkhel, 2019, Encyclopedia of Polymer Applications, ISBN9781351019415, Taylor and Francis Group
- Anupam Roy, Sreyajit Saha, Animesh Ghosh, 2018, Development of Nanoparticles from Grafted Natural Polysaccharides for Drug Delivery, Polysaccharide based Nano-Biocarrier in Drug Delivery, Trailor and Fransis.
- 3. 3. Tiwari, Amit Kr. and Vinod Kr. Nigam. 2019. "Recent Bio-Processing Technologies for Value Added Horticultural Products." Applied Microbiology & Bioengineering 57–67.

SECTION 5

ACTIVITIES/ FACULTY MEMBERS BOS

7. Departmental Students' Activities:

SI. No.	Name of the Activity	Students' Co-Ordinator	Faculty Co- ordinator	Date / Duration
1.	COLESENCE 2017, National Students Technical Events organized by IIChE, BIT Mesra Students Chapter	Chapter	Coordinator -IIChe	31 st March - 2 nd April, 2019
2	Ingenium- Q-Technical quiz	Student Chapter/IIChE	Coordinator -IIChe	19th August 2018

8. List of Faculties:

SI. No.	Name	Designation
1.	Dr. Gautam Sarkhel	Professor & Head
2	Dr. (Mrs.) M Mukherjee	Professor

Sl. No.	Name	Designation
3.	Dr. (Mrs.) Sudipta Goswami (Sharma)	Professor
4.	Dr. Akhil Kumar Sen	Associate Professor
5.	Dr. G.T. Mohanraj	Assistant Professor
6.	Dr. Arup Chaudhury	Assistant Professor
7.	Dr. Pulak Datta	Assistant Professor
8.	Dr. Sumit Kumar Jana	Assistant Professor
9.	Dr. Sudeepan.J	Assistant Professor
10.	Mrs. Debasree Ghosh	Assistant Professor
11.	Dr. Amar Nath Mishra	Assistant Professor
12.	Dr. Dharmendra Pandey	Assistant Professor
13.	Dr. Arnab Karmakar	Assistant Professor
14.	Dr. Bidhan Chandra Ruidas	Assistant Professor
15.	Dr. Anupam Roy	Assistant Professor
16.	Dr. Chandan Kumar Das	Assistant Professor
17.	Dr. Amit Kumar Tiwari	Assistant Professor
	TEQIP Sponsored	
18.	Dr. Ashok Kumar Baranwal	Assistant Professor
19.	Dr. Jay Mant Jha	Assistant Professor
20.	Dr. Bikash Kumar Mondal	Assistant Professor
21.	Dr. Yogendra Nath Prajapati	Assistant Professor
22.	Dr. Nirupama	Assistant Professor
23.	Dr. Anand Bharti	Assistant Professor
22.	Dr. Dan Bahadur	Assistant Professor
23.	Mr. G Ravi Kumar	Assistant Professor

9. List of Adjunct Faculties:

SI. No.	Name (Please mention Dr. / Prof./ Mr./ Mrs. / Ms., as applicable)	Designation	Affiliation
1	Dr. Anirudha Singh	Adjunct Assistant Professor	Department of Urology Brady Urological Institute Johns Hopkins University School of Medicine

10. Board of Studies:

SI. No.	Name of the Member	Designation	Role
1.	HOD/In-Charge		Chairman (Ex-Officio)
2.	Dr. (Mrs.) M. Mukherjee	Professor	Internal Member
3.	Dr. Gautam Sarkhel	Professor	Internal Member

SI. No.	Name of the Member	Designation	Role
4.	Dr. (Mrs.) S. Goswami	Professor	Internal Member
5.	Dr. G.T. Mohanraj	Assistant Professor	Internal Member
6.	Dr. Bidhan C. Ruidas	Assistant Professor	Internal Member
7.	Dr. A.K. Sinha, Dept. of Civil Engg., BIT Mesra	Professor	External Member
8.	Dr.D.P. Mishra, Dept. of Mech. Engg., BIT Mesra	Professor	External Member
9.	One student representative of UG programme	Student	Internal Member
10.	One Student representative of PG programme	Student	Internal Member
11.	Dr.Pallab Ghosh Dept. of Chemical Engineering, IIT, Guwahati	Professor	External Member
12.	Dr. Siddhartha Datta Dept. of Chemical Engineering, Jadavpur University	Professor	External Member
13.	Dr. Pinakpani Biswas Environment Research Group, Tata Steel Ltd., Jamshedpur	Principal Scientist	External Member
14.	Prof. Priyabrata Sarkar Department of Poly Sci & Tech, University of Calcutta	Professor	External Member
15.	Dr. Suddhasatwa Basu Chemical Engineering, IIT Delhi	Professor	External Member

SECTION 6 OTHER INFORMATION

11. Publication by students, if any:

- Prasoon Kumar, Siddha Sharma, Debasree Ghosh, Chandan Guha. Simulation of charging of phase change material in a double pipe heat exchanger. International conference, CHEMCON 2018 (Oral Presentation).
- 2. Prasoon Kumar, Siddha Sharma, Debasree Ghosh, Chandan Guha. Effect of Thermo-physical properties of PCM on performance of Double pipe heat exchanger for latent heat energy storage. SCHEMCOM 2018 (Oral Presentation).

12. Achievements of Students:

Sr.	Name of Student	Achievement/Position/Award etc	Organised by	Date and Venue
1.	Sreyajit Saha	AWSAR award 2018 Hundred Best Popular Science Stories under PhD Category	DST	June, 2018

Sr. No	Name of Student	Achievement/Position/Award etc	Organised by	Date and Venue
2	Ananya Kant	First prize in "Women of Mettle" competition, 2018	TATA Steel	August, 2018
3.	Anamika Sinha	First prize in Mind over Matter Season 5,	TATA Steel	August, 2018

13. Distinguished Visitors from Industry/Academia/Research organizations:

SI. No.	Name of Visitor with Affiliation	Date of Visit
1	Dr. Mohammad Jawaid	27.09.2018
	Laboratory of Biocomposite Technology, Institute of Tropical Forestry & Forest Products (INTROP), University Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia	
2	Mr. Mihir Mohanta	2.10.2018
	GM, SCM, Mother Diary	
3	Mr. Basudeb Chakraborty	27.08.2018
	DGM, CCG SAIL R&D	

14. Any other relevant information

- NBA team visited Department of Chemical Engineering on 17th-18th November, 2018 BE Chemical Engineering programme got NBA accreditation for the year of 2018-2021.
- Prof. Gautam Sarkhel has delivered a invited talk on "Basics of Rheology of Pharmaceutical sample, on 11th December 2018 in QIP programme in Pharmacy" during AICTE sponsored QIP-2018 on the theme "Innovations and Challenges in Newer Drug Delivery System.
- Prof. Akhil Kumar Sen has delivered a invited talk on "Polymer and Surfactants in Drug Delivery applications on 5th December 2018 in QIP programme in Pharmacy" during AICTE sponsored QIP-2018 on the theme "Innovations and Challenges in Newer Drug Delivery System.
- Dr. Anupam Roy has delivered a invited talk on "Entrepreneurial Opportunities in Food & Agro Processing Secto" in MSME Financing & Strengthening MSME Linkagesby Indian Chambers of Commerce in 05th July 2019 at 10:00 A.M., Ramada Hotel, Jamshedpur
- Dr. Anupam Roy has delivered a invited talk on "Needs and Possibilities of Food Processing Research" One day Conference on Food Processing & Kisan SAMPADA Yojana" on Tuesday, 24th April at 10 am at Central Tasar Research & Training Institute, Ranchi.



Department of Chemistry

SECTION 1

DEPARTMENTAL PROFILE





1. About the Department Overview:

Department of Chemistry was established in 1955, offers undergraduate, postgraduate & Ph.D. programmes in chemistry. The Department has received support under "Fund for Improvement in Science & Technology Infrastructure" (FIST-2012) programme of the Department of Science and Technology, New Delhi for NMR and Computational Chemistry facility. The Department is committed to high quality research programmes supported by DST, UGC, DBT, CSIR and AICTE in major thrust areas like:

Oscillatory Chemical Reactions and Dynamics, Fuel Cells and Electrochemical Supercapacitors, Medicinal Chemistry, Polymers, Environmental Chemistry, Nanotechnology, Biomaterials, Computational Chemistry, Coordination Chemistry.

Vision & Mission

To become a recognized centre of excellence for teaching, research and innovations and make significant contribution for producing academic professionals and entrepreneurs in frontier areas of chemical sciences.

 To impart quality education and fundamental concepts of chemical sciences to students & scholars through our state of the art laboratory, teaching and research facilities Building a scientific environment and motivation towards innovation with quality research in chemical sciences and interdisciplinary areas.

Research Facilities

- The Department is equipped with state
 of art instruments and research facility to meet the requirement of modern-day chemistry
- The Department has a unique research facility of Nuclear Magnetic Resonance (NMR) spectroscopy, 400 MHz, JEOL which fulfils the requirements of solution-state analytical needs for both students and researchers.
- Advanced equipments such as AUTOLAB workstation, Electrochemical Analyzer (CHI), Microwave Reactor, UV/VIS/NIR Spectrophotometer, Solar Simulator, Rotational Viscometer, Ultra Low Immersion Chiller, Digital Osmometer, XYT Chart Recorder, Millipore, Refractometrer, Ultra Low Chiller etc. are available for training and research.
- Department has a computational lab facility for conducting training and research in the area of theoretical and computational chemistry.

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

a) Ongoing Projects

SI. No.	Project Title	PI / Co PI / Collaborator	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
1.	Development of highly porous nano structure metal/ mixed metal oxide spheres for removal of arsenic"	Dr. Usha Jha Co PI	Board of Research in Nuclear Sciences (BRNS), Department of Atomic Energy (DAE), Government of India	2016	30.02 Lakhs	3 Yrs
2.	One-dimensional Nanostructured Si- based Electrodes for High-Performance Energy Storage Devices	Dr. S.S. Mahapatra PI	Board of Research in Nuclear Sciences (BRNS), Department of Atomic Energy (DAE), Government of India	2016	30.02 Lakhs	3 Yrs
3	Synthesis and Development of Novel HSP90 Inhibitors as Potential Anti-HIV Candidate Molecules and Elucidation of their Mechanism of Inhibition	les		2018	25.00 Lakhs	1 Yr
4	Band-Gap Engineering of Lead- Free Perovskite Quantum-Dots for Optoelectronic Application	Dr. Joydeep Dhar (PI) Dr. Ashoke Sharon (Co- PI)	NPIU (MHRD) under AICTE- TEQIP Collaborative Research Scheme (CRS)	2019	11.45 Lakhs	1 Yr
5	Development of transition metal complexes as water oxidation catalyst	Dr. Subhendu Naskar (PI)	EMR-SERB- DST	2017	28.34 Lakhs	3 Yr
6.	Synthesis and characterization of thermo sensitive nano composites based modified agar and its applications.	Dr Sumit Mishra (PI)	JCST	2017 (Sanctioned)	5 Lakhs	3 Yrs

Projects Completed

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Date of completion of the Project
1.	Influence of functionalized nanomaterial on electrochemical bio-sensing of biotin-avidin couple	Sole PI: Dr. Pradip KAR	DST Nanomission	09.06.2016	40.78 Lakhs	3 Years

SECTION 3 SEMINAR / CONFERENCE

Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by **Faculty Members:**

Sr. No	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Dr. Pradip KAR	Innovation and Challenges in Newer Drug Delivery System	AICTE QIP	Dept. Pharm. Sc., BIT Mesra	Ranchi	30.11.2018 to 13.12.2018
2	Dr. Joydeep Dhar	Advanced Pedagogies: Active Learning and Digital Tools	TEQIP, NPIU	IIT Hyderabad	Hyderabad	10-06-2019 to 14-06- 2019

SECTION 4 RESEARCH PUBLICATIONS

4. Publications in Journals: (International/ National)

- F. Rozy and A. Sharon, Chemistry Select 2019, 4, 6194-6197.
- 2. H. Chakravarty, C. Bal, M. Yadav, N. Jena, N. C. Bal and A. Sharon, ACS Omega 2019, 4, 11508-11514.
- R. S. Pathare, V. Patil, H. Kaur, A. K. Maurya, V. K. Agnihotri, S. Khan, N. Devunuri, A. Sharon and D. M. Sawant, Org Biomol Chem 2018, 16, 6885-6888.
- R.S. Pathare, A.J. Ansari, S. Verma, A. Maurya, A.K. Maurya, V.K. Agnihotri, A. Sharon, R.T. Pardasani and D.M. Sawant, J Org Chem 2018, 83, 9530-9537

- S. Kundu, N. Kumari, S.R. Soni, S.
- Ranjan, R. Kumar, A. Sharon and A. Ghosh, ACS Omega 2018, 3, 15380-15388.
- 6. G. Joshi, M. Chauhan, R. Kumar, A. Thakur, S. Sharma, R. Singh, A. A. Wani, A. Sharon, P. V. Bharatam and R. Kumar, Organic Chemistry Frontiers 2018, 5, 3526-3533.
- 7. Nandkishore Thombare, Sumit Mishra, M.Z. Siddiqui, Usha Jha,; Design and development of guar gum based novel, super absorbent and moisture retaining hydrogels for agricultural applications, Carbohydrate Polymers 185 169-188 2018



- Amulya Prasad. Sanjaya Swain Usha Jha; Core shell structured zero valent manganese, a novel nanoadsorbant for efficient removal of AsIII and As(V) from drinking water, Journal of Material Chemistry A, RSC publications 7 9933-9947(2019)
- 9. Amulya Prasad. Sanjaya Swain Usha Jha; Exploring nano structure Zr/Cu composite oxides(NZCO) as an efficient adsorbant for removal of AsIII and As(V)from aqueous solutions. Chemistry Select, 4 1-14 (2019)
- 10. Pal, P.; Banerjee, A.; Haldar, U.; Pandey, J.P.; Sen, G.; Bandopadhay, R. (2018). Conferring antibacterial properties on sesbania gum via microwave-assisted graft copolymerization of DADMAC. Journal of polymer and the environment, 26, 3272.
- 11. Pal, P.; Pandey, J.P.; Sen, G. (2018). Sasbenia gum based hydrogel as platform for sustained drug delivery: An 'in vitro' study of 5 FU release. International Journal of Biological Macromolecules, 113, pp 1116-1124
- 12. Pal, P.; Pandey, J.P.; Sen, G.(2018). Grafted sesbania gum: A novel derivative for sugarcane juice clarification. International Journal of Biological Macromolecules, 114, 349.
- 13. Pal, P.; Pandey, J.P.; Sen, G. (2018). Synthesis and study of hydrolyzed polyacrylamide grafted polyvinyl pyrrolidone (Hyd. PVP-g-PAM) as flocculant for removal of nanoparticles from aqueous system. Material Science & Engineering B, 236, 32.
- 14. Pal, P.; Banerjee, A.; Soren, K.; Chakraborty, P.; Pandey, J.P.; Sen, G.; Bandopadhay, R. (2019). Novel Biocide Based on Cationic Derivative of Psyllium: Surface Modification and Antibacterial Activity. Journal of polymer and the environment, 27, 1178.
- 15. Singh, A., Samanta, S., Roy, P. & Kar; P. (2019). Poly(m-aminophenol)/silver

- nanorod composite based paper strip for chemo-resistive picric acid sensing. Sensor Letters 17, 219-227.
- 16. Raj, S., Srivastava, S., Kar, P. & Roy, P. (2019). In situ growth of Co3O4 nanoflakes on reduced graphene oxide-wrapped Ni-foam as high performance asymmetric supercapacitor. Electrochimica Acta, 302, 327-337.
- 17. Raj, S., Kar, P. & Roy, P. (2019). Ammonia-assisted growth of CoSn(OH)6 nanostuctures and their electrochemical performances for supercapacitor. Journal of Nanoscience and Nanotechnology, 19, 2755-2761.
- 18. Raj, S., Kar, P. & Roy, P. (2018). Facile synthesis of flower-like morphology of Cu0.27Co2.73O4 for high performance supercapattery with extraordinary cycle stability. Chemical Communications, 54, 12400-12403.
- 19. Raj, S., Dong, Y., Kar, P., Mai, L., Jin, S. & Roy, (2018). P. Hybrid NiCo2O4-NiCo2S4 nanoflakes as high performance anode materiels for Liion batteries. Chemistry Select, 3, 2315-2320.
- 20. Bhuyan, M., Samanta, S. & Kar, P. (2018). Selective sensing of methanol by poly (m-aminophenol)/copper nanocomposite, Electronic Materials Letter 14, 161-172.
- 21. Sil, S.; Dey, A.; Datta, J.; Das, M.; Jana, R.; Halder, S.; Dhar, J.; Sanyal, D.; Ray, P. P. (2018). Analysis of interfaces in Bornite (Cu₅FeS₄) fabricated Schottky diode using impedance spectroscopy method and its photosensitive behavior, Materials Research Bulletin 106, 337–345.
- 22. Grandhe Usha Rani, Ananda Kumar Konreddy, Sumit Mishra, Novel hybrid biosorbents of agar: Swelling behaviour, heavy metal ions and dye removal efficacies International

Journal of Biological Macromolecules 117, 902–910, (2018)

- 23. Bharti, S., Mishra S., Controlled drug release behavior of 5-aminosalicylic acid using polyacrylamide grafted oatmeal (OAT-g-PAM): a pH-sensitive drug carrier, Polymer Bulletin 76, 2, 813-824 (2018)
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- 25. A. Kumari, B Dasgupta Ghosh, La doped barium titanate/polyimide nanocomposites: A study of the effect of La doping and investigation on thermal, mechanical and high dielectric properties, Journal of Applied Polymer Science, 135, 46826 (2018)
- 26. A. Kumari, B Dasgupta Ghosh, A study of dielectric behavior of manganese doped barium titanate polyimide composites, Advances in Polymer Technology, 37(6), 2270 (2018).

27. A. Kumari, B Dasgupta Ghosh, Effect of Strontium doping on structural and dielectric behavior of barium titanate nanoceramics, Advances in Applied Ceramics: Structural, Functional and Bioceramics, 117(7), 427 (2018)

5. Book:

Chapter(s) in Edited Book

- Kar, P. (2019). Chapter 3: Conjugated polymers nanocomposites. In Aliofkhazraei (Ed) Advances in Nanostructured Composites: volume 1: Carbon Nanotube and Graphene Composites, CRC Press, Boca Roton, USA.
- 2. Kar, P. (2019). Chapter 8: Anti Corrosion and Anti Wear. In P.N. Tri, S. Rtimi and C.A. Plamondon (Eds) Nanomaterials Based Coatings: Fundamentals and Applications, Elsevier, New Jersey, USA.
- 3. Mishra S., Thombare N., Ali M., Swami S. (2018) Applications of Biopolymeric Gels in Agricultural Sector. In: Thakur V., Thakur M., Voicu S. (eds) Polymer Gels. Gels Horizons: From Science to Smart Materials. Online ISBN978-981-10-6080-9 Springer, Singapore

SECTION 5

AWARD / PATENT / COLLABORATIONS

6. MoUs / Collaborations

SI. No.	Name of Organisation/ University	Purpose/Area	Duration
1.	Kagoshima University, Japan	Development of Antivirals	April 18 March 19
2.	A*STAR Research Entities, Institute of Molecular and Cell Biology, Singapore	Structural and modeling studies of compounds in the target enzyme	Nov 17 to Oct 18

SECTION 6

ACTIVITIES/ FACULTY MEMBERS / BOS

7. Departmental Students' Activities:

SI. No.	Name of the Activity	Students' Co-Ordinator	Faculty Co- ordinator	Date / Duration
1.	Poster Presentation in	Keshav Kishor (ICH/10017/15)	Dr Ashoke Sharon	12.1.19
	International Society	Sneha Nayak (ICH/10013/15)	Dr C Bal	-
	of Chemists and	Harpreet Kaur (ICH/10001/15)		14.1.19
	Biologists,	Prem Kr Kushwaha (ICH/10020/15)		

SI. No.	Name of the Activity	Students' Co-Ordinator	Faculty Co- ordinator	Date / Duration
2.	Oral Presentation in 37 th convention of Indian Council of Chemists	Mr Koustav Kundu	Dr Sumit Mishra	12.12.19 - 14.12.19
3.	Student Summer Internships:	Puja Kumari (SAC/10003/2018) Anindita Mukherjee (SAC/10001/2018) (NIT Rourkela)	Dr Sumit Mishra	May 2019 - July 19
		Surabhi Kumari (SAC/10002/2018)	Dr C Bal	May 2018 - July 18
		Chinmaya (ICH/10015/15) Central Tasar Research and Training Institute	Dr P K Srivastava	May 2018 - July 18
		Anshu Kumari (ICH/10006/15) CSIR-CIMFR	Dr P.K. Srivastava	May 2018 - June 2018

8. List of Faculties

SI. No.	Name	Designation
1.	Dr. P.K. Srivastava	Professor
2	Dr. (Mrs.) U. Jha	Professor
3	Dr. J.P. Pandey	Professor
4	Dr. B. Verma	Associate Professor
5	Dr. A. Sharon	Associate Professor
6	Dr. S. Naskar	Assistant Professor
7	Dr. (Mrs.) S. Mishra	Assistant Professor
8	Dr. (Mrs.) C. Bal	Assistant Professor
9	Dr. (Mrs.) Deep Shikha	Assistant Professor
10	Dr. P. Kar	Assistant Professor
11	Dr. S.S. Mahapatra	Assistant Professor
12	Dr. (Mrs.) B. Dasgupta Ghosh	Assistant Professor
13	Dr. G.K. Agarwal	Assistant Professor
14	Dr. G. Sen	Assistant Professor
15	Dr. J. Dhar	Assistant Professor

9. Board of Studies

SI. No.	Name of the Member	Designation	Role
1.	Dr. D. Tiwary	Professor; Department of Chemistry – IIT, B.H.U. Varanasi	External Member
2.	Dr. R.K. Dey	Professor; Department of Chemistry, Central University of Jharkhand	External Member
4	Dr. R.N. Gupta	Professor, Dept. Phar. Sc. & Tech.	Member
5.	Dr. R.P. Sharma	Professor, Dept. of Mech.	Member

SI. No.	Name of the Member	Designation	Role
6.	Dr. Usha Jha	Professor, Dept. of Chemistry	Member
7.	Dr. J.P. Pandey	Professor, Dept. of Chemistry	Member
9.	Dr. Ashoke Sharon	Associate Prof., Dept. of Chemistry	Member
10	Dr. Subhendu Naskar	Assistant Prof., Dept. of Chemistry	Member
11	Dr. Sumit Mishra	Assistant Prof., Dept. of Chemistry	Member
13	Dr. Gautam Sen	Assistant Prof., Dept. of Chemistry	Member
14	Dr. S.S. Mahapatra	Assistant Prof., Dept. of Chemistry	Member
15	Dr. P.K. Srivastava	Professor, Dept. of Chemistry	Chairman (Ex Officio)

SECTION 7 OTHER INFORMATION

10. Publication by students, if any

- 1. Chinmaya, T Pandiraaj, PP Srivastava, AK Sinha, Status and Variability of soil nutrients and carbon sequestration with depth in the Tasar host plants growing soils, Journal of Pharmacognosy and Phytochemistry, Vol 7, Issue 4, 2018.
- 2. R.S. Pathare, V. Patil, **H. Kaur**, A.K. Maurya, V.K. Agnihotri, S. Khan, N. Devunuri, A. Sharon and D.M. Sawant, Iodine-Catalyzed Cross-Coupling of Isocyanides and Thiols for the synthesis of S-Thiocarbamates Org Biomol Chem 2018, 16, 6885-6888

11. Distinguished Visitors from Industry/Academia/Research organizations:

SI. No.	Name of visitor with affiliation	Date of visit	Picture
1.	Prof Alok K Ray,	25.7.18	
	IIT Delhi		
2.	Dr Rosa Busquets, Prof Peter Hooda	July 2018	

12. List of Distinguished Alumni

SI. No.	Batch and Affiliation	Short Description		
1.	Vinita Arora, PhD, 2008	Working as Senior Manager in Environmental Division, CMPDI, Ranchi		
2.	Manoj Kr Saini, PhD 2018	Working as Principal Scientist, CIMFR, Ranchi		
3. Nandkishore Thombare, PhD, 2018		Working as Senior Scientist, Indian Institute of Natural gums and Resins, Ranchi		

13. Any other relevant information

1. Implementation of CBCS syllabus at IMSC and MSc level from 2018 batch.



Department of Civil and Environmental Engineering

SECTION 1

DEPARTMENTAL PROFILE





1. About the Department:

The Department of Civil Engineering was established in 1957. It was renamed as Department of Civil and Environmental Engineering in 2014. The Department has well established laboratory facilities on:

- Concrete and Road Materials
- Geology
- Hydraulics
- Soil Mechanics
- Structural Engineering
- Surveying Laboratory
- Computer Laboratory
- Environmental Engineering

The faculty members are well qualified and are having degrees from reputed Institutes.

Faculty members also possess work experience from reputed organizations from outside India. They are actively involved in research and consultancy. The department had contributed a lot in the infrastructural and industrial growth in Jharkhand by providing technical expertise and consultancy of worth several crores INR. Students from the Department have pursued internship from universities of International repute such as the Illinois Institute of Technology, Chicago.

The Department has facilities for:

- Field-testing in Geotechnical Engineering
- Transportation Engineering
- Non-Destructive Testing of concrete.

The Department offers the following programs:

Sr No	Program	Year of Starting	Intake	NBA Accreditation
1	B. Tech. (Civil Engineering)	1957	60	2002, 2009, 2016
2	M. Tech. (Structural Engineering)	1967	12	2009, 2016
3	M. Tech. (Soil Mechanics & Foundation Engineering)	1967	12	2002, 2009, 2018
4	M. Tech. (Environmental Science and Engineering)	2002	18	2016

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

Ongoing Projects.

Sr No	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
1.	National Carbonaceous Aerosols Programme (NCAP): Working Group III – Emissions, sources apportionment and climate effects.	Dr. R. Naresh Kumar (PI) Dr. Jawed Iqbal (Co-PI)	MoEFCC	March, 2017	Rs. 1.06 Crores	5 Years
2.	Development of Guidelines for design of all tiers of shovel dumper dump above dragline dump with delineation of phreatic surface within dragline dump, throughout the year and validation study of two dragline mines of Coal India Limited.	Dr. Indrajit Roy (PI), Dr. Anand Kumar Sinha (Co-PI), Dr. Bindhu Lal (Co-PI), Dr. Sudeshna Chakravarty (Co-PI)	Ministry of Coal, Government of India	April, 2018	Rs. 75.30 Lakhs	3 Years
3	Mobility, Bio- accessibility and Source Apportionment Study of Toxic Heavy Metals in Indoor and Outdoor Dust Environment: An Isotope Fingerprinting Approach'	Dr. Tanushree Bhattacharya	Science and Engineering Research Board	July, 2017	Rs. 41.907 Lakhs	3 years

b) Projects Completed

	- Indiana de la companya de la comp					
Sr No	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Date of completion of the Project
1.	Top Soil Study	Dr. Kirti Avishek	Adani Corporation Chatisgarh	2018	5.9 Lakh	Aug 2018
2.	Slope Stability Study of PEKB coal mines	Dr. Indrajit Roy	GMDC	2018	4.9 Lakh	Aug 2018
3.	Slope stability study of Neeljai	Dr. Indrajit Roy	Western Coalfield Limited (WCL)	Jan, 2019	2.36 Lakh	June 2019
4.	Slope stability study of Penganga	Dr. Indrajit Roy	WCL	Jan, 2019	2.36 Lakh	June 2019
5.	Slope stability study of Mungoli	Dr. Indrajit Roy	WCL	Jan, 2019	2.36 Lakh	June 2019
6.	Slope stability study of Kolgaon	Dr. Indrajit Roy	WCL	Jan, 2019	2.36 Lakh	June 2019
7.	Slope stability study of Umrer	Dr. Indrajit Roy	WCL	Jan, 2019	3.0 Lakh	June 2019
8.	Slope stability study of Gokul	Dr. Indrajit Roy	WCL	Jan, 2019	3.0 Lakh	June 2019
9.	Slope stability study of Makardhokra – I	Dr. Indrajit Roy	WCL	Jan, 2019	3.0 Lakh	June 2019
10.	Slope stability study of Ghonsa	Dr. Indrajit Roy	WCL	Jan, 2019	2.0 Lakh	June 2019
11.	Slope stability study of Kolarpimpri	Dr. Indrajit Roy	WCL	Jan, 2019	2.0 Lakh	June 2019
12.	Slope stability study of Ukni	Dr. Indrajit Roy	WCL	Jan, 2019	1.5 Lakh	June 2019
13.	Slope stability study of Junad	Dr. Indrajit Roy	WCL	Jan, 2019	1.5 Lakh	June 2019
14.	Slope stability study of Sonepur-Bazari ocm	Dr. Indrajit Roy	Eastern Coalfield Limited (ECL)	Oct, 2018	4.72 Lakh	June 2019
15.	Slope stability study of Satgram ocm	Dr. Indrajit Roy	ECL	Oct, 2018	4.72 Lakh	June 2019
16.	Slope stability study of Kenda ocm	Dr. Indrajit Roy	ECL	Oct, 2018	2.13 Lakh	June 2019
17.	Slope stability study of Trans- Damador pencast mine(ocm)	Dr. Indrajit Roy	West Bengal Power Development corporation ltd. (WBPDC)	Feb, 2019	1.77 Lakh	June 2019

Sr No	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Date of completion of the Project
18.	Slope stability study of Barjora (N)	Dr. Indrajit Roy	WBPDC	Feb, 2019	1.77 Lakh	June 2019
19.	Slope stability study of Gangaramchak Opencast mine(ocm)	Dr. Indrajit Roy	WBPDC	Feb, 2019	1.77 Lakh	June 2019
20.	Slope stability study of Barjora	Dr. Indrajit Roy	WBPDC	Feb, 2019	1.77 Lakh	June 2019
21.	Slope stability study of Mata-no-Madh lignite opencast mine	Dr. Indrajit Roy	GMDC	July 2018	4 Lakh	June 2019
22.	Slope stability study of Vastan and Valia opencast mine	Dr. Indrajit Roy	GMDC	July 2018	5.9 Lakh	June 2019
23.	Slope stability study of Panandhro lignite opencast mine	Dr. Indrajit Roy	GMDC	July 2018	4 Lakh	June 2019
24.	Slope stability study of Umarsar lignite opencast mine	Dr. Indrajit Roy	GMDC	July 2018	4 Lakh	June 2019
25.	Slope stability study of Surkha(N) lignite opencast mine	Dr. Indrajit Roy	GMDC	July 2018	4.72 Lakh	June 2019
26.	Slope stability study of Ghogha-Surkha lignite opencast mine	Dr.Indrajit Roy	GMDC	July 2018	2.36 Lakh	June 2019
27	Design and Renovation of Eco Friendly toilets for 50 Govt. schools of Jharkhand	Dr.Kirti Avishek	CINI-TATA TRUST	Feb, 2018	3.60 Lakh	July 2018

SECTION 3 SEMINAR / CONFERENCE

3. Seminar / Conferences / Short – Term Courses Conducted by the Department

	Sr No	Title of Seminar/ Conference/ Short Term Courses/ Workshop	Coordinator	Funding / Sponsoring Agency	Date of Event
/	1.	One Day Academia—Industry Interaction On Coal Mining and Sustainable Environment	Prof. Bindhu Lal and Dr. Sukalyan Chakraborty	TEQIP-III, BIT Mesra	15 Mar 2019

4. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

Sr No	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Dr. Manoj Ku. Diwakar, Mr. Vikky Masih	Training on "HPC for ANSYS"	BIT Mesra	BIT Mesra	BIT Mesra	9 - 13.04.2019
2.	Dr. Siddhartha Sengupta, Dr. Manoj Ku. Diwakar, Mr. Indrajit Barua, Mr.Vikky Masih	Awareness of Fire Safety	NRB DRDO	BIT Mesra	BIT Mesra	29.03.2019
3.	Dr. Siddhartha Sengupta, Dr. Neeta Kumari Dr. Manoj Ku. Diwakar, Mr. Indrajit Barua, Mr. Vikky Masih	One day Industry- Academia Interaction on Coal mining and Sustainable Environment	TEQIP- III, BIT Mesra	BIT Mesra	BIT Mesra	15.03.2019
4.	Dr. Neeta Kumari, Dr. Manoj Kumar Diwakar, Indrajit Barua	One day workshop on National Information system for climate and environment studies (NICES) data products	BIT Mesra	BIT Mesra	BIT Mesra	31.01.2019
5.	Dr. Koushik Paul	One week Short Term GIAN course on "Geoinformatics and Geocomputational Modeling for Water Resources Engineering and Environmental Science"	BIT Mesra	IIT ISM Dhanbad	IIT ISM Dhanbad	17-22.9.2018
6.	Mr. Mani Mohan	Applications of Probability and Statistics in Civil Engineering	BIT Mesra	IIT Delhi	IIT Delhi	13-15.07.18
7.	Dr. Kirti Avishek	Design of water supply and wastewater treatment facilities	BIT Mesra	NIT Warangal	NIT Warangal	19-23.05.19

Sr No	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
8.	Dr.Indrajit Roy	Invited talk/ presentation on Slope stability problems of surface coal/lignite mines of India & their solution	BIT Mesra	Disaster Prevention Research Institute (DPRI)	Kyoto University, Japan.	7-06-2019

SECTION 4 RESEARCH PUBLICATIONS

5. Publications in Journals : (International/National)

- 1. Paul, K., Chattopadhyay, S., Dutta, A., Krishna, A.P., Ray, S. (2018). A comprehensive optimization model for integrated solid waste management system: A case study. Environmental Engineering Research 24, 220–237.
- 2. Akhoury, G., & Avishek, K. (2018). The congruity between interannual variations of rainfall, OLR and temperature maxima-minima in the context of Indian subcontinent. Advance and Innovative Research, 70.
- Sengupta, S., Krishna, A. P., & Roy, I. (2018). Slope failure susceptibility zonation using integrated remote sensing and GIS techniques: A case study over Jhingurdah open pit coal mine, Singrauli coalfield, India. Journal of Earth System Science, 127(6), 82.
- 4. Mondal, N.K., Samanta, A., Chakraborty, S., and Shaikh, W.A. (2018). Enhanced chromium(VI) removal using banana peel dust: isotherms, kinetics and thermodynamics study. Sustainable Water Resources Management 4, 489–497.
- Shaikh, W.A., Chakraborty, S., and Ul Islam, R. (2018). UV-assisted photocatalytic degradation of anionic dye (Congo red) using biosynthesized silver nanoparticles: A green catalysis. Desalination and Water Treatment 130, 232–242.

- 6. Alam, Md. A., Shaikh, W.A., Alam, Md. O., Bhattacharya, T., Chakraborty, S., Show, B., and Saha, I. (2018). Adsorption of As (III) and As (V) from aqueous solution by modified Cassia fistula (golden shower) biochar. Applied Water Science 8.
- 7. Prathap, A., and Chakraborty, S. (2019). Assessment of surface water quality around opencast coal mines for sustainable utilization potentials: a case study in Jharkhand, India. Environment, Development and Sustainability.
- 8. Akhoury, G., and Avishek, K. (2019). Climatic changes over the Arabian Peninsula and their correlation with Indian rainfall. Journal of Earth System Science 128.
- Akhoury, G., and Avishek, K. (2019). Statistical analysis of Indian rainfall and its relationship with the Southern Oscillation Index. Arabian Journal of Geosciences 12.
- 10. Sengupta, S. (2019). Responses of piled raft foundations in layered soils subjected to eccentric vertical loading. International Journal of Science and Research, 8 (5), 440-445.
- 11. Kumari, N., Garg, S., Singhal, A., Kumar, M., Bhattacharya, M., Jha, P.K., Chauhan, D.K., Thakur, I.S. (2019). Comparing different algorithms of



- Artificial neural network for optimizing chemical pretreatment process of Leucaena leucocephala wood. Bioresource Technology Reports, vol 7, pp 100289-297.
- 12. Pandey, S. K., & Bhattacharya, T. (2018). Effect of two biodegradable chelates on metals uptake, translocation and biochemical changes of Lantana Camara growing in fly ash amended soil. International journal of phytoremediation, 20(3), 214-224.
- 13. Pandey, S. K., & Bhattacharya, T. (2019). Mobility, Ecological risk and change in surface morphology during sequential chemical extraction of heavy metals in fly ash: A case study. Environmental Technology & Innovation, 13, 373-382.

6. Publications in Proceedings (International/National)

- Bhattacharya, T., and Kumar, A., Biochar and its Application, In proceedings of Biogeochemical Cycles and Climate Change, 2018.
- Jain, S., Bhattacharya, T., and Chakraborty, S., Comparison of Plant Tolerance Towards Air Pollution of Rural, Urban and Mine Sites of Jharkhand: A Biochemical Approach to Identify Air Pollutant Sink, In proceedings of Advances in Waste Management, 2019.
- Pandey, S.K., and Bhattacharya, T., Biochemical Changes in Lantana

- camara and Ipomoea carnea Growing in the Fly Ash Amended Soil, In proceedings of Advances in Waste Management, 2019.
- Singh, B.K. and Sengupta, S., Development of sustainable building blocks using fly ash blended with different additives: A critical review, In proceedings of 2nd National Conference on Recent Advances in Civil Engineering (RACE - II), National Institute of Technology, Patna, 2019.
- Kumar, D. and Sengupta, S., Determination of liquefaction potential of sand-fly ash blends, In proceedings of 2nd National Conference on Recent Advances in Civil Engineering (RACE -II), National Institute of Technology, Patna, 2019.

7. Chapter(s) in Edited Book

- Bhattacharya, T., & Chakraborty, S. (2019). Eco-Restoration Potential of Vegetation for Contaminated Water Bodies. Phytomanagement of Polluted Sites (pp. 425-446). Elsevier.
- 2. Kumari, N. and Pathak, G.(2019). Study of chemical nature of groundwater in the western parts of Jharkhand with a focus on Fluoride. Wastewater reuse and watershed management, engineering implications for agriculture, industry and the environment. Editor: Ajay Singh, Apple Academic Press, Florida, USA.

SECTION 5

AWARD/PATENT/COLLABORATIONS

8. Award / Recognition Bestowed on Faculties (State / National / International)

Sr No	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
1	Dr. Indrajit Roy	Selected by DAAD- RISE Internship to guide a German student	German Academic Exchange Service	International	2019

Sr No	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
2	Dr. Kirti Avishek	Indo Global Excellence Award in Environmental Science	IGCCIA, Pune	National	2018
3	Dr. Sukalyan Chakraborty	Selected in Fulbright- Nehru Specialist Program to host a Professor from USA	United States-India Educational Foundation (USIEF)	International	2019

SECTION 6

ACTIVITIES/ FACULTY MEMBERS / BOS

9. Departmental Students' Activities

1	Sr No	Name of the Activity	Students' Co-Ordinator	Faculty Co- ordinator	Date / Duration
	1.	Kerala Flood Relief Operation	Nishant Kumar Singh		1/09/18-8/09/18

10. List of Faculties

Sr No	Name	Designation	TEQIP Sponsored
1.	Dr. Sudeshna Chakravarty	Professor, Head of the Department	No
2.	Dr. Bindhu Lal	Professor	No
3.	Dr. Anand Kumar Sinha	Professor	No
4.	Dr. Birendra Kumar Singh	Professor	No
5.	Dr. Siddhartha Sengupta	Associate Professor	No
6.	Dr. Indrajit Roy	Associate Professor	No
7.	Dr. Kirti Avishek	Assistant Professor	No
8.	Dr. Koushik Paul	Assistant Professor	No
9.	Dr. Radhakrishnan Naresh Kumar	Assistant Professor	No
10.	Dr. Sukalyan Chakraborty	Assistant Professor	No
11.	Dr. Tanushree Bhattacharya	Assistant Professor	No
12.	Dr. Jawed Iqbal	Assistant Professor	No
13.	Dr. Neeta Kumari	Assistant Professor	No
14.	Mr. Mani Mohan	Assistant Professor	No
15.	Mr. Vikky Masih	Assistant Professor	Yes
16.	Dr. Manoj Kumar Diwakar	Assistant Professor	Yes
17.	Mr. Indrajit Barua	Assistant Professor	Yes

11. Board of Studies

Sr No	Name of the Member	Designation	Role
1.	Prof. Sudeshna Chakravarty	Head of the Department	Chairman
2.	Prof. Anand Kr. Sinha	Professor	Member
3.	Prof. Bindhu Lal	Professor	Member
4.	Prof. Birendra Kr. Singh	Professor	Member
5.	Dr. Indrajit Roy	Associate Professor	Member
6.	Dr. Kirti Avishek	Assistant Professor	Member
7.	Prof. D.J. Biswas	Professor and Head (Architecture)	Member
8.	Prof. Jeganathan C.	Professor and Head (Remote Sensing)	Member
9.	Prof. S.K. Maity	Professor (ESE), IIT (ISM), Dhanbad	Member
10.	Prof. Rajesh Kumar	Professor (CE), IIT(BHU), Varanasi	Member
11.	Dr. Rakesh Pratap Singh	Associate Professor (CE), NIT Jamshedpur	Member
12.	Mr. Sujib Chatterjee	Chief Manager (Civil), CMPDIL, Ranchi	Member
13.	Mr. Rammohon Chatterjee	Head (Structural Div), CET, SAIL, Ranchi	Member
14.	Mr. Suvendu Basu	Head, Redimix, Health and Safety, Lafarge, Kolkata	Member

SECTION 7 OTHER INFORMATION

12. Publication by students

- Mondal, N.K., Samanta, A., Chakraborty, S., and Shaikh, W.A. (2018). Enhanced chromium(VI) removal using banana peel dust: isotherms, kinetics and thermodynamics study. Sustainable Water Resources Management 4, 489– 497.
- 2. Shaikh, W.A., Chakraborty, S., and Ul Islam, R. (2018). UV-assisted photocatalytic degradation of anionic dye (Congo red) using biosynthesized silver nanoparticles: A green catalysis. Desalination and Water Treatment 130, 232–242.
- 3. Alam, Md.A., Shaikh, W.A., Alam, Md.O., Bhattacharya, T., Chakraborty, S., Show, B., and Saha, I. (2018). Adsorption of As (III) and As (V) from aqueous solution by modified Cassia fistula (golden shower) biochar. Applied Water Science 8.
- Kumar, D. and Sengupta, S., Determination of liquefaction potential of sand-fly ash blends, In proceedings of 2nd National Conference on Recent Advances in Civil Engineering (RACE -II), National Institute of Technology, Patna, 2019.

13. Achievements of Students

Sr No	Name of Student	Achievement/Position/ Award etc	Organised by	Date and Venue
1.	Nishant Kumar Singh	Excellence in Social Service Award	News and Publication Society Awards, BIT Mesra	05/04/2019 CAT Hall, BIT Mesra
2	Nishant Kumar Singh	First Position University Level	Swachh Bharat, Summer Internship, Govt. of India	15/04/2019 BIT Mesra



Sr No	Name of Student	Achievement/Position/ Award etc	Organised by	Date and Venue
3	Nishant Kumar Singh	Research Internship	CMU, Pittsburgh, US	03/06/2019- 26/07/2019
4.	Abhishek Bhatt, Prajjwal Verma, Apurva Sinha, Ayushi Saraf	Qualified for the final round of National Award Scheme for Civil/Structural Engineering Student for best Innovative Structural Steel Design.	development and	15/02/2019- 16/02/2019, Ispat Pragati Bhawan, Kolkata

14. Distinguished Visitors from Industry/Academia/Research organizations

Sr No	Name of Visitor with Affiliation	Date of Visit	Picture
1	Dr Biswajit Paul, Associate Professor, Department of Environmental Sc & Engineering (Centre of Mining Environment) Indian Institute of Technology (Indian School of Mines)	15/03/2019	
2	Mr. Zeeshan Qamer, Director of Mines, Govt. of Jharkhand	15/03/2019	
3	Mr. V.K. Pandey Senior Manager (Environment), CMPDI	15/03/2019	
4	Mr. Abhijit Sinha GM (Environment), CMPDI	15/03/2019	Processing and State of the Control
5	Mr. Rakesh Dwivedi Chief Manager (Environment), CCL	15/03/2019	2 Organization of American Community of Comm

15. Distinguished Alumni:

SI. No.	Name	Affiliation
1		Dr. Gopal Pathak Vice Chancellor, Jharkhand Technical University.
2		Mr. Chandrakant Raipat, Managing Director, Rameshwaram Group of Companies, Ranchi, Jharkhand
3		Dr. Sunil K. Sinha Professor of Civil and Environmental Engineering at Virginia Tech. Director of the Sustainable Water Infrastructure Management (SWIM) Center. Principal Faculty of Myers-Lawson School of Construction.
4		Dr. Arup Roy Choudhury Chief Commissioner, Right to Public Service Commission, West Bengal, India

16. List of Ph.D. Scholars admitted:

Sr No	Roll No.	Name
1	PHD/CEE/10001/2018	Aditya Kr. Jha
2	PHD/CEE/10002/2018	Arpita Roy
3	PHD/CEE/10003/2018	Rukaiya Kausher
4	PHD/CEE/10004/2018	Chakresh Kumar
5	PHD/CEE/10051/2018	Kumari Anadita
6	PHD/CEE/10052/2018	Akash Mishra
7	PHD/CEE/10053/2018	Kanchan Lakra
8	PHD/CEE/10001/2019	Abhiseg D.



Department of Computer Science and Engineering

SECTION 1

DEPARTMENTAL PROFILE





1. About the Department

The Department of Computer Science & Engineering was established in the year 1983 and is now recognized as one of the leading departments with infrastructure and facilities to match the very best in the country. The department remains committed towards its mission, which is twofold. One is to provide students with the fundamental knowledge and problemsolving skills in Computer Science required for a fulfilling career. The other goal is to create and disseminate knowledge to improve Computer Science research, education and practice.

The Departmenthas academic collaborations with University of New Brunswick, Canada, University of Melbourne, Australia and University of Manitoba, Canada.

Undergraduate Programme

B.E. in Computer Science and Engineering

B.E. in Information Technology

Postgraduate Programmes

M. Tech in Computer Science

M. Tech in Information Technology

M. Tech in Information

Master of Computer Application

Doctoral Programmes

The Department of Computer Science and Engineering offers PhD programmes in various branches of the subject.

Software Available

SI. No.	Software	SI. No.	Software
1.	IBM Rational Suit Enterprise	9.	Prolog
2.	MATLAB (Mathworks)	10.	Turbo C 3
3.	JAVA(1.8), (JAVA djk 1.7)	11.	LDRA
4.	Eclipse 4.4	12.	Turbo C++ 4.5
5.	NetBeans	13.	Argo
6.	Code Blocks	14.	Swi-Prolog
7.	MySQL	15.	Oracle database 10g express ed.
8.	R Studio	16.	Open Office

SI. No.	Software	SI. No.	Software
1.	MS Office	5.	WinRAR
2.	Acrobat reader	6.	Putty
3.	Google Chrome	7.	Internet Explorer
4.	Mozilla Firefox	8.	ESET Endpoint Security 5.0 (antivirus)

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

a) Ongoing Projects

SI. No.	Project Title	PI / Co PI /	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
1.	Development of Basic Natural Language Processing Tools and Resources for Maithili.	Dr. Sujan Kumar Saha (PI)	SERB (GOI)	02 March 2017	Rs. 17.98 Lakhs	3 years
2.	Development of machine learning algorithms for the early diagnosis of delinquent behaviour of juveniles"	Dr. S. Mohapatra (PI) Dr. V. Bhattacharjee (Co-PI)	CSRI, DST	January 2019	Rs. 22.54 Lakhs	3 years
3.	Automated vegetation stress detection from very high resolution multi-temporal spectral data to establish relationship using Artificial Intelligence	Dr. C. Jeganathan (PI) Dr. A.P. Krishna(Co-PI) Dr. V. Bhattacharjee(Co-PI) Dr. A.Mustafi (Co-PI) Dr. S. Mishra(Co-PI)	Sky Map Global (SMG) Pvt. Ltd., Singapore	June 2019	Rs. 7.50 Lakhs	1 year

SECTION 3

SEMINAR / CONFERENCE

3. Seminar / Conferences / Short – Term Courses Conducted by the Department

SI. No.	Title of Seminar/ Conference/ Short Term Courses/ Workshop	Coordinator	Funding / Sponsoring Agency	Date of Event
1.	International Conference on Computational Intelligence (ICCI 2018)	Dr. S.K. Sahana	TEQIP III	DEC 10-12, 2018
2.	Recent Trends In Software Testing (RTST-2019)	Dr. K. Sridhar Patnaik	TEQIP III and ACM	MAY 20-24, 2019
3.	Excellence in Pedagogy and Quantitative Research	Dr. S. Shivani	TEQIP III	26-30 August, 2019

SI. No.	Title of Seminar/ Conference/ Short Term Courses/ Workshop	Coordinator	Funding / Sponsoring Agency	Date of Event
4.	IoT Challenge2019 Prelims	Dr. K. Sridhar Patnaik, Dr. Itu Snigdh, Prof. S. Srivastava	I3indyatechnologies Ltd, ACM	13-14 Oct, 2018
5.	LDRA Software Testing Training	Dr.K.Sridhar Patnaik	TEQIP-III	29-30 Sep, 2018
6.	Two Days Training on Internet of Things By CDAC Bangalore	Dr. K. Sridhar Patnaik	TEQIP-III	4-5 April, 2018

4. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Akriti Nigam	One week training program on Biomedical Imaging and Image Processing	TEQIP III	NIT Silchar	NIT Silchar	28 th July to 1 st August 2018
2.	Akriti Nigam	Training Cum Workshop on E Learning in Higher Education	TEQIP III	Allahabad	Ishwar Saran PG College, Allahabad	7 th Feb to 13 th Feb 2019
3	Debjani mustafi	Prevention of Harassment at Work place	TEQIP III	BIT, Mesra	R & D building, BIT, Mesra	25 th June 2019
4	Devjani mustafi	Intellectual Property Rights and Patent Filing	TEQIP III	BIT, Mesra	R&D building, BIT, Mesra	28 th June, 2019
5	Kalyan Samanta	Induction Training, NITTTR, Kolkata	TEQIP	NITTTR Kolkata	Kolkata	16 th -20 th July 2018
6	Kalyan Samanta	National Information System for Climate and Environment Studies (NICES) Data Products	Remote Sensing Dept, BIT, Mesra and NICES	BIT Mesra	BIT Mesra	31 January 2019 to 4 th February
7	Kalyan Samanta	12 th National Workshop on Recent Trends In Software Testing (RTST-2019)	TEQIP	CSE Dept, BIT Mesra	BIT Mesra	20-24 May 2019
8	Kalyan Samanta	IBM Faculty Development Program	IBM, India	IBM, India	IBM, India, Bangolore	17-21 June 2019
9	Shamama Anwar	National Information System for Climate and Environment Studies (NICES) Data Products		Department of Remote Sensing, BIT Mesra	BIT Mesra	31 st January, 2019.

SI.	Name of the	Title of the Conference/	Funding	Organizers	Venue	Date
No.	Faculty	Seminar	Agency			
10	Shamama Anwar	12 th National Workshop on Recent Trends in Software Testing (RTST – 2019)		Dept. of Comp. Sci. & Engineering, BIT Mesra	BIT Mesra	20 – 24 May, 2019
11	Shamama Anwar	4 th International Conference on Nanoelectronics Circuits & Communication Systems (NCCS),		IETE Ranchi.	Advanced Regional Telecom Training Centre, Ranchi	3 – 4 th November, 2018
12	Shamama Anwar	4 th International Conference on Advanced Machine Learning Technologies and Applications, AMLTA 2019			Ain Shams University Conference Center, Egypt	28-30 March, 2019
13	Dr. V. Bhattacharjee	ICCI 2018	TEQIP III	Deptt of CSE	Deptt of CSE, BIT Mesra	Dec. 2018
14	Dr. V. Bhattacharjee	RTST 2019	TEQIP III and ACM	Deptt of CSE	Deptt of CSE, BIT Mesra	May 2019
15	Deo Dutta Ishwar	International Conference on Computational Intelligence – ICCI 2018	TEQIP-III	BIT Mesra	BIT Mesra	10 th -11 th Dec, 2018
16	Deo Dutta Ishwar	Recent Trends on Software Testing – RTST 2019	TEQIP-III	BIT Mesra	BIT Mesra	20 th -24 th May, 2019
17	Deo Dutta Ishwar	Advance Pedagogy Training Workshop 2019	TEQIP-III	IIT Hyderabad	IIT Hyderabad	10 th - 14 th June, 2019
18	Shishir Singh Chauhan	Faculty Development Program	TEQIP-III	IIT Madras	IIT Madras	31 st Jan-4 th Feb 2018
19	Shishir Singh Chauhan	Big Data	BIT Mesra	BIT Mesra	BIT Mesra	27 th - 30 th Mar 2019
20	Shishir Singh Chauhan	Data Analytics & Machine Learning	NIT Jamshedpur.	NIT Jamshedpur	NIT Jamshedpur	20-24 th May, 2019
21	Shishir Singh Chauhan	Internatioal Conference on Degital Padagogies		AICTE	AICTE Head Quarter.	1 st - 2 nd April 2019
22	Shishir Singh Chauhan	MICROSOFT	Microsoft	Microsoft	AICTE Head Quarter.	3 rd April 2019
23	Gaurav Kumar Pandey	Faculty summer training program on advanced pedagogies: Active learning on Digital Tools	TEQIP III	IIT Hyderabad	IIT Hyderabad	June 10- 14, 2019
24	Gaurav Kumar Pandey	National Information System for Climate and Environment Studies (NICES) Data Products	NRSC (ISRO), Hyderabad	BIT Mesra	BIT Mesra	31.01. 2019

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
25	Gaurav Kumar Pandey	Awareness of fire safety	TEQIP III	BIT Mesra	BIT Mesra	29.03. 2019
26	Dr.K.Sridhar Patnaik	Machine Learning Applications in Software Engg	TEQIP-III	NIT Warangal	NIT Warangal	11-16 June, 2019
27	Dr.K.Sridhar Patnaik	Summer Training Program on Active Leraning	TEQIP-III	IIT Gandhinagar	IIT Gandhinagar	18-22 June, 2018
28	Kumar Gaurav	Lab Safety: Pitfalls & Remedies	TEQIP-III	BIT Mesra	BIT Mesra	December 17, 2018
29	Kumar Gaurav	Recent Trends In Software Testing	TEQIP-III	BIT Mesra	BIT Mesra	May 20- 24, 2019
30	Kumar Gaurav	Summer Training Program on Advanced Pedagogies	TEQIP-III	NPIU and IIT Hyderabad	IIT Hyderabad	June 10- 14, 2019

SECTION 4 RESEARCH PUBLICATIONS

5. Publications in Journals:(International/National)

- Kumari. D and Rajnish, K (2018), "A Systematic Approach for Investigating the Effect of OO-metric in Development of Software Fault Prediction Model", JARDCS, Vol. 10, No. 9, Elsevier (Scopus), 2018.
- 2. Patra, H.P. and Rajnish, K. "A New High-Performance Empirical Model for software Cost Estimation", International Journal of Computer Added Engineering and Technology, Vol.11, No 4/5, 2019, Inderscience Publisher, Scopus.
- 3. Jain, V and Rajnish, K (2018), Comparative Study of Software Automation Testing Tools: Open Script and Selenium, Int. Journal of Engineering Research and Application 8(2), 29-33.
- Puja Kumari and K. Rajnish, "Cloud Cost Management: An Empirical View", IJARIIT, Vol.5, Issue: 3, pp.486-490, 2019.
- 5. H. Parthasarthi patra and Kumar Rajnish, A Fuzzy based Parametric Approach for Software Effort Estimation", I.J. Modern Education and

- Computer Science, 2018, 3, 47-54, MECS Publisher.
- Nigam, A., Singh, P., Singh, V.K., Tripathi, R.C., (2018), "A Multiple Feature Based Offline Handwritten Signature Verification System", International Journal of Computer Applications in Technology, Vol 59, Issue 3, pp 214- 223. doi: 10.1504/ IJCAT.2019.098602
- 7. Khatoon N. and Amritanjali (2019). Congestion adaptive load balanced clustering scheme for prolonging network lifetime in mobile ad-hoc network, International Journal of Wireless and Mobile Computing, 16(3), 211-221
- 8. B.K. Sarkar (2019): A Two-Step Knowledge Extraction Framework for Improving Disease Diagnosis Framework for Improving Disease Diagnosis. The Computer Journal (ISSN: 1460-2067, SCIE- I.F. 0.98), doi:10.1093/comjnl/bxz034
- B. K. Sarkar (2019): Hybrid model for prediction of heart disease. - Soft Computing (1432-7643, Springer, SCI- I.F. - 2.784)



- 10. A. Kumar and B.K. Sarkar: A Hybrid Predictive Model Integrating C4.5 and Decision Table Classifiers for Medical Data Sets (180317-015223).- Journal of Information Technology Research (JITR) (IGI Global, ESCI and Scopus indexed), (2018) 11(2):150-167
- 11. Anwar, Shamama & Meghana, S. (2019). A pixel permutation based image encryption technique using chaotic map. Multimedia and Tools Application: An International Journal, Springer, Vol. 67, No. 3, pp. 1 22.
- 12. Wahi C., Bhattacharjee V., Chakraverty S.(2019), "Current Taxonomy of Trust based Secure Routing in MANETs", Journal of Advanced Research in Dynamical & Control Systems, Vol. 11, 04-Special Issue
- 13. Atish and Bhattacharjee V. (2018), An efficient method for brain tumor detection and categorization using MRI images by K-means clustering & DWT, International Journal of Information Technology, Springer, DOI:10.1007/s41870-018-0255-4.
- 14. R. Mukherjee, K.S Patnaik, "Prioritizing JUnit Test Cases Without Coverage Information: An Optimization Heuristics Based Approach", IEEEAccess, SCIE/Scopus, Vol.9, pp-78092-78107, 2019, Digital Object Identifier 10.1109/ACCESS.2019.2922387.June, 2019
- 15. Priyanka Srivastava, K.S. Patnaik, "Valuation of Facial Images likeness under different posture", MicroSystem Technologies, Spinger (SCI), 2019, https://doi.org/10.1007/s00542-019-04441-z.April, 2019
- 16. Pooja Jha, K Sridhar Patnaik, "Can Metric Judge Usability of Software: A Psychometric Walkthrough", International Journal of Computer Applications in Technology, (Scopus-Elsevier, Inderscience), Vol-58 (1). 2018.
- 17. R. Mukherjee, K.S Patnaik, "A Survey on Different Approaches for Software Test Case Prioritization, " Journal of King Saud University -

Computer and Information Sciences, 10.1016/j.jksuci.2018.09.005. ScienceDirect(ESCI).(in Press).2018

6. Publications in Proceedings: (International/National)

- Anjali Kumari, P. Paul and K. Rajnish, "Bots a new evolution of Roberts: A Survey", Proceedings of third international Conf. on MCC systems", springer, Lecture series in Electrical Engg., pp. 201-210, 2019.
- Annu Priya, Keshav Sinha, Sandeep Choudhary, Sabina Priyadarshini, "Image denoising technique using various filter models: A Survey" 2018, IEEE International conference of computing, power and communication technologies, Sep-28-29, 2018-2019
- 3. Aamir Junaid Ahmad and Sabina Priyadarshini, "Searching Social Networking Sites using Semantic web and Natural Language Processing", : Proceedings of the 2nd International Conference on Recent Advancements in Interdisciplinary Research, ICRAIR 2019, Bangkok, Thailand, June 2019.
- Mukhopadhyay, U.K., Sharma, R.N., Anwar, S., & Dutta, A.D. (2019, March). Correlating Thermal Anomaly with Earthquake Occurrences Using Remote Sensing. In International Conference on Advanced Machine Learning Technologies and Applications (pp. 863-875). Springer, Cham. [Print ISBN: 978-3-030-14117-2, Online ISBN: 978-3-030-14118-9].
- Singh. S and Paul.S, "Dimension Analysis in No-SQL Databases"., International Conference on Recent Innovations in Electrical, Electronics & Communication Engineering (ICRIEECE), IEEE Xplore, July 27th & 28th 2018, School of Electrical Engineering, Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar, India.

7. Book:

Co-Authored

- 1. B.K. Sarkar & A. Kumar- Introduction to Theory of Computation, University Press, India, ISBN-978-93-86235-75-6, 2019
- Bishnu P. S. and Bhattacherjee. V (2018), Data Analysis, PHI, ISBN 978-93-87472-65-

Edited Books

- Sahana S. K. and Bhattacharjee V. (Eds). (2018) Advances in Intelligent Systems and Computing: Springer, ISBN 978-981-13-8221-5.
- 2. Snigdh I, Patnaik K Sridhar, (2019). Energy Management in OppNets, Eds(K.Ahmad, N.J, Udzir, G.C Deka) In Opportunistics Networks Mobility Models, Protocols, Security and Privacy, CRC Press, Taylor and Francis (159-169)
- K. Sridhar Patnaik, Itu Snigdh(2019), Modeling and Designing of IoT Systems using UML Diagrams: An Introduction, In Integrating the Internet of Things

Into Software Engineering Practices, IGI Global(36-61)

Chapter(s) in Edited Book

- 1. Khatoon N. & Amritanjali (2019). Mobility Aware Distributed Clustering and Routing Algorithm based on A* Search for Mobile Ad-Hoc Networks, LNEE 476 (pp. 257-261), Springer
- 2. Khatoon N. & Amritanjali (2019). A Node Stability based Multi-Metric Weighted Clustering Algorithm for Mobile Ad-Hoc Networks, LNEE 476 (pp. 63-71), Springer.
- 3. Anwar, S., Sinha, S.K., Vivek, S., & Ashank, V. (2019). Hand Gesture Recognition: A Survey. In Nanoelectronics, Circuits and Communication Systems (pp. 365-371). Springer, Singapore.
- 4. Bhattacharjee V. and Neogi M.S. (2018), VOSDM4S: A Framework for Sustainable Software Development Model, In A. Ekka, H. Sinha (Ed.) Leadership, Innovation and Management for a Sustainable World.

SECTION 6

ACTIVITIES/ FACULTY MEMBERS / BOS

8. Departmental Students' Activities

SI. No.	Name of the Activity	Students' Co-Ordinator	Faculty Co- ordinator	Date / Duration
1.	Co-ordinator	BE (CS+IT) : Final year	CSE Department	8.07.2019

9. List of Faculties

SI. No.	Name	Designation
1	Dr. G. Sahoo	Professor
2	Dr. (Mrs). V. Bhattacharjee	Professor
3	Dr. Sandip Dutta	Professor
4	Dr. D.K. Mallick	Associate Professor
5	Dr. (Mrs.) Aruna Jain	Associate Professor
6	Dr. Bhaskar Karn	Associate Professor
7	Dr. V.K. Jha	Associate Professor
8	Dr. K.S. Patnaik	Associate Professor
9	Dr. K. Rajnish	Associate Professor
10	Dr. Abhijit Mustafi	Associate Professor

SI. No.	Name	Designation
11	Dr. B.K. Sarkar	Assistant Professor
12	Prof. S.K. Chatterjee	Assistant Professor
13	Dr. Partha Paul	Assistant Professor
14	Dr. I. Mukherjee	Assistant Professor
15	Dr. (Mrs.) Itu Snigdh	Assistant Professor
16	Prof. Ritesh Jha	Assistant Professor
17	Prof. I.D. Ram	Assistant Professor
18	Dr. Anup Kumar Keshri	Assistant Professor
19	Dr. K.K. Senapati	Assistant Professor
20	Dr. (Mrs.) Amritanjali	Assistant Professor
21	Dr. (Mrs.) Sanchita Paul	Assistant Professor
22	Dr. (Mrs.) Shruti Garg	Assistant Professor
23	Dr. Sudip Kumar Sahana	Assistant Professor
24	Prof. B.K. Chanda	Assistant Professor
25	Dr. S. Pushkar	Assistant Professor
26	Dr. Sujan Kumar Saha	Assistant Professor
27	Dr. S. Priyadarshini	Assistant Professor
28	Dr. (Mrs.) Shamama Anwar	Assistant Professor
29	Prof. Kalyan Samanta	Assistant Professor
30	Dr. S. Mohapatra	Assistant Professor
31	Dr. (Mrs) Akriti Nigam	Assistant Professor
32	Prof. Sumit Srivasatava	Assistant Professor
33	Dr. Niraj Kumar Singh	Assistant Professor
34	Mrs. D. Mustafi	Associate Lecturer
35	Mr. Amit Prakash	TCRF
	TEQIP Sponsored	
36	Ms. Kshitiza Vasudeva	Assistant Professor
37	Mr. Kumar Gaurav	Assistant Professor
38	Mr. Radhamadhab Dalai	Assistant Professor
39	Mr. Alok Kumar	Assistant Professor
40	Mr. Surya Narayan Mahapatra	Assistant Professor
41	Mr. Narayan Sharma	Assistant Professor
42	Mr. Arunangshu Pal	Assistant Professor
43	Mr. Satya Prakash Patel	Assistant Professor
44	Mr. Ashish Kumar	Assistant Professor
45	Mr. Shishir Singh Chauhan	Assistant Professor
46	Ms. Najima Begum	Assistant Professor
47	Mr. Rashmi Rathi Upadhayay	Assistant Professor
48	Mr. Mayur.V. Shrirame	Assistant Professor
49	Mr. Rosamma K.S	Assistant Professor

10. List of Adjunct Faculties

SI. No.	Name	Designation	Affiliation
1.	Dr. Rama Govind Raju	Senior staff Software Engineer	Google Inc, 3101 Silver land Drive, San Jose, CA 95135 (USA)
2.	Mr. Atul Chadha	Chief Technology and Operations Officers	Affinity Solutions, Mackin Woods Lane, San Jose, CA 95135 (USA)

11. Board of Studies

SI. No.	Name of the Member	Designation	Role
1.	Dr. V. Bhattacharya	HOD, Ex-officio	Chairman (Ex-Officio)
2.	Dr. G. Sahoo	Professor	Internal Member
3	Dr. S. Dutta	Professor	Internal Member
4	Dr. K. Rajnish	Associate Professor	Internal Member
5	Dr. A. Mustafi	Associate Professor	Internal Member
6	Dr. B.K. Sarkar	Assistant Professor	Internal Member
7	Dr. I. Mukherjee	Assistant professor	Internal Member
8	Dr. C. Jeganathan	Professor, Remote Sensing	External Member
9	Dr. S.Pal	Professor, ECE	External Member

SECTION 7 OTHER INFORMATION

12. Publication by students, if any

1. Masroor Farha, Bhattacharjee Vandana, Mustafi Debjani "A Fuzzy Logic Approach for Software cost estimation", International Conference on Microelectronics Computing & Communication. 2019, Advance Regional Telecom Training Center, Ranchi.

13. Achievements of Students

Sr. No	Name of Student	Achievement/Position/ Award etc	Organised by	Date and Venue
1.	Saakshi Srivastava Siddhau Jain	SMART INDIA HACKATHON (won KPIT	Ministry of Telecommunication	2018
	Sree Aslesh Penisetty	award)		
	Dhiriti Kumari			
	Pamireddy Sucharitha			
	Ankit Kumar Singh			
2.	Sayed Bilal bari	HACK IN THE NORTH	IIIT Allahabad	2018,
	Prasant Singh	(Developed an app Docker		IIIT Allahabad
	Abhijeet Pandey	as Service)		Allallabau
	Mayank Mishra			
	Atul Kumar			
	Gaurav Kumar			



Department of Electrical and Electronics Engineering

SECTION 1 DEPARTMENTAL PROFILE





About the Department

The Department of Electrical and Electronics (EEE) offers B.E. in Electrical and Electronics Engineering, M.E. in Electrical Engineering with three different specializations, viz., Power System, Control System Power Electronics and Ph.D. in Electrical Engineering. CBCS Course Structure has been implemented from MO/ 2018 offering B.Tech. and M.Tech. in EEE. All the UG and PG programmes are accredited by NBA. Dept. of EEE has obtained 5 years accreditation in ME Power Electronics. In collaboration with Dept. of Energy Management has installed 700kWp Rooftop Solar Power Plant making 1Mw in BIT Mesra campus, also has been working for Augmentation of 11/33kV GIS Power System, got our Aveon Team 5th AIR in SAE India organised by Mahindra. Thirty three research scholars are currently pursuing their doctoral degree on different concepts related to Micro grid, Reliability, Hybrid Electric Vehicles, Multi-level inverters, Robotics, Fault Tolerant Multi Drives, Image Processing, magneto-optic sensors, Power System Voltage Stability, System Identifications, Applications of Soft Computing Techniques etc. Department of EEE is presently utilizing the grants received from DST (FIST), UGC (SAP), MODROB, TEQIP and Institute grant to strengthen the research and postgraduate lab facility. The department is continuously working in the direction of elevating the standard of 13 labs for laboratory based research and teaching. Many major equipments, such as Twin rotor MIMO System, Magnetic Levitation system, DC servo fundamental trainer kit, Temperature, Pressure, level and flow controller (both manual and PLC based), Air circuit breaker, SVC, Relay testing system, Generator protection system, numbers of DSO, Programmable function generator, Harmonic analyser, NI power measurement system, variable DC power supply, LCQ meter, different ratings of DC and AC motors, M-G set, BLDC motor, single phase and three phase transformers, NI Data acquisition card CRIO, LabVIEW, 5kW solar photovoltaic system, smart energy meter and NAO Humanoid Robot and Machine Fault Simulator are available in the key laboratories like Control System, Power System, Power Electronics, Measurement and Process Control and Machines, Power Electronic, Smart Grid, Measurement, and Drive labs. In the financial year 2018-19, Department has procured Typhoon Hill, Micro Lab box, DSO 1000 MHZ, DSPACE Kit, Data Acquisition system integrated with sensor, 3 phase multilevel inverter based induction motor drive, NI ELVIS Rotary inverted pendulum, ETAP software.

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

a) Ongoing Projects

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
1.	Design of IoT Based Energy Management System	Dr. Aftab Alam	SERB	21/05/2019	3870900	3 years
	Using Cloud Computing Platform					

b) Projects Completed

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Date of completion of the Project
1.	Special Assistance for developing infrastructure on Smart Grid and Electric Drive	Dr. T. Ghose Dr. P.R. Thakura	UGC under SAP	16.11.2012	51.80 lacs	22.2.2019 (Final Report sent)

SECTION 3 SEMINAR / CONFERENCE

3. Seminar / Conferences / Short – Term Courses Conducted by the Department/Campus

SI. No.	Title of Seminar/ Conference/ Short Term Courses/ Workshop	Coordinator	Funding / Sponsoring Agency	Date of Event
1.	Short Term Course on Development of IoT based Power Electronic Interface for Green Energy system		TEQIP-III	20 th – 24 th May, 2019

4. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Dr. T. Ghose Dr. V. Laxmi Mr. Prem Prakash	Prevention of harassment of workplace	TEQIP-III	BIT, Mesra	BIT	25 th June
2.	Dr. V. Laxmi	IPR Management	TEQIP-III	BIT, Mesra	BIT, Mesra	10 June, 2019
3.	Dr. V. Laxmi Mr. Prem Prakash	Intellectual Property Rights and Filing	TEQIP-III	BIT, Mesra	BIT, Mesra	28 th June, 2019



SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
4.	Dr. D.V. Siva Krishna Rao K. Dr. Tarkeshwar	Faculty Summer Training Program on Advance Pedagogies: Learning and Digital Tools	TEQIP	IIT, Hyderabad	IIT, Hyderabad	10-14 June, 2019
5.	Dr. S. K. Mishra	Intellectual Property Rights	National Research Development Corporation (NRDC)	Birla Institute of Technology Mesra, Ranchi.	Birla Institute of Technology Mesra, Ranchi.	7 th Sep. 2019
9	Dr. Deepak Kumar Mr. Gauri Shanker Gupta	95 th Orientation Program	Self	UGC-HRDC	Ranchi University	10-30 June- 2019

SECTION 4 RESEARCH PUBLICATIONS

5. Publications in Journals: (International/National)

- Debdoot Sain, Subrat Kumar Mishra, Sudhansu Kumar Mishra (July 2018). Robust 2-DOF FOPID Controller Design for Maglev System using Jaya Algorithm. IETE Journal of Research (SCI), Taylor & Francis (SCIE), 1-13.
- Debdoot Sain, Subrat Kumar Swain, Ayan Saha, Sudhansu Kumar Mishra & Sarbani chakraborty (Oct. 2018). Real-Time Performance Analysis of FOI-PD Controller for Twin Rotor MIMO System. IETE Technical Review, (Taylor & Francis), ISSN: 0256-4602 (Print) 0974-5971 (Online), 1-20.
- 3. Tarkeshwar Mahto, Hasmat Malik, M. Saad Bin Arif (Nov. 2018). Load frequency control of a solar-diesel based isolated hybrid power system by fractional order control using parial swarm optimization. Journal of Intelligent & Fuzzy Systems, vol. 35(5), 5055-5061.
- S. Dutta, P. Sadhu, M. J. B. Reddy and D. K. Mohanta (Nov. 2018). Smart Inadverten Islanding Detection Employing P-Type μPMU for an Active Distribution Network. IET Generation

- Transmission and Distribution, 12(20), 4615 4625.
- 5. S. Ghosh, D. Ghosh and D. K. Mohanta, (Dec. 2018). Multilevel Reliability Allocatio of Phasor Measurement Unit Using Bayesian Networks. Electric Power Components and Systems, 46(16-17), 1-13.
- KDVSivaKrishnaRao, V.S.N.Narasimha Raju, M. Premalatha. Constant Power Management Controller for Solar PV-Battery Hybrid System. Journal of Circuits, Systems, and Computers, World Scientific Publishing Company. Accepted.
- 7. KDVSivaKrishnaRao, V.S.N.Narasimha Raju, M. Premalatha. A Novel Approach for Reactive Power Compensation in Wind Energy Conversion System using DSTATCOM. Journal of Hydrogen Energy, Elsevier. Accepted.
- 8. B. Appasani and D. K. Mohanta (2018 [In press]). Reliability Analysis of PMU Mcrowave Communication Networks Using Generalized Stochastic Petri Nets. International Journal of Power and Energy Conversion (Inderscience Publishers).



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- 43. Chiranjeev Mishra, Subrat Kumar Swain, Sudhansu Kumar Mishra, Sisir Kumar Yadav, Fractional order sliding mode controller for the twin rotor MIMO system. IEEE International Conference on Intelligent Computing and Control System(ICICCS), Madurai, India, 15-17 May, 2019.
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Sourav Kumar Sahu, Debomita Ghosh, J.B. Reddy, R.C. Jha, Dusmanta Kumar, Mohanta, Fuzzy Reliability Analysis of Unit Commitment Problem Considering Uncertain Outage Replacement Rate and Load Representation. 20 th National Power Systems Conference (NPSC 2018), Electronic ISBN: 978-1-5386-6159-8, USB ISBN: 978-1-5386-5552-8, Tiruchirappalli, Tamilnadu, India, Dec. 14-16, 2018.

7. Chapter(s) in Edited Book

- Mahto, T., Malik, H., & Mukherjee, V. (2018). Fractional Order Control and Simulation of Wind-Biomass Isolated Hybrid Power System Using Particle Swarm Optimization. In: H. Malik, S. Srivastava, Y.R.
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SECTION 5

AWARD / PATENT / COLLABORATIONS

8. Award / Recognition Bestowed on Faculties (State / National / International)

SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
1.	Dr. P.R. Thakura	Appointed as an expert in Board of Study	BIT Sindri,	State	24 th June 2019.
2.	Dr. P.R. Thakura	Appointed as in Board of Managent	Sainath University, Ormahji, Ranchi	International	Dec 2018.
3.	Dr. P.R. Thakura	Chaired Session in Int. Conf on MCC in	BSNL, Ranchi, Jharkhand	International	Dec 2019,

SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
4.	Dr. P.R. Thakura	Chaired Session in Int. Conf on NCC	BSNL, Ranchi, Jharkhand	International	Dec 2018,
5.	Dr. P.R. Thakura	Member of Board of Studies	Rai University, Jharkhand	National	Jan 2019
6.	Dr. P.R. Thakura	Vice-Chairman	IETE Ranchi Chapter from Nov. 2018.	National	2018
7.	Dr. P.R. Thakura	Guest Editor for International Journal of Power & Energy System, Acta Press in Special Issue on "Green Energy Conversion Systems Based on Advanced Modeling and Simulations Techniques", Feb.2019.		International	2019
8.	Dr. D.K. Mohanta	awarded Recognized reviewer - Integration, (Elsevier) for 2018(Impact Factor: 0.906).	-	International	2018
9.	Dr. D.K. Mohanta	Awarded Outsatnding reviewer - Integration, (Elsevier) for 2018(Impact Factor: 0.906)		International	2018
10.	Dr. D.K. Mohanta	Working as Editor, Electric Power Components & Systems (Taylor & Francis Publications) (Impact Factor: 1.22)		International	2018-2019
11.	Dr. D.K. Mohanta	Working as Guest Editor-in-Chief, Special Issue on Emerging Trends in System Integrity Protection Schemes (SIPS) for Improving the Performance of Smart Grid, IET Proceedings of Generation, Transmission and Distribution. (Impact Factor: 2.213)		International	2018-2019
12.	Dr. D.K. Mohanta	Working as Subject Editor, IET Generation, Transmission and Distribution (Impact Factor: 2.213)		International	2019
13.	Dr. D.K. Mohanta	Working as Associate Editor, IEEE Access (Impact Factor: 3.244)		International	2019
14.	Dr. D.K. Mohanta	Appointed as Member, BOS,	MVGR College of Engineering (Autonomous), Viziznagaram.	International	2019
15.	Dr. Debomita Ghosh	Declared winner of Main Award in Typhoon HIL' 10 for 10 award Program in Feb. 2019.		International	12 th February 2019

SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
16.	Dr. Surendra Kumar	Board member of electrical inspectorate,	Govt. of Jharkhand		2019
17.	Dr. Surendra Kumar	Member of technical board for medical equipment	RIMS, Jharkhand, Ranchi		2019
16.	Subrat Kumar Swain	Full KINGS scholarship (100% Scholarship) for the Ph.D. program	Kyungpook National University	International Level	2019

9. MoUs / Collaborations

	SI. Io.	Name of Organisation / University	Purpose / Area	Year / Duration
	1.	Aalto University, Finland	Research activity	Dec. 2018
2	2.	DC Office, Ranchi	Design and implementation of low cost Solar Power Lamp for rural people.	2018

SECTION 6

ACTIVITIES/ FACULTY MEMBERS / BOS

10. Departmental Students' Activities

SI. No.	Name of the Activity	Students' Co-Ordinator (If any)	Faculty Co-ordinator (if any)	Date / Duration		
1	Team Aveon Racing has designed and participated in E-Baja.	Harshit Raj	Dr. Aftab Alum	Organized by Sai India conducted by Mahindra at Pitampura, Indore on 23 rd -26 th January 2019. 5 th rank		
2	Industrial Visit		Mr.G.S.Gupta	On 31.03.2018, 30 PG studer dept., BIT Mesra went for a s to Tata Motors, Jamshedpur		
3	Industrial Visit		Mr.G.S.Gupta	On 07.04.2018, 30 PG students of EE dept., BIT Mesra went for a study tou to DVC, Bokaro Thermal		
4	Industrial Visit		Mr.G.S.Gupta	On 12.12.2018, 30 PG studer dept., BIT Mesra went for a s to Jindal Steel & Power, Patra	tudy tour	
5	Student Internship			2018-2019 Data:		
				Company/Industry Name	Student Number	
				BHEL	01	
				IISC, Banglore	01	
				IIT, Kanpur	01	
				Western Coal field Ltd, Nagpur	01	
				IIT, Guwahati 01		
				ABB India Limited	03	
				BSNL, Patna	01	

SI. No.	Name of the Activity			Date / Duration	
		(If any)	(if any)		
				2018-2019 Data:	
				Company/Industry Name	Student Number
				DRDO LAB, Hyderabad	01
				DVC, Andal	01
				DVC, Dhanbad	01
				HEC, Ranchi	12
				HPVP-BHEL, Vishakapatnaam	01
				IIT, Delhi	02
				IOL, Begusarai	01
				JSPL, Patratu	01
				JSPL, Raigarh	09
				Maithon Power Ltd., Nirsa, Dhanbad	01
				NIT Rourkela	01
				NTPC ANTA, THERMAL	01
				PWC Kolkata	02
				RDCIS, SAIL, Ranchi	02
				SAIL, Bokaro	01
				South Eastern Railway Ranchi	01
				Sterling and Wilson Pvt. Ltd.	01
				Super Thermal Power Plant, Kota	01
				TATA Rao Thermal Power, Vijaywada	01
				Ultra Tech Cement, Andhra Pradesh	01
				IIT, Delhi	02
				New Entrants Cell (NEC) Sail Bokaro	01
				SAIL, Bokaro	02
				TATA, Hitachi	01
				CESC, Kolkatta	01
				HINDALCO, Renukoot	01
				IIT, Kharaghpur	01
				IIT, Bhubneshwar	02
				JUSCO LTD.	01
				SAIL, Bokaro	01
				NTPC Khelgaon	01
				Chabra Thermal Power Station, Near Kota, Rajasthan	01
				CCL, Ranchi	01
				ANDRITZ HYDRO	01
				CROPIN TECH. Ltd.	01
				IIT, Kharaghpur	01
				Power Transmission Company Ltd. Rampur, Nayagaon, Jabalpur (MP)	01
				CET SAIL Ranchi	02
				ONGC, Delhi	01
				ONGC, Uran, Mumbai	01
				OMC, Aptransco Gumadala,	
				Vijaywada (AP)	01

	SI. No.	Name of the Activity			Date / Duration	
			(If any)	(if any)	Company/Industry Name	Student Number
					NTCEL (NTPC Tamil Nadu	01
					Energy Company Limited)	
					SNTI, TATA Steel, Jamshedpur	18
					Cypress Semiconductor	01
					BHEL, Haridwar	01
\					TATA STEEL, Dhanbad	01
					Carnegie Mellon University LIPI Data System Pvt Ltd., Udaipur	01
					Price Water House	01
					Lalitpur Power Company Limited	01
					NTPC Unchahar	01
					Uttar Pradesh Rajya Vidyut	
					Utpadan Nigam, Sonebhadra	01
					Office of the Duty	0.2
					Commisionery, West Bengal	02
					IOCL, Guhawati	03
					IIIT, Banglore	01
					GEORGIA TECH, Atlanta	01
					Price Water House Coopers	01
					HAL, Banglore (IMGT DIV.)	01
					NTPC, Noida	01
					GAIL, Varanasi	01
					Nuclear Power Corp., Rajasthan	01
					NTPC, Vindhyanagar	01
					Power Grid Corporation, Guragaon	01
					PARE HE PROJECT, NEEPCO	01
					BHEP, Chandrakanta, J&K	01
					TATA Motors, Jamshedpur	03
					Indian Oil Corporation Limited	01
					J K Transformers & Switchgears, Jammu ILLINOIS Institute of Technology, Chicago, USA	01
1					UCIL	01
					SAIL, Bokaro Steel Plant	01
\					Pariccha Thermal Power Plant	01
					Roza Thermal Power Plant	01
\					ARTTC, BSNL, Ranchi	01
					DVC, Bankura	01
					EASEBUZZ, Pune	01
					ISWPL (Indian Steel Wire Products)	01
					Powergrid, Corporation, Patna	01
1					LINUX World Informatics, Jaipur	03

Team Aveon Racing has designed and participated in E-Baja 2019 and achieved 5th Rank

11. List of Faculties

SI. No.	Name	Designation	TEQIP Sponsored
1	Prof. Tirthadip Ghose	Professor	No
2	Prof. Rakesh Chandra Jha	Professor (on Deputation)	No
3	Prof. Dusmanta Kumar Mohanta	Professor	No
4	Dr. Parshuram Thakura	Professor & Head	No
5	Dr. Vijaya Laxmi	Professor	No
6	Dr. Sarbani Ray Chakraborty	Professor	No
7	Mr. Prem Prakash	Assistant Professor	No
8	Mr. Abinash Prasad	Assistant Professor	No
9	Dr. Surendra Kumar	Assistant Professor	No
10	Dr. Sudhanshu Kumar Mishra	Assistant Professor	No
11	Dr. Debomita Ghosh	Assistant Professor	No
12	Mr. Gauri Shanker Gupta	Assistant Professor	No
13	Mr. Brij Mohan Prasad	Assistant Professor	No
14	Mrs. Sushma Suryaprakash Kamlu	Assistant Professor	No
15	Mr. S.K. Swain (on Study leave from Feb 2019)	Assistant Professor	No
16	Dr. Deepak Kumar	Assistant Professor	No
17	Dr. Aftab Alam	Assistant Professor	No
18	Dr. S. Shiva Kumar	Assistant Professor	No
19	Mr. S.K. Das	Associate Lecturer	No
20	Dr. Tarkeshwar Mahto	Assistant Professor	Yes
21	Mr. Vamshi Kumar	Assistant Professor	Yes
22	Ms. Nishtha Bajoria	Assistant Professor	Yes
23	Mr. D.V. Siva Krishna	Assistant Professor	Yes

12. Board of Studies

SI. No.	Name of the Member	Designation	Role
1	Prof. P.R. Thakura	HOD, EEE	Chairman
2	Prof. Amitava Chartjee	Professor, EE Dept. Jadavpur University	Member
3	Dr. Anup Kumar Panda	NIT Rourkela	Member
4	Mr. Sujit Kumar	DGM, MECON, Ranchi	Member (Alumni)
5	Dr. Nirbhar Neogi	Ex-Executive Director, SAIL, Ranchi	Member
6	Mr. Deepak Kumar	AGM, Electrical, MECON	Member
7	Prof. T. Ghose	Professor, Dept. of EEE	Member
8	Prof. D.K. Mohanta	Professor, Dept. of EEE	Member
9	Dr. (Mrs.) Vijaya Laxmi	Professor, Dept. of EEE	Member
10	Dr. (Mrs.) Sarbani Chakraborty	Professor, Dept. of EEE	Member
11	Dr. (Mrs.) Debomita Ghosh	Asst. Professor, Dept. of EEE	Member
12	Mr. Prem Prakash	Asst. Professor, Dept. of EEE	Member
13	Dr. Mahesh Chandra	Professor, Dept. of ECE	Member
14	Prof. G. Sahoo	Professor, Dept. of CSE	Member
15	Mr Vijay Kumar Karan,	Ph.D. Scholar	Member
16		One UG Student	Member
17		One PG Student	Member

SECTION 7 OTHER INFORMATION

13. Publication by students

- 1. Praneeth Ku. Pedapati, Anantha Sai Hariharan, Santanu Ku. Pradhan, Surendra Kumar, "Identification and Study of the Kinematic Parameters for an Autonomous Ground Vehicle", IEEE International Conference on Recent Innovation in Electrical, Electronics & Communication Engineering (ICRIEECE) 2018, Organized by Electrical Engineering Department, KIIT Bhubaneswar, Odisha, India, July-27th & 28th, 2018.
- Praneeth Ku. Pedapati, Santanu Ku. Pradhan, Surendra Kumar, "Point-to-Point Motion Control Autonomous Vehicle Ground using Optimal PID Control", IEEE -International Conference on New Trends in Engineering and Technology - (ICNTET) - 2018, Organized by Electrical Engineering Department, GRT-IET, Chennai, Tamil Nadu, India, September-7th & 8th, 2018.
- 3. Deep Shekhar Acharya, Sudhansu Kumar Mishra, P. K. Ranjan, S. Misra, S. Pallavi, "Design of Optimally Tuned Two Degree of Freedom Fractional Order PID Controller for Magnetic Levitation Plant", 5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON-2018) (Jointly Organized by Madan Mohan Malaviya University of Technology, Gorakpur-273010, Nov. 2-4, 2018.
- 4. Bhatnagar, M., Gupta, G. S. and Sinha, R. K., "k-NN and LDA based motor imagery EEG classification using phase features", 5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON) at Madan Mohan Malviya University of Technology, Gorakhapur (India), 2-4 November, 2018.

- 5. Subham Dey, V. Laxmi, D. K. Giri, "Time-Varying Non-Singular Terminal Sliding Mode Attitude Control of Reusable Launch Vehicle", 15th International Conference on Control, Automation, Robotics and Vision, ICARCV 2018, Marina Bay Sands Expo and Convention Centre, Singapore, 18-21 November, 2018.
- 6. Sourav Kumar Sahu, Debomita Ghosh, J.B. Reddy, R.C. Jha, Dusmanta Kumar Mohanta, "Fuzzy Reliability Analysis of Unit Commitment Problem Considering Uncertain Outage Replacement Rate and Load Representation", 20th National Power Systems Conference (NPSC 2018), Tiruchirappalli, Tamilnadu, India, Dec. 14-16, 2018.
- **7. Goutam Goswami**, P. R. Thakura, "Torque & Current Noise Reduction of BLDC Motor using Fuzzy Logic Control Strategy", International Conference on computational intelligence, pp 23-36, 1st December, 2018.
- 8. Brij Mohan Prasad and P. R. Thakura, "A Comparison of MATLAB and PSIM Applications in Power Electronic Courses", International Conference on Smart Technology, Electrical and Electronics Engineering (ICSTEEE), December, 2018.
- 9. S. K. Jha and D. Kumar, "A Power saving approach to Self-Sustained Microgrid", International Conference on Power Energy, Environment and Intelligent Control (PEEIC), Greater Noida, India, pp. 430-436, doi: 10.1109/PEEIC.2018.8665666, 2018.
- **10. S. K. Jha** and D. Kumar, "Robust Decentralized control of Parallel type Autonomous Microgrid structure", IEEE International Conference on "Applied Electromagnetics, Signal Processing & Communication" (Accepted), 2018.



- 11. R. R. Kar and M. Aftab Alam, "Design and Modeling of High Power DC-DC Boost Converter for Solar Photovoltaic System", International Conference on Soft-computing and Network Security (ICSNS), Coimbatore, pp. 1-5, doi: 10.1109/ICSNS.2018.8573607, 2018.
- 12. S. Singh, N. K. Singh and M. Aftab Alam, "Design of a Closed Loop Direct Torque Control for an Induction Motor Drive", International Conference on Soft-computing and Network Security (ICSNS), Coimbatore, pp 1-5, doi: 10.1109/ICSNS.2018.8573643, 2018.
- 13. V. Anand, A. Alam, S. Singh and A. Gautam, "Hardware Implementation of Real-Time Flux, Torque, Sensorless Speed Estimation of a 3KW Three-Phase Induction Machine using LabVIEW", International Conference on Current Trends towards Converging Technologies (ICCTCT), Coimbatore, pp 1-6, doi: 10.1109/ICCTCT.2018.8550952, 2018.
- **14. V. Anand,** S. Singh, A. Alam and A. Gautam, "State-Space Stator-Flux Model of 3-phase Induction Motor using LabView", International Conference on Current Trends towards Converging Technologies (ICCTCT), Coimbatore, pp 1-5, doi: 10.1109/ICCTCT.2018.8551022, 2018.
- **15. Subham Dey,** V. Laxmi, D.K. Giri, "Time-Varying Non-Singular Terminal Sliding Mode Attitude Control of Satellites", 5th Indian Control Conference, IIT Delhi, January 9-11, 2019.
- 16. Sonal, Sourav Sahu, Debomita Ghosh, Dusmanta Kumar Mohanta, "Reliability Analysis of a Distribution Network in Two State Weather Condition", International Conference on Computer, Electrical & Communication Engineering, Kolkata, India, IEEE, Jan. 18-19, 2019.

- 17. Rani Kumari, Debomita Ghosh, Dusmanta Kumar Mohanta, "Petri Net Based Reliability Evaluation Considering Distribution System Protection Coordination", International Conference on Computer, Electrical & Communication Engineering, Kolkata, India, Jan. 18-19, 2019.
- 18. Tamal Datta, Sudhansu Kumar Mishra, Subrat Kumar Swain, Avirup Gupta, "Real Time Detection and Tracking of a Model Car using Kalman Filter", IEEE 2nd International Conference On Innovations In Electronics, Signal Processing and Communication (IESC), Shilong, India, 1-2 March, 2019.
- 19. Tanmay Jain, Debomita Ghosh, Dusmanta Kumar Mohanta, "Elevation of Distribution Network Reliability incorporating Network Reconfiguration", 5th International Conference for Convergence in Technology, Pune, India, March 29-31, 2019.
- 20. Saikat Gope, Sarbani Chakraborty, "Stabilization & Synchronization Rössler System using Fuzzy Controller", IEEE sponsored 2019 International Conference on Vision Towards Emerging Trends in Communication and Networking (ViTECoN'19), Tamilnadu, 30-31st March, 2019.
- 21. Amal Kumar Das, Vijaya Laxmi, Sanjeev Kumar, "Hand Motion Recognition and Real-Time Classification Technique in Frequency Domain", International Conference On Vision Towards Emerging Trends In Communication And Networking (vitecon19), Vellore, Tamil Nadu, India, March 30 31, 2019.
- 22. Amal Kumar Das, Vijaya Laxmi, Sanjeev Kumar, "Hand Gesture Recognition and Classification Technique in Real-Time", International Conference On Vision Towards Emerging Trends In Communication

And Networking (vitecon19), Vellore, Tamil Nadu, India, March 30–31, 2019.

- 23. Avirup Gupta, Subrat kumar Swain. Sudhansu kumar Mishra. Tamal Datta, Sarbani Chakraborty, "Improved Turning Angle Calculation for an Unmanned Ground Vehicle", IEEE sponsored 2019 International Conference on Vision Towards Emerging Trends in Communication Networking (ViTECoN'19), Tamilnadu, 30-31st March, 2019.
- 24. Avirup Kumar Gupta, Subrat Kumar Swain, Sudhansu Kumar Mishra, Tamal Datta, Sarbani Chakraborty, "Improved Turning Angle Calculation for an Unmanned Ground Vehicle", IEEE International Conference on Vision Towards Emerging Trends in Communication and Networking (ViTECoN'19), Vellore, India, 30-31 March, 2019.
- 25. Jaya, Sarode Shiva Kumar, Subrat Kumar Swain, "Stability analysis and variable frequency control of zero voltage switching buck converter", IEEE International Conference on Vision Towards Emerging Trends in Communication and Networking (ViTECoN'19), Vellore, India, pp. 1-6, 30-31 March 2019.
- 25. Sisir Kumar Yadav, S Shiva Kumar, Hemanth Kumar, Chiranjeev Mishra, "Investigation on Energy Recovery Converter using Industrial Motor Drive", IEEE International Conference on Vision Towards Emerging Trends in Communication and Networking (ViTECoN'19), Vellore, India, pp 1-6, 30-31 March 2019.
- 27. Saurabh Tiwari, S Shiva Kumar, "Adjustable Voltage-Sensor-Based MPPT Interfacing SEPIC with PV Including Variable Scaling Factor", IEEE International Conference on Vision Towards Emerging Trends in Communication and Networking

- (ViTECoN'19), Vellore, India, pp 1-6, 30-31 March 2019.
- 28. Umang Singh Patel, S Shiva Kumar, Vinay Sagar Kommukuri, "Power Factor Correction using Continuous Conduction Mode based Bridgeless SEPIC Converter for Improved THD and Voltage Regulation", IEEE International Conference on Vision Towards Emerging Trends in Communication and Networking (ViTECoN'19), Vellore, India, pp 1-6, 30-31 March 2019.
- 29. Deep Shekhar Acharya, Sudhansu Kumar Mishra, "A novel PID Controller using SymbioticOrganisms Search for a Second Order Unstable Magnetic Levitation Plant", Springer International Conference on Intelligent Computing and Smart Communication, Tehri, India, 19-21 April, 2019.
- 30. Tamal Datta, Sudhansu Kumar Mishra, Subrat Kumar Swain, "Real Time Tracking and Lane Line Detection Technique for an Autonomous Ground Vehicle System", Springer International Conference on Intelligent Computing and Smart Communication, Tehri, India, 19-21 April, 2019.
- 31. Rudra Narayan Pandey,
 Sarat Mishra, Sudhansu Kumar
 Mishra, "Teaching Learning Based
 FunctionalLink Artificial Neural
 Network forShort-term electrical load
 forecasting", Springer International
 Conference on Intelligent Computing
 and Smart Communication, Tehri,
 India, 19-21 April, 2019.
- 32. Tirthadip Ghose, Soumadeep Roy, "Bidirectional Power Flow in DC Microgrid and its Islanding Detection Using Support Vector Machine", International Conference on Intelligent Computing and Control Systems (ICICCS 2019) Vaigai College of Engineering, Madurai, India, May 15-17, 2019.
- **33. P. Dubey** and S. Chakraborty, "Avoidance of the relapse condition of

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Prostate Cancer using Super-twisting Sliding Mode Control", IEEE sponsored Third International Conference on Intelligent Computing and Control Systems (ICICCS-2019), Madurai, 15-17 May, 2019.

- 34. Chiranjeev Mishra, Subrat Kumar Swain, Sudhansu Kumar Mishra, Sisir Kumar Yadav, "Fractional order sliding mode controller for the twin rotor MIMO system", IEEE International Conference on Intelligent Computing and Control System (ICICCS), Madurai, India, 15-17 May, 2019.
- **35. Aman Shankar,** K Vamshi Kumar, "Intra And Inter Power Management Of Residential Microgrid", Third International conference on Intelligent Computing and Control System (ICICCS 2019), Vaigai College of Engineering, Madurai, May 15-May 17, 2019.
- **36. Promit Kumar Saha, Shashank Shekhar,** Vijaya Laxmi, P. R. Thakura,
 "Improved Speed Response of ECM
 Drive using Antiwinduo Concept",
 ICECA, RVS technical Campus,
 Coimbatore, India, 12-14 June 2019.
- 37. Soumodeep Roy, Sourabh Nayer, Surendra Kumar, Aftab Alam & T. Ghose, "Bidirectional control And management through droop control in standalone ac Microgrid", International conference on Inteligent Controlling and Control System (ICICCS2019) organized by Malla Reddy College of Engineering, Secunderabad, 27-28, June 2019.
- **38. Goutam Goswami** and P.R. Thakura, "A Speed and Flux Observer using Square Root Cubature Kalman Filter for Induction Motor Drive", 978-1-5386-9353-7/19, 2019.
- **39. Promit Kr Saha,** Shashank Shekhar and Parashuram Thakura, "Improved Speed Response of Ecm Drive sing Antiwindup Concept", ICIEA, 2019.
- **40.** Kibriya, D.K. Mahto, **A.M. Khalkho,** T. Mahto and D.K. Mohanta,

- "Determination of Voltage Control Area Based on Bus Coherency Using Synchronized Phasor Measurements", IEEE TECON, 2019 (Accepted).
- **41. Mohan Prasad, Brij** & P.R. Thakura, "Design and Analysis of Dedicated Power Converter for Hybrid Electric Vehicles", Proceeding of NCCS 2017, 10.1007/978-981-13-0776-8_6, 2019.
- 42. S. Singha, A.S. Singh, S. Prasad and A. Alam, "A Study on Power Optimization Techniques in PSoC", International Conference on Communication and Signal Processing (ICCSP), Chennai, India, doi: 10.1109/ICCSP.2019.8698070, pp. 0225-0229, 2019.
- 43. Pandey, H.W., Gadham, K.R. and Ghose, T., 2018, June. Risk based Benefit analysis of RES aggregator in Restructured Energy Market. In 2018 2nd International Conference on Power, Energy and Environment: Towards Smart Technology (ICEPE) (pp. 1-6). IEEE. DOI: 10.1109/EPETSG.2018.8658380
- 44. Sandhya, K., Chatterjee, K. and Ghose, T., 2018, December. State Estimation for DG penetrated Adaptive Distribution System during Disaster. In 2018 20th National Power Systems Conference (NPSC) (pp. 1-5). IEEE. DOI: 10.1109/NPSC.2018.8771796.
- **45.** Ghose, T. and **Chatterjee**, **K**., 2018, December. Droop Based Dynamic Demand Response Controller for HVAC Load. In 2018 20th National Power Systems Conference (NPSC) (pp. 1-6). IEEE. **DOI:** 10.1109/NPSC.2018.8771754
- 46. Pan, P., Sharma, M.K., Ghose, T. and Mohanta, D.K., 2018, March. Synchrophasor based concurrent swing and state estimation of synchronous generator. In 2018 Technologies for Smart-City Energy Security and Power (ICSESP) (pp. 1-5). IEEE. DOI: 10.1109/ICSESP.2018.8376701

- 47. Nayar, S. and Ghose, T., 2019, June. Power Sharing And Management Through Power Based Droop Control in DC microgrid. In 2019 3rd International conference on Electronics, Communication and Aerospace Technology (ICECA) (pp. 538-544). IEEE. DOI: 10.1109/ICECA.2019.8822030.
- 48. Saurabh Tiwari, S Shiva Kumar.,
 Adjustable Voltage-Sensor-Based
 MPPT Interfacing SEPIC with PV
 Including Variable Scaling Factor,
 IEEE International Conference on
 Vision Towards Emerging Trends
 in Communication and Networking
 (ViTECoN'19), 30-31 March 2019,
 Vellore, pp. 1-6.
- **49. Umang Singh Patel**, S Shiva Kumar, Vinay Sagar Kommukuri., Power Factor Correction using Continuous Conduction Mode based Bridgeless SEPIC Converter for Improved THD and

- Voltage Regulation, IEEE International Conference on Vision Towards Emerging Trends in Communication and Networking (ViTECoN'19), 30-31 March 2019, Vellore, pp. 1-6.
- **50.** K.D.V.Siva Krishna Rao, **Madhav Kumar**, Ranju Bharti, "Conventional and Hybrid erturb & Observe based Maximum Power Point Tracking for Solar System" EEE Conference on "International Conference On Vision Towards Emerging Trends In Communication And Networking" 30 31 March 2019, (ViTECoN-2019).
- **Kumar**, "Modelling and Parameter Estimation of SolarmCell using Genetic Algorithm" International Conference on Intelligent Computing and Control Systems, [ICICCS 2019], 17 May 2019 at Vaigai College of Engineering, Madurai, Tamil Nadu, India.

14. Achievements of Students

Sr. No	Name of Student	Achievement/Position/ Award etc	Organised by	Date and Venue
1.	Prabhat Ranjan	attended Short Term Project on	Nanyang Technological	July-Aug.
	Tripathy, Ph.D. Scholar	PCB Design and Power Converter.	University, Singapore.	2018

15. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
1.	Dr. Bhim Singh, Professor, IIT, Delhi visited for review of Centre of Excellence.	25 th Jan. 2019	
2.	Dr. Shyama Prasad Das, Professor, IIT Kanpur, Dr. R. K. Saket, Professor, IIT-BHU, Varanasi and Mr. Sharat Kumar, Chief, Tata Steel Ltd to review Centre of Excellence.	07 th Jan. 2019	
3.	Mr. Sharat Kumar, Chief, Tata Steel Ltd. delivered guest lecture in the Department of Electrical and Electronics Engineering on Electric Automation in Tata Steel and Technical Advancement	28 th Sept. 2018.	

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
4.	Dr Atasi N Goswami, Research Coordinator, KnIDS, e-mail atasi@knids.org. Mobile - 8240228869, Landline (work) 03346014964. DST-FIST Team	18 th March 2019	
5.	Mr. Pradosh Nath pradoshnath@knids.org Principal Investigator, Director, Centre for Knowledge Ideas and Development Studies (KnIDS), 1/433, Gariahat Road South, Jodhpur Park, Kolkata 700068, DST-FIST Team.	18 th March 2019	
6.	Sudarsan Chakrabarti, CEO, PVUNL Short Term Course on Development of IOT Based Power Electronic Interface for Green Energy Management system during sponsored by TEQIP, in the department of EEE.	20 th May-24 th May 2019	

16. List of Distinguished Alumni

SI. No.	Name, Batch and Affiliation	Short Description	
1.	Mr. Madhavan Nayar Founder, Infogix, Inc., USA	Member, Executive Committee Illinois Tech.	
2.	Mr. Himanshu Kapania Managing Director, Idea Cellular Limited	Aditya Birla Group plans to give a bigger role to Idea Cellular Managing Director and Chief Executive Officer Himanshu Kapania, including the first-ever position of vice-chairman at Grasim Industries, after the merger of the company's telecom business with Vodafone. "Aditya Birla Group Chairman Kumar Mangalam Birla has internally announced that Himanshu Kapania will join the board of Grasim Industries as non-executive director and will be the company's vice-chairman. This will be the first time in the history of Grasim that a vice-chairman will be appointed, "according to company sources.	
3.	Dr. Anjan Lahiri Ex-CEO and Managing Director, Birlasoft	Lahiri is an alumnus of the Birla Institute of Technology, Mesra, where he earned a Bachelor of Technology degree in electrical and electronics engineering. Birla Institute of Technology, Mesra, is part of the CK Birla Group. He also holds an MBA from the University of Florida, Gainesville, USA.	
4.	Prof. Kankar Bhattacharya Professor, ECE Department University of Waterloo	ECE Department University of Waterloo	
5.	Mr. Sougata Basu Founder, CashRich, India	Selected as the best start-up in 2018 by Govt. of India	

17. Any other relevant information

- 1. R&D Activities: (a) Institute Research Fellow- MO/18- 02, SP/19-1(b)Ph.D. Awarded:06
- 2. Infrastructure Development:
 - (a) Department is engaged in Augmentation of Power Distribution System by up gradation 11kV Air Insulated Substation to 33kV Gas Insulated Substation along with SCADA to meet the high power demand of BIT Mesra campus.
 - **(b)** Department has been involved in installing 700kW peak Roof Top Solar Power Plant and it is working from October 2018. After this installation, BIT Mesra campus has 1MW peak Solar Power Plant.
- 3. CBCS Course Structure has been implemented for B.Tech EEE and M.Tech, EE Programme from MO/ 2018.
- **4.** Dr. Deepak Kumar has successfully completed his Post-Doctoral Research from Aalto University, Finland from July-December 2018.

- **5.** Mr. Subrat Kumar Swain has been selected for Ph.D. Programme with scholarship at Kyungpook National University, South Korea and will be joining in Feb.2019
- **6.** NBA has accredited Two ME Programmes, ME-Power System and ME-Control System.
- 7. Department has been recognized as Centre of Excellence and a team of Experts visited the department for evaluation.
- 8. Dr. D.K. Mohanta has been appointed as Member, Working Group IEEE P666™ Design Guide for Electric Power Service Systems for Generating Stations.
- **9.** Dr. D.K. Mohanta has been appointed as Program Committee Member forNTELLI 2017, The Sixth International Conference on Intelligent Systems and Applications, 2018, Nice, France.
- **12.** Industrial Visit to Jindal Steel & Power Limited, Patratu was organized for ME Students of Department of EEE on 12th Dec. 2018.



Department of Electronics and Communication Engineering

SECTION 1

DEPARTMENTAL PROFILE





1. About the Department

The Department of Electronics and Communication Engineering is one of the largest departments of the Institute having largest student and faculty strength. Due to its modern infrastructure and exposure given to the students, it is one of the elite departments in India. The Department has modern laboratories and support facilities in all major areas of Electronics and Communication.

The Communication laboratories are well equipped with Analog Communication kits and Digital Communication Kits. COMSIM Software is also available in the laboratory for designing of wired, wireless and mobile communication systems.

The Fiber Optic Laboratory is well-equipped with He-Ne Laser Source, Argonion Laser Source, Tunable Laser Source, Optical Spectrum Analyzer, Optical Time Domain Reflectometer, Monochromator, Multiplexers, CCD camera, BSO crystal, Vibration Isolation Table, Newport Kit, Falcon Kits and various types of fibers. Recently, Beam Prop software has been installed in the laboratory.

Department also has an Advanced Instrumentation Lab which includes Data Acquisition Cards (DAC) from National

Instruments and Lab View software for real time calibration and measurement experiments. This lab also has acquired a new PLC of Mitsubishi make.

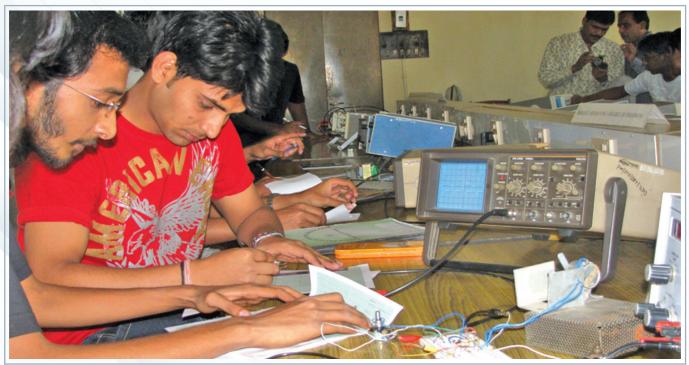
The Department has a well-equipped VLSI Design lab. Primary area of research in VLSI lab consists of full-custom Application Specific Integrated Circuits (ASIC) and processors involving analog, digital and mixed signal processing. For this purpose the Cadence software is available which provides full custom with front end and back end facility. Industry compatible design libraries like UMC90nm, SCLPDK180nm are available with us. Our design has selected for fabrication in SCL Chandigarh and final product going to utilize by SAC ISRO Ahmedabad. VLSI Design has latest VCU108 FPGA kit for IoT based applications. Number of R&D Projects are running in this lab such as DST (Dr. Vijay Nath), DRDO(Dr. Vijay Nath), MHRD (Dr. Vijay Nath), ISRO (Dr. Vijay Nath), SERB (Dr. S. Kundu), SERB-EMR (Dr. A. Islam). Project outcomes are national and social welfares. Number of UG, PG and PhD. Students are using this lab for academic and research purposes.

The Advanced Communication Lab is equipped with GPS Trainer Kit, Satellite Communication Trainer Kit, Mobile Communication Trainer Kit and CDMA

Trainer Kit. This Laboratory also has Scalar Network Analyzer with Plotter (22 GHz), Spectrum Analyzer, Sweep Oscillators for, Pattern Generator and Sweamer Generator. The Antenna Lab is equipped with most sophisticated and modern equipments such as Vector Network Analyzer (N5230A, 10 MHz - 20 GHz), R & S Signal Generator (SMR20, 1 GHz - 20 GHz), R & S Spectrum Analyzer (FSP, 9 KHz - 30 GHz), MIC Kit for s-parameter characterization of Microwave Integrated Circuits, Antenna measurement facility and a small Anechoic Chamber. The Lab also has design software such as IE3D,

Fidelity, and MD Spice. The MIC Fabrication Lab has been setup with Ultra Violet exposure, Ovens, Spinners, all required for fabrication of high precision microwave integrated circuits. The laboratory is also supplemented with software Sonnet used for simulation of all kinds of microwave circuits.

An International Center for Wireless and Mobile Communication has been incorporated to the Department of Electronics & Communication Engineering, BIT Mesra, under ASIA-LINK Program.



Analog and Digital Gateway Conducted by IEI (ECE) & ECE Soc



SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

a) Ongoing Projects:

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (lakhs)	Duration of the Project
1.	Design of Ultra Low Power CMOS Temperature Sensors for Aerospace Applications	Dr. Vijay Nath	RESPOND ISRO, Bangalore	April 2015	25.00	
2.	MEMS based piezoelectric energy harvester for implanted medical devices	Dr. Sudip Kundu (PI) & Dr. N. Chattoraj (Co-PI)	Science & Engineering Research Board (SERB)	March 2017	38.8602	2017-2020
3.	Study of HEMT and its performance in amplifier circuit	Dr. Sudip Kundu (CoPI) & Dr. A. Islam(PI)	DRDO	July 2018	23.742	2018-2020
4.	Computational identification and validation of genome wide protein-protein interaction network in rice and rice blast	Dr. S. S. Sahu	SERB, DST, Govt. of India	June 2017	21.626	2017-2020
5.	Development of Low Cost Cryptography Approach for Cyber Security	Dr. S.S. Sahu(PI) Dr. Sanjeet Kumar (Co-PI)	JCST, Jharkhand Govt	Oct. 2017	2.0	2017-2019
6.	Electroencephalogram based Sleep Stages Detection using Advance Wavelet Techniques	Dr. Rajeev Sharma (PI), Dr. S SSahu (Co-PI)	AICTE, MHRD	June 2019	14.42	2019-2020

SECTION 3

SEMINAR / CONFERENCE

3. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Dr. Vijay Nath	Advanced DSP Design Techniques	TEQIP	IIT Kharagpur	IIT Kharagpur	Sept. 25- 29, 2018
2.	Dr. M.K. Mukul	Advanced DSP Design Techniques	TEQIP	IIT Kharagpur	IIT Kharagpur	Sept. 25- 29, 2018
3.	Dr. S.S. Sahu	Advanced DSP Design Techniques	TEQIP	IIT Kharagpur	IIT Kharagpur	Sept. 25- 29, 2018
4.	Dr. Aminul Islam	Advanced DSP Design Techniques	TEQIP	IIT Kharagpur	IIT Kharagpur	Sept. 25- 29, 2018

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
5.	Dr. Sanjeet Kumar	Advanced DSP Design Techniques	TEQIP	IIT Kharagpur	IIT Kharagpur	Sept. 25- 29, 2018
6.	Dr. Prajna Parimita Dash	Orientation Programme	UGC-Human Resource Development Centre	Academic Staff College, Ranchi University, Morabadi Campus, Ranchi.	Academic Staff College, Ranchi University	20 th Nov- 17 th Dec. 2018
7.	Dr. Soumya Sidhishwari	Recent Trends in Software Testing (RTST-2019)	Sponsored by TEQIP - III, Co-Sponsors- ACM-ISoft, LDRA, Oxford Univ. Press	Birla Institute of Technology, Mesra, Ranchi, Jharkhand.	Department of Computer Science and Engineering Birla Institute of Technology, Mesra, Ranchi, Jharkhand.	20-24 th May 2019
8.	Dr. Soumya Sidhishwari	Orientation Programme	UGC-Human Resource Development Centre	Academic Staff College, Ranchi University, Morabadi Campus, Ranchi.	Academic Staff College, Ranchi University	10-30 th June 2019
9.	Dr. Rajeev Sharma	"Advanced Pedagogies: Active Learning and Digital Tools"	NPIU, MHRD	IIT Hyderabad	IIT Hyderabad	10.06.2019 - 14.06.2019

SECTION 4 RESEARCH PUBLICATIONS

Publications in **Journals** (International/National)

- Priyadarshi, R., Soni, S.K. & Nath V.(2018). Energy Efficient Cluster Head Formation in Wireless Sensor Network. Microsystem Technologies, 24(12), 4775-4784.
- 2. Chakraborty, S., Pandey A., Prasad D., Vedam V., Nath V.(2018). Linearity improvement of gain enhanced opamp using cross-coupled architecture. Microsystem Technologies, 24(12), 4807-4815.
- 3. Verma, V.K., Ranjan R.K., Gupta P., Priyadarshini B., Nath V. (2018). A Series Expansin Method Aided Design of CCII Controller for TITO System. Microsystem Technologies, 24(9), 3843-3849.
- Sinha, R.K., Sahu, S.S. (2018).

Secure Image Encryption Based on Improved Bat Optimized Piecewise Linear Chaotic Map through Integrated Permutation-Confusion and Double diffusion. Journal of Intelligent & Systems-Applications in Engineering and Technology, 35(2), 1567-1578.

- 5. Patro, K.A.K., Acharya, B., Nath, V. (2019). A secure multi-stage oneround bit-plane permutation operation based chaotic image encryption. Microsystem Technologies, 25(6), 2331-2338.
- 6. Prasaad, D., Nath, V., Vishwanthan, V., Mehta, M.(2019). A 0.6 V 117 nW high performance energy efficient systemon-chip (SoC) CMOS temperature sensor in 0.18 µm CMOS for aerospace applications. Microsystem Technologies, 25 (06), 2301-2311.

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- 7. Priyadarshi, R., Rawat, P, Nath, V.(2019). Energy dependent cluster formation in heterogeneous wireless sensor network. Microsystem Technologies, 25(6), 2313-2332.
- Qadeer, S.A., Khan, M.S. Shylashree, N., Nath. (2019). High resolution fuel indicating and tracking system. Microsystem Technologies, 25(06), 2267-2271.
- Shylashree, N., Venkatesh, B., Saurab, T. M., Srinivasan, T., Nath, V. (2019). Design and analysis of high-speed 8-bit ALU using 18 nm FinFET technology. Microsystem Technologies, 25(06), 2349-2359.
- Kundu, S., Sarkar, S., Mandal, P., Islam, A. (2019). Modeling and Sizing of Non-linear CMOS Analog Circuits used in Mixed Signal Systems, Analog Integrated Circuits and Signal Processing, 99(1), 95-109
- 11. Chaudhuri, D., Kundu, S., Chattoraj, N. (2019). Design and analysis of MEMS based piezoelectric energy harvester for machine monitoring application, Microsystem Technologies.25(4) 1437-1446.
- 12. Hosain, M.M., Kumari, S. & Tiwary, A. K. (2019). Compact Filtenna for WLAN Applications. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 18(1), 70-79.
- 13. Tirkey, M.M.& Tiwary, A.K. (2018). A Compact Dual-Band Antenna Using Hexagonal Complementary Split Ring Resonator. Microwave Review, 24(2), 19-25.
- 14. Sharma, S.S., Pandey, A.K. & Tiwary, A.K. (2018). New method of analysis and design of frequency and bandwidth reconfigurable active filter. International Journal of RF and Microwave Computer-Aided Engineering, 28(9), 1-10.
- 15. Kumari, B. & Gupta, N. (2018). UWB active antenna using dielectric

- resonator. Microwave and Optical Technology Letters, 60(8), 1894-1898.
- 16. Bhargav, A. Prince, P., Ranjan, R.K., Gupta, N. & Verma, V.K. (2018). A Simple Multi-band Metamaterial Absorber with Combined Polarization Sensitive and Polarization Insensitive Characteristics for Terahertz Applications. Plasmonics, 1-6.
- 17. Tirkey, M.M. & Gupta, N. (2018). The Quest for Perfect Electromagnetic Absorber: A Review. International Journal of Microwave and Wireless Technologies, 1-17.
- 18. Das, S., Islam, H., Bose, T. & Gupta, N. (2019). Coplanar waveguide fed stacked dielectric resonator antenna on safety helmet for rescue workers. Microwave and Optical Technology Letters, 61(2), 1-5
- 19. Tirkey, M. M. & Gupta, N. (2019). Electromagnetic absorber design challenges. IEEE Electromagnetic Compatibility Magazine, 8(1), 59-65.
- 20. Das, S., Islam, H., Bose, T. & Gupta, N. (2019). Ultra-Wide Band CPW-Fed Circularly Polarized Microstrip Antenna for Wearable Applications. Wireless Personal Communications, 1-20.
- 21. Snigdh, I. & Gupta, N. (2019). Enhancing reliability by adoptive graph traversals for backbone-assisted communication in wireless sensor networks. International Journal of Sensor Networks, 30(1), 13-23.
- 22. Biswas, A., & Gupta, V. R. (2019). Design of Penta-Band MIMO Antenna for GPS/2G/3G/4G and 5G NR Applications. International Journal of Recent Technology and Engineering, 8 (1), 1935- 1940.
- 23. Chaudhuri, D., Kundu, S., &Chattoraj, N. (2019). Design and analysis of MEMS based piezoelectric energy harvesterfor machine monitoring application. Microsystem Technologies, 25(04), 1437–1446.



- 24. Quarratulain & Chattoraj, N. (2018). Parametric study and Analysis of Band Stop Characteristics for a Compact UWB Antenna with Tri-band notches. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 17(04), 509-527.
- Upadhyay, D. K. & Kumar, A. (2018). A Compact Planar Diplexer based on Via-Free CRLH TL for WiMAX and WLAN Applications. International Journal of Microwave and Wireless Technologies, 11(02), 130-138.
- 26. Kumar, U. &Upadhyay, D. (2018). A Highly Compact UWB Bandpass Filter using Via-less CRLH TL. Microwave review, 24(02), 26-30.
- 27. Upadhyay, D. (2018). Development of ZOR using via-less CRLH-TL. Microwave review, 24(01), 3-7.
- 28. Roy, R.B., Ghosh, A., Bhattacharyya, S., Mahto, R.P., Kumari, K., Pal, S.K., & Pal, S. (2018). Weld defect identification in friction stir welding through optimized wavelet transformation of signals and validation through X-ray micro-CT scan. The International Journal of Advanced Manufacturing Technology, 98(470), 1-11.
- 29. Ghazali, A., Hussain, J. &Pal, S. (2019). A Hybrid Surface-to-Surface Transition Based UWB-BPF with Multiple In-Band Interference Suppression. International Journal of Microwave and Wireless Technologies, 11(02), 1-7.
- 30. Ghazali, A., Sazid, M. & Pal, S. (2018). A Dual Notched Band UWB-BPF Based on Microstrip-to-Short Circuited CPW Transition. International Journal of Microwave and Wireless Technologies, 10(07), 794-800.
- 31. Biswas, A., Sinha, S., Acharyya, A., Banerjee, A., Pal, S., Satoh, H., &Inokawa, H. (2018). 1.0 THz GaN IMPATT Source: Effect of Parasitic Series Resistance. Journal of Infrared, Millimeter, and Terahertz Waves, 39(10), 954–974.

- 32. Meenaketan, B. L. P., Pal, S., Chattoraj, N. (2019). Electromagnetic forward and inverse scattering analysis of a one-dimensional collision system. International Journal of RF & Microwave Computer-Aided Engineering, 29(08), e21760.
- 33. Kumar, V., Mehra R., Islam, A. (2019). A CMOS active inductor based digital and analog dual tuned voltage-controlled oscillator. Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, 25(05), 1571–1583.
- 34. Guduri, M., Dwivedi, A. K., Majumder, S., R. Islam, A. (2019). An efficient circuit-level power reduction technique for ultralow power applications. Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, 25(05), 1689–1697.
- 35. Roy, C.Islam, A. (2019). Power-aware sourse feedback single-ended 7T SRAM cell at nanoscale regime. Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, 25(05), 1783–1791.
- 36. Guduri, M., Dokania, V., Verma, R. Islam, A. (2019). Minimum Energy Solution for Ultra-Low Power Applications. Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, 25(05), 1823–1831.
- 37. Mehra, R. Islam A. (2019). A Low Power, Temperature Compensated, Robust Design of CS Amplifier in Nanoscale Regime. Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, 25(05), 1841–1852.
- 38. Sengupta, A. Islam A. (2019).
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 GaN high electron mobility transistor
 with sapphire and 4H-SiC substrate.
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 Nanosystems-Information Storage



- and Processing Systems, 25(05), 1927–1935.
- 39. Kundu, S., Sarkar, S., Mandal, P., Islam, A. (2019). Modeling and Sizing of Non-linear CMOS Analog Circuits used in Mixed Signal Systems. Analog Integrated Circuits and Signal Processing, 99(01), 95–109.
- 40. Pal, S., Gupta, V.Islam A. (2019). Design of CNFET based power- and variability-aware nonvolatile RRAM cell. Microelectronics Journal, 86, 7–14.
- 41. Kumar, V., Mehra, R. IslamA. (2018). Design and Analysis of MISO Bi-quad Active Filter. International Journal of Electronics, 106(02), 287 304.
- 42. Mehra, R., Kumar, V.Islam A. (2018). Reliable and Q-Enhanced Floating Active Inductors and Their Application in RF Bandpass Filters. IEEE Access, 6, 48181-48194.
- 43. Nayan, N., Sahu, S.S., & Kumar, S. (2019). Detecting anomalous crowd behaviour using correlation analysis of optical flow. *Signal, Image and Video Processing*, 13(06), 1233-1241.
- 44. Sidhishwari, S., Basu, M., Ghorai, S.K.(2019). A modal interference-based Fiber Optic Sensor for dual parameter measurement using an Artificial Neural Network, Optical Fiber Technology, 50(0), 216-224.
- 45. Kumar, A., & Ghorai, S.K. (2018). Effect of multipath reflection on BER performance of indoor MIMO-VLC system. Optical and Quantum Electronics, 50(11), 1-18.
- 46. Basu, M., & Ghorai, S. K. (2018). An optical soft-sensor based shape sensing using a bio-inspired pattern recognition technique to realise fly-by-feel capability for intelligent aircraft operation. The Aeronautical Journal, 122(1257), 1734–1752.
- 47. Kumari, S., Sahu, S. S., & Gupta, B. (2018). Efficient SSHI circuit for

- piezoelectric energy harvester uses one shot pulse boost converter. Analog Integrated Circuits and Signal Processing, 97(3), 545-555.
- 48. Sinha, R. K., & Sahu, S. S. (2018). Secure image encryption based on improved bat optimized piecewise linear chaotic map through integrated permutation-confusion and double diffusion. Journal of Intelligent & Fuzzy Systems, 35(2), 1567-1578.
- 49. Barik, R. C., Sahu, S. S. andChangder, S. (2018). A Novel Smooth texture based visual cryptography approach for secure communication, Journal of Electronic Security and Digital Forensic, 10(2), 109-137.
- 50. Dash, P.P., Patra, D. (2019). Mutation based Self Regulating and Self Perception Particle Swarm Optimization for Efficient Object Tracking in a Video. Measurement, Elsevier, 144(0), 311-327.
- 51. Dash, P.P., Patra, D. (2019). Efficient visual tracking using multi-feature regularized robust sparse coding and quantum particle filter based localization, Journal of Ambient Intelligence and Humanized Computing, 10(2), 449-462.
- 52. Prasad, S., Prasad, R. (2019). Fusion Multistyle Training for Speaker Identification of Disguised Speech. Wireless Personal Communications, Springer, 104 (3). 895-905.

5. Publications in Proceedings (International/National)

- 1. Naval, S., Sinha, P.K., Anand, A., Kundu S Bandwidth Increment of Piezoelectric Energy Harvester using Multi-beam Structure. In 3rd International Conference on Devices for Integrated Circuit (DevIC), Kalyani University, West Bengal, 2019. ISBN: 978-1-5386-6722-4.
- 2. Anand, A., Kundu S, Improvement of Output Power in Piezoelectric Energy

- Harvester under Magnetic Influence. In 3rd International Conference on Devices for Integrated Circuit (DevIC), Kalyani University, West Bengal, 2019 ISBN: 978-1-5386-6722-4.
- Anand, A., Kundu S, Design of MEMS Based Piezoelectric Energy Harvester for Pacemaker. In 3rd International Conference on Devices for Integrated Circuit (DevIC), Kalyani University, West Bengal, 2019 ISBN: 978-1-5386-6722-4.
- 4. Raj, A., Divvela, S.Y., Singh, G., Kundu S, Trade-off Characteristics of Hysteresis Comparator used in Noisy Systems. In 3rd International Conference on Devices for Integrated Circuit (DevIC), Kalyani University, West Bengal, 2019. ISBN: 978-1-5386-6722-4.
- Konar, M., Sahu, R., Kundu S, Improvement of the Gain Accuracy of the Instrumentation Amplifier Using a Very High Gain Operational Amplifier. In 3rd International Conference on Devices for Integrated Circuit (DevIC), Kalyani University, West Bengal, 2019. ISBN: 978-1-5386-6722-4.
- Rajak, N., Chattoraj, N. & Kumar, R., A gain and bandwidth enhanced metamaterial based surface antenna for wireless communication. In Proceedings of the URSI Asia-Pacific Radio Science Conference (URSI AP-RASC), New Delhi, India, 2019. ISBN: 978-908-25987-5-9.
- Vasisht, P., Chattoraj, N., Chandra, R. & Rajak, N., A Novel Compact Ultra-Wide-Band MSRDRA for X- and KU-BAND Applications. In Proceedings of the URSI Asia-Pacific Radio Science Conference (URSI AP-RASC), New Delhi, India, 2019.ISBN: 978-908-25987-4-2.
- Meenaketan, B.L.P., Pal, S. & Chattoraj, N., A Relativistic Based Computational Technique For Scattering Analysis Due To An Accelerating Target, In

- Proceedings of the IEEE Indian Conference On Antennas And Propagation, Hyderabad, India, 2018. ISBN: 978-981-10-4762-6.
- 9. Meenaketan, B.L.P., Pal, S. & Chattoraj, N., Electromagnetic Scattering Analysis Due To A Colliding System Using Quasi Stationary -Finite Difference Time Domain Method, In Proceedings of the IEEE- Asia-Pacific Radio Science Conference, New Delhi, 2019. ISBN:978-3-319-65598-7.
- 10. Meenaketan, B.L.P., Pal, S. & Chattoraj, N., Inverse Scattering Using Scattered Field Pattern, proceedings of the IEEE-International Symposium on Antennas and Propagation, Cochin, 2018.ISBN: 978-981-10-4762-6.
- 11. Ghazali, A., Pal, S., Dual-Band Notched UWB-BPF for Indoor Communication Systems, In Proceedings of the IEEE International Conference on Applied Electromagnetics, Signal Processing & Communication (AESPC-2018), KIIT University, Bhubaneswar, India. ISBN: 978-1-5386-7966-1.
- 12. Meenaketan, B.L.P., Pal, S. & Chattoraj, N., Electromagnetic inverse Scattering for dynamic fluid level detection, In Proceedings of the IEEE International Conference on Applied Electromagnetics, Signal Processing & Communication (AESPC-2018), KIIT University, Bhubaneswar, India. ISBN: 978-1-5386-7966-1.
- 13. Sinha, K., Sahu, K., P., Ranjan, R., Dubey, K., S. & Islam, A., Investigation of impact of high Al content with AlN/GaN HEMT, In Proceedings of the 7th International Conference on Computing, Communication and Sensor Network (CCSN2018), Kolkata, India, 2018.ISBN: 81-85824-46-2.
- 14. Bose, S., Pal, S. & Islam, A., An SRAM Cell design for Wireless Sensor NetorkIoT applications, In Proceedings of the 7th International



- Conference on Computing, Communication and Sensor Network (CCSN2018), Kolkata, India, 2018. ISBN: 81-85824-46-2.
- Aishwarya, N., Nayak, A., Bose, S., Kumar, V. & Islam, A., A Memristor Emulator Circuit Using CNFET, In Proceedings of the 7th International Conference on Computing, Communication and Sensor Network (CCSN2018), Kolkata, India, 2018. ISBN: 81-85824-46-2.
- 16. Singha, S., Prasad, S. POS based implementation of Bluetooth low energy mesh network. Proceedings of IEEE forum International Conference, Bengaluru, India, ISBN: 978-3-030-10659-1.
- 17. Karan, B., Mahto, K. and Sahu, S.S., Detection of Parkinson Disease Using Variational Mode Decomposition of Speech Signal. In Proceeding of International Conference on Communication and Signal Processing (ICCSP), pp. 0508-0512, Chennai, 2018. ISBN 978-1-5386-3522-3.
- 18. Kumar, A., & Ghorai, S.K. (2018). BER performance analysis of indoor MIMO-VLC system for multipath reflection. 2018 Technologies for Smart-City Energy Security and Power (ICSESP), C.V. Raman College of Engg., Bhubaneswar, Odisha, pp. 1-5. Electronic ISBN: 978-1-5386-4581-9, DVD ISBN: 978-1-5386-4580-2
- 19. Prakash, S., Sharma, A., & Sahu, S.S. (2018). Soil Moisture Prediction Using Machine Learning. 2018 Second International Conference on Inventive Communication and Computational Technologies (ICICCT), Coimbatore, India.
- Sriwastwa, A., Prakash, S., Mrinalini, Swarit, S., Kumari, K., & Sahu, S.S. (2018). Detection of Pests Using Color Based Image Segmentation. 2018 Second International Conference

- on Inventive Communication and Computational Technologies (ICICCT), Coimbatore, India.
- 21. Karan, B., Mahto, K., & Sahu, S.S. (2018). Detection of Parkinson Disease Using Variational Mode Decomposition of Speech Signal. 2018 International Conference on Communication and Signal Processing (ICCSP), Chennai, India.
- 22. Sinha, R.K., Asha, B., San, N., Prasad, S., Sahu, S.S. (2018). Chaotic Image Encryption Scheme Based on S-Box Substitution, IEEE International Conference on Inventive Research in Computing Applications (ICIRCA 2018), Coimbatore, India. Electronic ISBN: 978-1-5386-2456-2, Print on Demand(PoD) ISBN: 978-1-5386-2457-9
- 23. Sinha, R.K., San, N., Asha, B., Prasad, S., & Sahu, S.S. (2018). Chaotic Image Encryption Scheme Based on Modified Arnold Cat Map and Henon Map. 2018 International Conference on Current Trends Towards Converging Technologies (ICCTCT), Coimbatore, India. Electronic ISBN: 978-1-5386-3702-9, Print on Demand(PoD) ISBN: 978-1-5386-3703-6

6. Book:

Edited Books

- 1. Vijay Nath & J.K. Mandal (Eds). (2019). Nano-electronics, Circuits & Communication Systems (Proceeding of NCCS-2017), Lecture Notes in Electrical Engineering, Springer Nature Singapore Pte Ltd Springer Singapore. ISBN No.: 978-981-13-0776-8.
- 2. Vijay Nath & J.K. Mandal (Eds). (2019). Proceedings of the Third International Conference on Microelectronics, Computing & Communication Systems (MCCS-2018) Lecture Notes in Electrical Engineering, Springer Nature Singapore Pte Ltd Springer Singapore. ISBN No. 978-981-13-7091-5.

Chapter(s) in Edited Book

- Singh, S., Prasad, D., Nath V. (2019). A 70.8 MW Wideband CMOS Low-Noise Amplifier for WiMAX Application. In: Nath V. & Mandal J.(eds). Proceedings of the Second International Conference on Microelectronics, Computing & Communication Systems (MCCS-2017). Lecture Notes in Electrical Engineering, vol 476, pp 367-380, Springer, Singapore.
- Bohra V., Nidhi N., Singh S, Prasad D. Thakur A., Kumar A., Nath V. (2019). Design and Implementation of a Reaction Timer Using CMOS Logic. In: Nath V., Mandal J. (eds) Proceeding of the Second International Conference on Microelectronics, Computing & Communication Systems (MCCS 2017). Lecture Notes in Electrical Engineering, vol 476, pp-533-543, Springer, Singapore.
- 3. Bohra V., Prasad D., Nidhi N., Tiwari A., Nath V. (2019). Design Strategy for Smart Toll Gate Billing System. In: Nath V., Mandal J. (eds) Proceeding of the Second International Conference on Microelectronics, Computing & Communication Systems (MCCS 2017). Lecture Notes in Electrical Engineering, vol 476, pp 615-621, Springer, Singapore.
- Razi Q., Nath V. (2019).. Design of Smart Embedded System for Agricultural Update Using Internet of Things. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp372-382 Springer, Singapore.
- Fatma S., Nath V. (2019). Study and Design of Smart Embedded System for Train Track Monitoring Using IoTs. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 385-395. Springer, Singapore.

- 6. Kumar A., Nath V. (2019). Study and Design of Smart Embedded System for Smart City Using Internet of Things. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 397-408, Springer, Singapore.
- 7. Anand S., Nath V. (2019). Study and Design of Smart Embedded System for Remote Health Monitoring Using Internet of Things. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp409-414. Springer, Singapore.
- 8. Kumar C., Nath V. (2019). Design of Smart Embedded System for Auto Toll Billing System Using IoTs. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp415-424. Springer, Singapore.
- 9. Nidhi N., Prasad D., Nath V. (2019). Different Aspects of Smart Grid: An Overview. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 451-456. Springer, Singapore.
- 10. Nidhi N., Prasad D., Nath V. (2019). A High-Performance Energy-Efficient 75.17 dB Two-Stage Operational Amplifier. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 469-474. Springer, Singapore.
- 11. Raj U., Nidhi N., Nath V. (2019). Automated Toll Plaza Using Barcode-Laser Scanning Technology. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 475-481. Springer, Singapore.



- 12. Chaudhary S., Prava A., Nidhi N., Nath V. (2019). Design of All-Terrain Rover Quadcopter for Military Engineering Services. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 507-513. Springer, Singapore.
- 13. Mohan R., Suraj A.K., Agarawal S., Majumdar S., Nath V. (2019). Design of Robot Monitoring System for Aviation. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 535-547. Springer, Singapore.
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- 15. Goel V., Riya, Kumari P., Shikha P., Tanushree, Prasad D., Nath V.(2019). Design of Smartphone Controlled Robot Using Bluetooth. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 557–563. Springer, Singapore.
- 16. Sinha P.K., Saraiyan S., Ghosh M., Nath V. (2019). Design of Earthquake Indicator System Using ATmega328p and ADXL335 for Disaster Management. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 565-572. Springer, Singapore.
- 17. Raju D., Eleswarapu L., Saiv R., Nath V. (2019). Study and Design of Smart Embedded System for Aviation System: A Review. In: Nath V.,

- Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 573-590. Springer, Singapore.
- 18. Maurya D.K., Kumar A., Kaunoujiya S., Prasad D., Nath V. (2019). Study and Design of Smart Industry: A Review. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 591-598. Springer, Singapore.
- Sanjay Kumar S., Khalkho A., Agarwal S., Prakash S., Prasad D., Nath V. (2019). Design of Smart Security Systems for Home Automation. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 599-604. Springer, Singapore.
- 20. Goel V., Kumar S., Muralidharan A., Markham N., Prasad D., Nath V. (2019). Auto-Train Track Fault Detection System. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 605-610. Springer, Singapore.
- 21. Roopchandka, P., Khanam, S., Dhan, R., Kumari, N., Prasad, D., Nath, V. (2019). Design of Password Based Door Locking System. In: Nath V., Mandal J. (eds) Proceedings of the Third International Conference on Microelectronics, Computing Communication Systems, Lecture Notes in Electrical Engineering, vol. 556, pp 605-612. Springer, Singapore.
- 22. Jain, R., Ashu, A., Lal, S., Kumari, N., Prasad, D., Nath, V. (2019). Application of Burglary Alarm System to Avoid Railway Accidents In: book: Proceedings of the Third International Conference on Microelectronics, Computing and Communication



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- 57. Mishra, A., Pandey, C., Sahu S.S. (2018). Detection of Atrial Arrhythmias

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SECTION 5

AWARD/ PATENT/ COLLABORATIONS

7. Award / Recognition Bestowed on Faculties (State / National / International)

SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	
1.	Dr. Srikanta Pal	Fellow	The Institution of Engineers (India)	National	2018
2.	Dr. Srikanta Pal	Senior Member	IEEE, USA	International	2019

8. Patents (Applied / Granted)

SI. No.	Name of the Inventor	Title of the Invention	Application / Patent No. (As applicable)	Year
1.	Pal, SurjyaKanta, Roy, Rohan Basu, Singh, Ankit Kumar, Barua, Arkadeep, Kumar, Aman, Ghosh, Alekhya, Majumdar, Sananya, Riya, Mishra, Debasish, Pal, Srikanta,	Cloud based system for real- time monitoring and machine learning based controlling of friction stir welding process	201831024813	2018
2.	Chirag Parikh, Aaquib Khan, Ravi Ranjan, R. Jain, R. Mahto, D. Chakraborty, S. Pal, Surjya K. Pal	Real-time surface defect analysis and correction in friction stir welding process by image processing	201831035477	2018

SECTION 6

ACTIVITIES/ FACULTY MEMBERS / BOS

9. Departmental Students' Activities

SI. No.	Name of the Activity	Students' Co-Ordinator (If any)	Faculty Co- ordinator (if any)	Date / Duration
1.	Seminar by Qualcomm Manager By Vijay Manohar	IEI & ECE Society Dev Gupta, Prateek Kumar Dalmia, Karunesh Tripathi, Nachiket Agni	Dr. Vijay Nath & Dr. S. S. Tripathy	31.08.2018
2.	Gateway to Analog	IEI & ECE Society Dev Gupta, Prateek Kumar Dalmia, Karunesh Tripathi, Nachiket Agni	Dr. Vijay Nath & Dr. S. S. Tripathy	10.08.2018 to 11.08.2018
3.	Digital Electronics Workshop	IEI & ECE Society Dev Gupta, Prateek Kumar Dalmia, Karunesh Tripathi, Nachiket Agni	Dr. Vijay Nath & Dr. S. S. Tripathy	29.09.2018 to 30.09.2018
4.	IoT Workshop by Technex IIT Varanasi	IEI & ECE Society Dev Gupta, Prateek Kumar Dalmia, Karunesh Tripathi, Nachiket Agni	Dr. Vijay Nath & Dr. S. S. Tripathy	27.10.18 to 28.10.18
5.	Summer Internship	IEI & ECE Society Dev Gupta, Prateek Kumar Dalmia, Karunesh Tripathi, Nachiket Agni	Dr. Vijay Nath & Dr. S. S. Tripathy	1.05.2019 to 20.05.2019

10. List of Faculties

SI. No.	Name	Designation	TEQIP Sponsored
1	Prof. Srikanta Pal	Professor	No
2	Prof. S.K. Ghorai	Professor	No
3	Prof. Mahesh Chandra	Professor	No
4	Prof. R. Sukesh Kumar	Professor	No
5	Prof. Vibha Rani Gupta	Professor	No
6	Prof. Nisha Gupta	Professor	No
7	Prof. Sandeep Singh Solanki	Professor	No
8	Dr. NeelaChattoraj	Associate Professor	No
9	Dr. Sanjay Kumar	Associate Professor	No
10	Dr. Rajesh Kumar Lal	Associate Professor	No
11	Mr. B.B. Pal	Associate Professor	No
12	Dr. S.S. Sahu	Assistant Professor	No
13	Dr. Vijay Nath	Assistant Professor	No
14	Dr. Somnath Sengupta	Assistant Professor	No
15	Dr. Priyank Kumar	Assistant Professor	No
16	Dr. Sanjeet Kumar	Assistant Professor	No
17	Dr. Kartik Mahto	Assistant Professor	No
18	Dr. Aminul Islam	Assistant Professor	No
19	Dr. PrajnaParimita Dash	Assistant Professor	No
20	Dr. Sudip Kundu	Assistant Professor	No
21	Dr. Gajendra Kant Mishra	Assistant Professor	No
22	Dr. Manoj Kumar Mukul	Assistant Professor	No
23	Dr. Swati Prasad	Assistant Professor	No
24	Dr. Soumya Sidhishwari	Assistant Professor	No



SI. No.	Name	Designation	TEQIP Sponsored
25	Dr. Anjini Kumar Tiwary	Assistant Professor	No
26	Dr. Sanjaya Shankar Tripathy	Assistant Professor	No
27	Dr. Dileep Kumar Upadhyay	Assistant Professor	No
28	Mr. Janardan Sahay	Assistant Professor	No
29	Mr. Santashraya Prasad	Assistant Professor	No
30	Mr. Sukanta Kumar Dash	Assistant Professor	No
31	Mr. Vishal H Shah	Assistant Professor	No
32	Dr. Rajeev Sharma	Assistant Professor	Yes
33	Mr. Rupesh Kumar Sinha	Associate Lecturer	No

11. Board of Studies

SI. No.	Name of the Member	Designation	Role
1.	Prof. Srikanta Pal	Professor	Chairman
2.	Prof. Mahesh Chandra	Professor	Internal Member
3.	Prof. S. K. Ghorai	Professor	Internal Member
4.	Prof. R. Sukesh Kumar	Professor	Internal Member
5.	Prof. Vibha Rani Gupta	Professor	Internal Member
6.	Prof. Nisha Gupta	Professor	Internal Member
7.	Prof. Sandeep Singh Solanki	Professor	Internal Member
8.	Dr. D. Mohanta	Professor	Internal Member
9.	Dr. S. Konar	Professor	Internal Member
10	Dr. Neela Chattoraj	Associate Professor	Internal Member
11.	Dr. M.K. Mukul	Assistant Professor	Internal Member
Externa	l Committee		
1.	Prof. Debatosh Guha	Calcutta University	External Member
2.	Prof. Gautam Saha	IIT, KGP	External Member
3.	Prof. Iti Saha Mishra	Jadavpur University	External Member
4.	Prof. Rowdra Ghatak	NIT, Durgapur	External Member
5.	Prof. Sajal Kumar Paul	IIT-ISM Dhanbad	External Member
6.	Mr. Atish Dipankar Mitra	Retd, AGM, BEL	External Member
7.	Dr. Tapas Chakraborty	TCS, Kolkata	External Member

SECTION 7 OTHER INFORMATION

12. Publication by students

Publications in Journals:

- Neha Nidhi, Prasad, D., Nath, V. (2018), Internet of Things/ Everything
 An Overview. International Journal of Pure and Applied Mathematics, 119(12),
- 2. Chakraborty, S., Pandey A., Prasad D., Vedam V., Nath V.(2018). Linearity improvement of gain enhanced op-

- amp using cross-coupled architecture. Microsystem Technologies, 24(12), 4807-4815.
- 3. Prasad, D., Nath, V., Vishwanthan, V., Mehta, M.(2019). A 0.6 V 117 nW high performance energy efficient systemon-chip (SoC) CMOS temperature sensor in 0.18 μm CMOS for aerospace applications. Microsystem Technologies, 25 (06), 2301-2311.

- 3. Chaudhuri, D., Kundu, S., & Chattoraj, N. (2019). Design and analysis of MEMS based piezoelectric energy harvesterfor machine monitoring application. Microsystem Technologies, 25(04), 1437–1446.
- 4. Quarratulain & Chattoraj, N. (2018). Parametric study and Analysis of Band Stop Characteristics for a Compact UWB Antenna with Tri-band notches. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 17(04), 509-527.
- Upadhyay, D. K. & Kumar, A. (2018). A Compact Planar Diplexer based on Via-Free CRLH TL for WiMAX and WLAN Applications. International Journal of Microwave and Wireless Technologies, 11(02), 130-138.
- Kumar, U. & Upadhyay, D. (2018). A Highly Compact UWB Bandpass Filter using via-less CRLH TL. Microwave review, 24(02), 26-30.
- 7. Meenaketan, B.L.P., Pal, S. & Chattoraj, N. (2019). Electromagnetic forward and inverse scattering analysis of a one-dimensional collision system. International Journal of RF & Microwave Computer-Aided Engineering, 29(08), e21760.
- Kumar, V., Mehra R. & Islam A. (2019). A CMOS active inductor based digital and analog dual tuned voltagecontrolled oscillator. Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, 25(05), 1571–1583.
- 9. Guduri, M., Krishna Dwivedi, A., Majumder, Sananya, R. & Islam A. (2019).An efficient circuitlevel power reduction technique for ultralow power applications. Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, 25(05), 1689–1697.
- 10. Roy, C. & Islam A. (2019). Power-

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- 11. Guduri, M., Dokania, V., Verma, R. & Islam A. (2019). Minimum Energy Solution for Ultra-Low Power Applications. Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, 25(05), 1823–1831.
- 12. Mehra, R. & Islam A. (2019). A Low Power, Temperature Compensated, Robust Design of CS Amplifier in Nanoscale Regime. Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, 25(05), 1841–1852.
- 13. Sengupta, A. & Islam A. (2019). Comparative analysis of AlGaN/GaN high electron mobility transistor with sapphire and 4H-SiC substrate. Microsystem Technologies-Micro-and Nanosystems-Information Storage and Processing Systems, 25(05), 1927–1935.
- 14. Kundu, S., Sarkar, S., Mandal, P. & Islam A. (2019). Modeling and Sizing of Non-linear CMOS Analog Circuits used in Mixed Signal Systems. Analog Integrated Circuits and Signal Processing, 99(01), 95–109.
- 15. Pal, S., Gupta, V. & Islam A. (2019). Design of CNFET based power- and variability-aware nonvolatile RRAM cell. Microelectronics Journal, 86, 7–14.
- Kumar, V., Mehra, R. & Islam A. (2018). Design and Analysis of MISO Bi-quad Active Filter. International Journal of Electronics, 106(02), 287–304.
- 17. Mehra, R., Kumar, V. & Islam A. (2018). Reliable and Q-Enhanced Floating Active Inductors and Their Application in RF Bandpass Filters. IEEE Access, 6, 48181-48194.



18. Sidhishwari, S., Basu, M. & Ghorai, S.K. (2019). A Modal interference-based Fiber Optic Sensor for Dual Parameter Measurement using an Artificial Neural Network. Optical Fiber Technology, 50, 216–224.

Publications in Book Chapter:

- Singh S, Prasad D., Nath V. (2019)., A 70.8 MW Wideband CMOS Low-Noise Amplifier for WiMAX Application. In: Nath V. & Mandal J.(eds) Proceedings of the Second International Conference on Microelectronics, Computing & Communication Systems (MCCS-2017). Lecture Notes in Electrical Engineering, vol 476, pp 367-380, Springer, Singapore.
- Bohra V., Nidhi N., Singh S, Prasad D. Thakur A., Kumar A., Nath V. (2019). Design and Implementation of a Reaction Timer Using CMOS Logic. In: Nath V., Mandal J. (eds) Proceeding of the Second International Conference on Microelectronics, Computing & Communication Systems (MCCS 2017). Lecture Notes in Electrical Engineering, vol 476, pp-533-543, Springer, Singapore.
- 3. Bohra V., Prasad D., Nidhi N., Tiwari A., Nath V. (2019). Design Strategy for Smart Toll Gate Billing System. In: Nath V., Mandal J. (eds) Proceeding of the Second International Conference on Microelectronics, Computing & Communication Systems (MCCS 2017). Lecture Notes in Electrical Engineering, vol 476, pp 615-621, Springer, Singapore.
- 4. Razi Q., Nath V. (2019). Design of Smart Embedded System for Agricultural Update Using Internet of Things. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp372-382 Springer, Singapore.
- 5. Fatma S., Nath V. (2019). Study and

Design of Smart Embedded System for Train Track Monitoring Using IoTs. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 385-395. Springer, Singapore.

- 6. Kumar A., Nath V. (2019). Study and Design of Smart Embedded System for Smart City Using Internet of Things. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 397-408, Springer, Singapore.
- 7. Anand S., Nath V. (2019). Study and Design of Smart Embedded System for Remote Health Monitoring Using Internet of Things. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp409-414. Springer, Singapore.
- 8. Kumar C., Nath V. (2019). Design of Smart Embedded System for Auto Toll Billing System Using IoTs. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp415-424. Springer, Singapore.
- Nidhi N., Prasad D., Nath V. (2019). Different Aspects of Smart Grid: An Overview. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 451-456. Springer, Singapore.
- 10. Nidhi N., Prasad D., Nath V. (2019). A High-Performance Energy-Efficient 75.17 dB Two-Stage Operational Amplifier. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 469-474. Springer, Singapore.



- 11. Raj U., Nidhi N., Nath V. (2019). Automated Toll Plaza Using Barcode-Laser Scanning Technology. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 475-481. Springer, Singapore.
- Chaudhary S., Prava A., Nidhi N., Nath V. (2019). Design of All-Terrain Rover Quadcopter for Military Engineering Services. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 507-513. Springer, Singapore.
- 13. Mohan R., Suraj A.K., Agarawal S., Majumdar S., Nath V. (2019). Design of Robot Monitoring System for Aviation. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 535-547. Springer, Singapore.
- 14. Hari Charan E.V.V., Pal I., Sinha A., Baro R.K.R., Nath V. (2019). Electronic Toll Collection System Using Barcode Technology. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 549-556. Springer, Singapore.
- 15. Goel V., Riya, Kumari P., Shikha P., Tanushree, Prasad D., Nath V.(2019). Design of Smartphone Controlled Robot Using Bluetooth. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 557-563. Springer, Singapore.
- 16. Sinha P.K., Saraiyan S., Ghosh M., Nath V. (2019). Design of Earthquake Indicator System Using ATmega328p and ADXL335 for Disaster Management. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol

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- 17. Raju D., Eleswarapu L., Saiv R., Nath V. (2019). Study and Design of Smart Embedded System for Aviation System: A Review. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 573-590. Springer, Singapore.
- 18. Maurya D.K., Kumar A., Kaunoujiya S., Prasad D., Nath V. (2019). Study and Design of Smart Industry: A Review. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 591-598. Springer, Singapore.
- 19. Sanjay Kumar S., Khalkho A., Agarwal S., Prakash S., Prasad D., Nath V. (2019). Design of Smart Security Systems for Home Automation. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 599-604. Springer, Singapore.
- 20. Goel V., Kumar S., Muralidharan A., Markham N., Prasad D., Nath V. (2019). Auto-Train Track Fault Detection System. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. Lecture Notes in Electrical Engineering, vol 511, pp 605-610. Springer, Singapore.
- 21. Roopchandka, P., Khanam, S., Dhan, R., Kumari, N., Prasad, D., Nath, V. (2019). Design of Password Based Door Locking System. In: Nath V., Mandal J. (eds) Proceedings of the Third International Conference on Microelectronics, Computing and Communication Systems, Lecture Notes in Electrical Engineering, vol. 556, pp 605-612. Springer, Singapore.



- 22. Jain, R., Ashu, A., Lal, S., Kumari, N., Prasad, D., Nath, V.(2019). Application of Burglary Alarm System to Avoid Railway Accidents In: book: Proceedings of the Third International Conference on Microelectronics, Computing and Communication Systems, Lecture Notes in Electrical Engineering, vol.556, pp.595-604. Springer, Singapore.
- 23. Tyaqi, C., Verma, S., Pandey, A., Prasad, D., Nath, V. (2019). Study and Design of Electro-Pneumatic system. Shifting In: Nath Mandal J. (eds) Proceedings of the Third International Conference on Microelectronics, Computing and Communication Systems, Lecture Notes in Electrical Engineering, vol. 556, pp 481-488. Springer, Singapore.
- 24. Jha, A., Singh, A., Kerketta, R., Kumari, N., Prasad, D., Nath, V.(2019). Development of Autonomous Garbage Colector Robot. In: Nath V., Mandal J. (eds) Proceedings of the Third International Conference on Microelectronics, Computing and Communication Systems, Lecture Notes in Electrical Engineering, vol. 556, pp 567-576. Springer, Singapore.
- 25. Singh, G., Kumari, N., Minz, S., Kumari, N., Prasad, D., Nath, V.(2019). Design of Water Overflow Indiactor Alarm and Controller. In: Nath V., Mandal J. (eds) Proceedings of the Third International Conference on Microelectronics, Computing and Communication Systems, Lecture Notes in Electrical Engineering, vol. 556, pp 623-630. Springer, Singapore.
- 26. Nidhi, N., Prasad, D., Kumari, M., Pandey, A., Solanki, S. S., Kumar, A., Thakur, K. K., Nath, V. (2019). Design of Low Power 3-Bit CMOS Flash ADC for Aerospace Application. In: Nath V., Mandal J. (eds) Proceedings of the Third International Conference on Microelectronics, Computing and Communication Systems, Lecture

- Notes in Electrical Engineering vol. 556, pp 585-594. Springer, Singapore.
- 27. Agarwal, R., Pandey, A., Kumari N., Prasad, D., Nath, V. (2019). An Assessment of Advanced Transportation research Opportunities. In: Nath V., Mandal J. (eds) Proceedings of the Third International Conference on Microelectronics, Computing and Communication Systems, Lecture Notes in Electrical Engineering, vol. 556, pp 631-640. Springer, Singapore.
- 28. Aditya, Lakra, A., Murmu, K., Prasad, D., Nath, V. (2019). Study and Development of Solar-Powered Water Pumping System. In: Nath V., Mandal J. (eds) Proceedings of the Third International Conference on Microelectronics, Computing and Communication Systems, Lecture Notes in Electrical Engineering, vol. 556, pp. 655-660. Springer, Singapore.
- 29. Anchalia, U., Reddy, K.P., Modi, A., Kumari N., Prasad, D., Nath, (2019). Study and Design V. of Biometric Security Systems: Fingerprint and Speech Technology. In: Nath V., Mandal J. (eds) Proceedings of the Third International Conference on Microelectronics, Computing and Communication Systems, Lecture Notes in Electrical Engineering, vol. 556, pp577-584. Springer, Singapore.
- 30. Sahay, S., Sharma, N. Raj, S., Kumari, N., Prasad, D., Nath, V. (2019). Development of Wireless Power Transfer System with Internet of Things. In: Nath V., Mandal J. (eds) Proceedings of the Third International Conference Microelectronics, on Computing and Communication Systems, Lecture Notes in Electrical Engineering, vol. 556, pp 613-622. Springer, Singapore.
- 31. Shrivastava, A., Rawat, S., Singh, H.K., Kumari N., Prasad, D., Nath, V. (2019). Preemption of Traffic Signal Using Global Positioning System (GPS) In: Nath V., Mandal J. (eds) Proceedings

- of the Third International Conference on Microelectronics, Computing and Communication Systems, Lecture Notes in Electrical Engineering, vol. 556, pp 641-648. Springer, Singapore.
- 32. Goyal, Y., Agarwal, S., Barman, S., Pranav, A., Prasad, D., Nath, V. (2019). Evolution of Pacemaker: A Review. In: Nath V., Mandal J. (eds) Proceedings of the Third International Conference on Microelectronics, Computing and Communication Systems, Lecture Notes in Electrical Engineering, vol. 556, pp 649-654. Springer, Singapore.
- 33. Kumar, P., Kalra, A., Prakash, K.J., Prasad, D., Nath, V. (2019). Study and Design of Obstacle Detection Mechanism. In: Nath V., Mandal J. (eds) Proceedings of the Third International Conference on Microelectronics, Computing and Communication Systems, Lecture Notes in Electrical Engineering, vol. 556, pp 661-666. Springer, Singapore.
- 34. Goel, V., Raj, H., Muthigi, K., Kumar, S. S., Prasad, D., Nath, V. (2019). Development of Human Detection System for Security and Military Applications. In: Nath V., Mandal J. (eds) Proceedings of the Third International Conference on Microelectronics, Computing and Communication Systems, Lecture Notes in Electrical Engineering, vol. 556, pp 195-200. Springer, Singapore.
- 35. Swaroop, A., Kumar, A., Tirkey, S., Kumari Neelam, Prasad, D., Nath, V. (2019). Design of Light-Sensing Automatic Headlamps and Taillamps for Automobiles In: Nath V., Mandal J. (eds) Proceedings of the Third International Conference on Microelectronics, Computing and Communication Systems, Lecture Notes in Electrical Engineering, vol. 556, pp 301-308. Springer, Singapore.
- 36. Kumar, A., Nath, V.(2019). Design of Ultra Low Power CMOS Sigma Delta ADC for Aerospace Applications. In: Nath V., Mandal J. (eds) Proceedings

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Publication in Conference:

- Tirkey, M. M. and Gupta, N., A Paper Based Perfect Electromagnetic Wave Absorber using Conducting Grid Pattern. 15th International Conference on Electromagnetic Interference & Compatibility (INCEMIC), Society of EMC Engineers, Bangalore, 2018
- 2. Biswas, A. and Gupta, V. R., Novel Compact Meandered Monopole Antenna for Smartphone Covering Fifteen LTE Bands. International Conference on Electrical, Communication, Electronics, Instrumentation and Computing, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Tamil Nadu, 2019.
- 3. Biswas, A., & Gupta, V.R., Multiband Antenna Design for Smartphone Covering 2G, 3G, 4G and 5G NR frequencies. International Conference on Trends in Electronics and Informatics, SCAD College of Engineering and Technology, Tirunelveli, 2019.
- Kumari, S., Singh, S. & Gupta, V. R., Paper Based Conformal Antenna. International Conference on Trends in Electronics and Informatics, SCAD College of Engineering and Technology, Tirunelveli, 2019.
- Rajak, N., Chattoraj, N. & Kumar, R., A gain and bandwidth enhanced metamaterial based surface antenna for wireless communication. In Proceedings of the URSI Asia-Pacific Radio Science Conference (URSI AP-RASC), New Delhi, India, 2019.
- Vasisht, P., Chattoraj, N., Chandra, R. & Rajak, N., A Novel Compact Ultra-Wide-Band MSRDRA for X- and KU-BAND Applications. In Proceedings of theURSI Asia-Pacific Radio Science Conference (URSI AP-RASC), New Delhi, India, 2019.

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- 7. Meenaketan, B.L.P., Pal, S. & Chattoraj, N., A Relativistic Based Computational Technique For Scattering Analysis Due To An Accelerating Target, In Proceedings of theIEEE Indian Conference On Antennas And Propagation, Hyderabad, India, 2018.
- Meenaketan, B.L.P., Pal, S. & Chattoraj, N., Electromagnetic Scattering Analysis Due To A Colliding System Using Quasi Stationary -Finite Difference Time Domain Method, In Proceedings of the IEEE- Asia-Pacific Radio Science Conference, New Delhi, 2019.
- 9. Meenaketan, B.L.P., Pal, S. & Chattoraj, N., Inverse Scattering Using Scattered Field Pattern, proceedings of the IEEE-International Symposium on Antennas and Propagation, Cochin, 2018.
- 10. Meenaketan, B.L.P., Pal, S. & Chattoraj, N., Electromagnetic inverse Scattering for dynamic fluid level detection, In Proceedings of the IEEE International Conference on Applied

- Electromagnetics, Signal Processing & Communication (AESPC-2018), KIIT University, Bhubaneswar, India.
- 11. Sinha, K., Sahu, K., P., Ranjan, R., Dubey, K., S. & Islam, A., Investigation of impact of high Al content with AlN/GaN HEMT, In Proceedings of the 7th International Conference on Computing, Communication and Sensor Network (CCSN2018), Kolkata, India, 2018.
- Bose, S., Pal, S. & Islam, A., An SRAM Cell design for Wireless Sensor NetorkIoT applications, In Proceedings of the 7th International Conference on Computing, Communication and Sensor Network (CCSN2018), Kolkata, India, 2018.
- 13. Aishwarya, N., Nayak, A., Bose, S., Kumar, V. & Islam, A., A Memristor Emulator Circuit Using CNFET, In Proceedings of the 7th International Conference on Computing, Communication and Sensor Network (CCSN2018), Kolkata, India, 2018.

14. List of Distinguished Alumni

Sr. No	Name, Batch and Affiliation	Short Description
1.	Dr. Ramjee Prasad	Professor Arhus University Denmark
2.	Sh. Vijay Bhushan Pandey	GM, ARTTC BSNL Ranchi
3.	Ms. Nancy Sahay	IAS, Govt. Of India



Department of Hotel Management & Catering Technology

SECTION 1

DEPARTMENTAL PROFILE





1. About the Department:

Department of Hotel Management & Catering Technology of BIT MESRA was established in January-2003. Department offers 4 years (8 Semester) Bachelor's Degree in Hotel Management & Catering (BHMCT). Technology The program lays emphasis on practical application of theoretical lessons through training, laboratory work, hands on workshops, theme parties, project and study tour. The department has a well-qualified team of faculty members with a blend of sound industry experience in India and overseas, academic excellence, consistently involved in various training, consultancy and research activities. The faculty members put in immense effort for both academic and practical training of the students.

Department is well equipped with training kitchen and bakery, training restaurant, housekeeping laboratory, laundry laboratory, front office laboratory etc. which ensure practical training in a professional

environment to students.

Department has biannual double blind refereed, research journal JOHAR- Journal of Hospitality Application and Research published in association with Publishing India Group which is indexed in ProQuest, i-scholar and Sci-Archives.

Department has its own departmental club 'Hospitality Club' solely managed by students which hones their managerial and entrepreneurial skills required in the hospitality industry. As a regular feature department organizes various workshops, theme parties, food festivals and outdoor caterings to cultivate skill among the students.

Among the branded and luxurious hotels in India our department has gained a very good image and students go on "Industrial Exposure Training" in India and abroad for 18 weeks in various star Hotels such as Taj group of hotels, Oberoi group of hotels, ITC, The Park hotels, Specialty Restaurant Ltd. etc.

SECTION 2 SEMINAR / CONFERENCE

2. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI.	Name of	Title of the Conference/	_	Organizers	Venue	Date
No.	the Faculty	Seminar	Agency	Organizers	Venue	Date
1.	Dr. Praveen Srivastava	8 weeks International MOOCs FDP on "Creating open source cloud based Gnomio Moodle of your own subject for OBE"		D.Y.Patil College of Engineering, Akurdi, Pune and UKIERI (UK India Education and Research Initiative) in association with ISTE and AICTE.		April 15, 2019 to June 10, 2019
2.	Dr. Praveen Srivastava	Two-week Faculty Development Program (FDP 301X) on "Mentoring Educators in Educational Technology"		IIT Mumbai	Online	May – July 2018
3.	Mrs. Pratima Ekka	National Seminar- Evaluation of entrepreneurship in hospitality in current scenario		DAV Post Graduate College	Varanasi	3-4 April 2019
4.	Dr. Nishkant Kumar	02 weeks FDP in Entrepreneurship	NSTEDB	XISS	Ranchi	10-22 Dec '2018
5.	Dr. Abhinav Kumar Shandilya	Presented paper titled "Heritage, Tourism and Hospitality: Road ahead in and around Santiniketan" in International Conference on "Development of Cultural Tourism in and around Santiniketan & Birbhum" from organised by.	Bharti	Visva-Bharti	Shanti- niketan	16 th -18 th November 2018

SECTION 3 RESEARCH PUBLICATIONS

3. Publications in Journals : (International/National)

- Chatterjee, R. & Mukherjee, S.K. (2019).
 Sustainable development of bio-diesel production for cleaner environment.
 Int. J. Environmental Technology and Management, 22(01), 20-39.
- Srivastava, S.K., Chandra B. & A. Sinha (2018). Effectiveness of Knowledge Management (KM) on Customer Relationship Management (CRM) in Hotel Business Performance, JEMT, IX, 6(30), 1277-1288.
- Srivastava, P. & Srivastava S.K. (2018). Emotional Labour within Hotel Industry- A case study in Hotels of Ranchi, IJMS, V, 3(3), 38-43.

 Kumar, P. & Mishra A. (2019) Implication of tourism traits on Jharkhand Tourism with special reference to perception of local residents, Purusartha, 60-73

4. Publications in Proceedings : (International/National)

 Sinha, A. & Srivastava S.K., Effective management of Technology and its productivity in open cast coal mining Industry with special reference to central coalfield limited, In proceeding of third International Conference on Facets of Business Excellence, FOBE, Institute of Management, Ghaziabad, Nov. 22-26, 2018

SECTION 4

AWARD / PATENT / COLLABORATIONS

5. MoUs / Collaborations

SI. No.	Name of Organisation / University	Purpose / Area	Year / Duration
1.	Sofitel Kuala Lumpur Damansara, Malaysia	Internship	15 Dec'18-14 June'19
2.	Michel Trama, Puymirol, France	Internship	31 Jan 30 June'2019

SECTION 5

ACTIVITIES/ FACULTY MEMBERS / BOS

6. Departmental Students' Activities

SI. No.	Name of the Activity	Students' Co-Ordinator (If any)	Faculty Co- ordinator (if any)	Date / Duration
1.	Educational tour to Parasnath, Giridih		Dr. Nishikant Kumar	
2.	Industrial visit to hotel Radisson Blu, Ranchi	Yuvraj Kumar	Dr. Nishikant Kumar	04.08.2018

7. List of Faculties

SI. No.	Name	Designation	TEQIP Sponsored
1.	Dr. Praveen Srivastava	Assistant Professor	No
2.	Dr. Abhinav Kr. Shandilya	Assistant Professor	No
3.	Dr. Nishikant Kumar	Assistant Professor	No
4.	Dr. Abhisek Jana	Assistant Professor	No
5.	Dr. Rajeshwari Chateerjee	Assistant Professor	No
6.	Mr. Sanjiv Kr. Srivastava	Assistant Professor	No
7.	Dr. Amit Saran	Assistant Professor	No
8.	Mr. Gautam Shandilya	Assistant Professor	No
9.	Ms. Pratima Ekka	Assistant Professor	No
10.	Mr. Pranjal Kumar	Assistant Professor	No

8. Board of Studies

SI. No.	Name of the Member	Designation	Role
1.	Dr. Nishikant Kumar	HOD (I/c) - (Ex-Officio)	Chairman
2.	Dr. Praveen Srivastava	Asst. Professor, Dept. of HMCT	Internal Member
3.	Dr. Abhinav Kr. Shandilya	Asst. Professor, Dept. of HMCT	Internal Member
4.	Dr. Nishikant Kumar	Asst. Professor, Dept. of HMCT	Internal Member
5.	Dr. Abhisek Jana	Asst. Professor, Dept. of HMCT	Internal Member
6.	Mr. Sanjiv Kr. Srivastava	Asst. Professor, Dept. of HMCT	Internal Member
7.	Dr. Amit Saran	Asst. Professor, Dept. of HMCT	Internal Member
8.	Mr. Gautam Shandilya	Asst. Professor, Dept. of HMCT	Internal Member
9.	Dr. Rajeshwari Chateerjee	Asst. Professor, Dept. of HMCT	Internal Member
10.	Dr. B. N. Sinha	Professor, Dept. of Pharmaceutical Sciences and Technology	Internal Member
12.	Dr. Saswati Ghosh	Asst. Professor, Dept. of Bioengineering	Internal Member
13.	General Manager, Hotel Radisson Blu, Ranchi	(Ex-Officio)	External Member
14.	General Manager, JTDC, Ranchi	(Ex-Officio)	External Member

SECTION 6 OTHER INFORMATION

9. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
1.	Mr. Sudhir Mishra, General Manager, BNR Chanakya, Ranchi	26.07.2019	To Basel
2.	Ms. Urvashi Sibal, Associate Editor, Cuisine Digest	02.11.2018	

10. List of Distinguished Alumni

SI. No.	Name, Batch and Affiliation	Short Description		
1	Ayodhya Nath Tiwari	Revenue manager at hotel Novotel Imagica Khopoli, Maharashtra. Responsible for room rate strategy.		
2	Ripudaman Singh Dadhwal	Sales manager at JW Marriott, New Delhi Aerocity. Responsible to handle corporate & Institutional sales.		
3	Akash Kumar	Assistant Manager - Food & Beverage, ITC Hotels.		
4	Pinki Priyadarshani	Front Office Manager – Movinpick Hotels, Doha, Qatar.		
5	Gargi Roy	Sales manager at ITC Sonar, Kolkata. Responsible to handle corporate & Institutional sales.		



Department of Management

SECTION 1 DEPARTMENTAL PROFILE

About the Department :

The Department of Management was established in the year 1979 with the aim of serving the growing need for qualified professionals who could harness the resources of the country to achieve its development goals. The department has continuously strived to achieve this aim by maintaining the highest standards in the Post Graduate (MBA) and Doctoral Programmes offered by it since its inception.

The vision of the department today is to be recognized as a frontrunner in Management education in the country in consonance with the social, economic and ecological environment while striving to contribute to nation building through excellence in research and development activities.

The department follows the philosophy of Outcome Based Education. Therefore, the teaching-learning process is student centric. The pedagogy is practical, hands on and real time. Case studies,

Problem Solving Exercises, Role- Plays, Management Games and Presentations are extensively used. The curriculum is planned to facilitate learning in theory and practice of all aspects of the discipline of management ensuring the achievement of predefined learning outcomes.

The department has a vibrant culture encouraging wide participation of the students in extracurricular activities through three duly elected student bodies. They are:

- Students Activity Forum
- The Academic Forum
- Team Sustainability

The academic infrastructure of the department was strengthened during the last year by upgrading the teaching aids, refurbishing of classrooms and setting up of a Business Analytics Lab.

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

a) Projects Completed

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Date of completion of the Project
1.	Attitude towards Female Role Portrayal in Advertising and its impact on Marketing Communication		ICSSR, New Delhi	January, 2016	Rs 12 Lacs	13 th July, 2018

SECTION 3 SEMINAR / CONFERENCE

3. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.		Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Sraboni	AICTE-UKIERI technical	AICTE-UKIERI	AICTE	Delhi	13 th -16 th
	Dutta	leadership program				Nov 2018
		2018				

SI.	Name of	Title of the	Funding	Organizers	Venue	Date
NO.	the Faculty	Conference/ Seminar	Agency		Bangalore	20 th -23 rd Feb 2019
					Shillong	11 th -13 th June 2019
2.	Sujata P.Dash	One day Awareness Workshop on Prevention of Harassment at Workplace	Dr. R. Singh	TEQIP	BIT, Mesra	25 th June, 2019
3.	Sujata P.Dash	Two-day CEP short term course on Mediation, Moderation and Conditional Process Analysis	Dr. R. Chaudhary	IIT, Patna, Bihar	IIT, Patna, Bihar	17 th -18 th May 2019
4.	Sujata P.Dash	One day Scilab Workshop	K P Kannan	Pandit Madan Mohan Malviya National Mission on Teachers and Teaching organized by Teaching Learning Centre (ICT)	IIT Bombay	4 th May 2019
5.	Sujata P.Dash	Two-day workshop on Outcome Based Accreditation	Three members from ICT Mumbai		Birla Institute of Technology, Mesra, Ranchi	
6	Shelly Srivastava	Participant Centered learning (case method of teaching & learning)	BIT MESRA	IIM Ranchi	IIM Ranchi	25-26 th May 2019
7	Rohini Jha	Participant Centered learning (case method of teaching & learning)	BIT MESRA	IIM Ranchi	IIM Ranchi	25-26 th May 2019
8.	Praveen Chandra Jha	International Conference on Financial Inclusion and Inclusive Growth	Dept. of higher education and skill development, Govt. of Jharkhand	University Department of Commerce and Business Management, Ranchi University, Ranchi,	University Dept. of Commerce and Business Management	24-25 th November 2018
9.	Anand Pd. Sinha	Third "International Conference on Facets of Business Excellence - FOBE 2018"	MHRD, New Delhi	Institute of Management Technology, Ghaziabad.	Institute of Management Technology, Ghaziabad	22 nd -26 th Nov 2018
10.	Anand Pd. Sinha	"National Conference on Paradigm Shift in Management Practices for Fostering Excellence" (PSMPFE-2019)	Guru Gobind Singh Indraprastha University	New Delhi Institute of Management Studies	New Delhi Institute of Management Studies	2 nd & 3 rd Feb 2019
11.	Anand Kumar	International Conference on Financial Inclusion and Inclusive Growth,		Ranchi University	Ranchi University	24 th -25 th Nov, 2018

SECTION 4 RESEARCH PUBLICATIONS

Publications in Journals: (International/National)

- Mishra P C, Shivani S, & Kishore S (2018). Information Technology as an enabler for Knowledge Management; A Study of Indian Coal Mining Industry. Journal of Global Information Technology Management, 21 (3), 208-225.
- Roy, S. & Satpathy, B. (2019). Strategic Alliance between Information Intensive Services and Supply Chain Integration: Impact on Firm Performance. Journal of Operations & Production Management.
- Kumar, A. & Roy, S. (2019). Trading of Derivative in Stock Market: A Predictive Approach towards Effective Decision Making. Published in South Asian Journal of Socio-Political Studies (Sajosps), 12(2).
- Fatima, S, Malpani, R, Sodhi, S, Ghosh, A. (2019). E-buying of medicines: Trends and factors influencing Online Pharmacy. Accepted for publication in International Journal of Marketing & Business Communication.
- Dasgupta, A.S, Tiwari, S, Ghosh, A & Fatima, S (2018). Factors Influencing Textile Industry: A Case of India. Asian Textile Journal, 27 (12), 62-64.
- Srivastava, S.K., Chandra, B., Sinha, A.P. (2018). Effectiveness of Knowledge Management on Customer Relationship Management in Hotel Business Performance. Journal of Environmental Management and Tourism, 6(30).
- 7. Baral, M.M., Verma, A. Chittipaka, V. (2019). Impact of Cloud Computing in Indian Healthcare Firms: A study. Published in International Journal of Scientific and Technology Research.
- Baral, M.M., Verma, A. Chittipaka, V. (2019). Ethics in Cloud Computing: Implications for India. Published in International Journal of Innovative Technology and Exploring Engineering; 8(10), 2449 2453.

- 9. Baral, M.M., Verma, A. Chittipaka, V. (2019). Smart Healthcare SCM. Journal of Information and Computational Science; 9(8), 60-69.
- 10. Srivastava, S.K., Chandra, B., Sinha, A.P. (2018). Effectiveness of Knowledge Management on Customer Relationship Management in Hotel Business Performance. Journal of Environmental Management and Tourism, 6(30).

6. Publications in Proceedings (International/National)

- Roy, S., Kumar K. and Satpathy, B. (2018)., Strategic Planning of Optimizing Productivity: a '5S' under Lean Quality. In proceedings of ICIEND, Bhubneshwar, India, 2018.
- Kumar, A. and Roy, S., Trading Of Derivative in Stock Market: A Predictive Approach towards Effective Decision Making. In proceedings of ICIEND, Bhubneshwar, India, 2018.
- 3. Preeti and Roy, S. (2018). Service Sector Performance by Non-Parametric Approach: A Critical Review. In proceedings of ICIEND, Bhubneshwar, India, 2018.
- 4. Fatima, S. and Ghosh, A., What is guiding customers-instincts or their social group? Influence of demographics and social group on Online Consumer Reviews participation: An exploratory survey". In proceedings of NASMEI, IIM Indore, 2019
- Fatima, S., Malpani, R., Sodhi, S. and Ghosh, A. 2018. "E-buying of Medicines: Trends and Factors influencing Online Pharmacy", In proceedings of 1st PANIITMC, IIT Roorkee, November, 2018.
- Fatima, S, and Ghosh, A., Time to Dive into Digital Communications. In proceedings of Facets of Business Excellence FOBE, IMT Ghaziabad, Delhi, 2018.



- Sodhi, S. and Ghosh, A., Sustainable Product Life Cycle: A Review. In proceedings of Colloquium VGSOM IIT Kharagpur, 2018.
- 8. Jha Rohini, Prasad Sunit., Examining Digital Divide as one of the Barriers in Financial Inclusion, In proceedings of the conference on Financial Inclusion and Inclusive Growth, Ranchi University, 2018
- 9. Prasad Sunit, Jha Rohini, Financial Inclusion and Financial Education are complementary for the growth of Micro, Small and Medium Enterprises: An Indian case In proceedings of the conference on Financial Inclusion and Inclusive Growth, Ranchi University, 2018
- Sinha. A.P. Effective Management of Technology and its productivity in Open Cast Coal Mining Industry with special reference to Central Coalfields Limited. In proceedings of Facets of Business Excellence, IMT Ghaziabad, Delhi, 2018.
- 11. Kumar, A., Sinha, A. & Prasad. A Comparative Study of Attitude and Job Satisfaction of Male Female Teachers in NCR, Delhi. In proceedings of National Conference on Paradigm Shift in Management Practices for Fostering Excellence, New Delhi Institute of Management Studies, New Delhi, 2019

7. Book:

Co-Authored

 Roy, S., Kumar, K. and Devim, P.(2019) "soft computing for engineering optimization". Published from: CRC Taylor and Francis Group, 6000 Broken Sound Parkway NW, Suite 300, Boca Raton, FL 33487, USA. ISBN 978-0-367-14861-4

Chapter(s) in Edited Book

- Baral, M.M. and Verma, based intelligent (2018)"Cloud system for Supply Chain management: A Future Roadmap for SCM technologies". In Scopus Book series LNEE by Springer, Singapore; Nano-electronics, Circuits Communication Systems; Proceeding of NCCS 2017; Vol. 511, p.p. 13-24, Edition 1, ISBN 978-981-13-0775-1.
- 2. Preeti and Roy, S. (2019). Data Envelopment Analysis Applications to Manufacturing Sector. In "Optimization using Evolutionary Algorithms and Metaheuristics: Applications to Engineering". CRC Press (Taylor & Francis Company), Catalogue # 311997, ISBN: 978-0-367-260440-6.

SECTION 6

ACTIVITIES/ FACULTY MEMBERS / BOS

8. Departmental Students' Activities

SI. No.	Name of the Activity	Students' Co-Ordinator (If any)	Faculty Co- ordinator (if any)	Date / Duration
1.	RBI E-BAAT	Adya Singh, Udit Sahoo, Shruti, Rishav Tiwari	Dr. Sraboni Dutta	29.01.19
2.	ICICI Stockmind 7	Adya Singh, Ayushi, Oshin	Dr. Sraboni Dutta	17.01.19
3.	Case study competition	Adya Singh, Udit Sahoo	Dr. Sraboni Dutta	24.01.19
4.	SEBI visit	Rishav Tiwari, Shruti	Dr. Sraboni Dutta	4.10.18 & 5.10.18
5.	MBA Quizzard	Adya Singh, Udit Sahoo	Dr. Sraboni Dutta	11.09.18
6.	Industrial visit to Jindal Steel and Power Limited, Patratu	Adya Singh, Udit Sahoo	Dr. Sraboni Dutta Dr. Anand Pd Sinha	25.09.18

9. List of Faculties

SI. No.	Name	Designation
1.	Dr. Shradha Shivani	Professor
2.	Dr. Utpal Baul	Professor
3.	Dr. Manju Bhagat	Professor
4.	Dr. R.N. Bhagat	Professor
5.	Dr. Supriyo Roy	Associate Professor
6.	Dr. Sraboni Dutta	Associate Professor
7.	Dr. P.C. Jha	Assistant Professor
8.	Dr. D.K. Chand	Assistant Professor
9.	Dr. Anupam Ghosh	Assistant Professor
10.	Dr. Rohit Kumar Pandey	Assistant Professor
11.	Mr. Anand Kumar	Assistant Professor
12.	Dr. Rohini Jha	Assistant Professor
13.	Dr. Amitabh Verma	Assistant Professor
14.	Mr. S.K. Singh	Assistant Professor
15.	Dr. Anand Prasad Sinha	Assistant Professor
16.	Mrs. Sujata Priyambada Dash	Assistant Professor
17.	Mrs. Shelly Srivastava	Assistant Professor

10. List of Adjunct Faculties

SI. No.	Name	Designation	Affiliation	
1.	Mr. Alok R. Chaturvedi	Professor	Krannert School of Management, Purdue University	

11. Board of Studies

SI. No.	Name of the Member	Designation	Role
1.	Dr. S. Shivani	Professor	Chairman
2.	Dr. Utpal Baul	Professor	Internal
3.	Dr. S.K. Bose	Professor	Internal
4.	Dr. Manju Bhagat	Professor	Internal
5.	Dr. R.N. Bhagat	Professor	Internal
6.	Dr. Supriyo Roy	Associate Professor	Internal
7.	Dr. Amitabh Verma	Assistant Professor	Internal
8.	Dr. Vinay Sharma	Professor	External
9.	Dr. G. Sahoo	Professor	External
	Any tv	wo of the Following	
1.	Prof. Partha Pratim Sengupta	Sr. Professor	External
2.	Dr. A.K. Sarkar	Associate Professor	External
3.	Dr. Priyobrata Bhattacharjee	DGM, Birla Corporation Ltd.	External
4.	Dr. Shivesh Singh	Vice President, Bandhan Bank	External

SECTION 7 OTHER INFORMATION

12. Achievements of Students

SI. No.	Name of Student	Achievement/Position/ Award etc	Organised by	Date and Venue
1	Rishav Raman Tiwari	2 nd Position Turn the table	Management Department, BIT Mesra	11/09/2018
2	Abdur Rahim	3 rd Position Turn the table	Management Department, BIT Mesra	11/09/2018
3	Raunak Upadhayay	1 st Position Channel Surf	Management Department, BIT Mesra	11/09/2018
4	Yatika Garg	1 st Position ICICI Stock Mind	Management Department, BIT Mesra	17/01/2019
5	Oshin, Prachi, Priyank, Diksha, Trishala, Jeeshna, Sonal, Debanjana, Jyoti, Kirti, Ranjana	Winner in Dance Competition at BITOSAV	BIT Mesra	22/02/2019
6	Anchal, Priyanka, Varsha, Ritu, Puja, Nikita, Meenu, Sweta, Nevedita, Natasha	3 rd in Dance Competition at BITOSAV	BIT Mesra	22/02/2019
7	Silky Kumari and Prerna Mitra	Runner Up Position Vajra'19 women's inter-college volleyball tournament.	BIT Mesra	22/02/2019

13. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
1.	Mr. Rajvardhan (Sr. VP Olam International Limited)	01.03.19	0
2.	Ms. Mridula Shekhar (Chief Marketing Officer, TATA AIA)	16.02.19	
3.	Mr. Ravi Pandey (Pre-sales Consultant at Kronos Incorporated)	16.02.19	
4.	Dr. Alok Chaturvedi (Professor of Information Systems at Krannert School of Management, Purdue University, USA)	8.02.19	



S	l. No.	Name of Visitor with Affiliation	Date of Visit	Picture
	5.	Mr. Gyanendra Neeraj (AGM, SEBI Ranchi Local Office)	07.02.19	
	6.	Mr. Brij Raj (General Manager of RBI Patna)	29.01.19	DEPARTMENT OF HAMAGEMENT Bits Immune of Technology Mores, East, Mark East, Mark East, Mark East, Mark East, Mark East, Mark OF IND.
	7.	Ms. Smita Chakraborty (Zonal Head Marketing (East), ICICI Securities)	17.01.19	gress
	8.	Dr. Pradip Bala (Associate Professor, IIM Ranchi)	11.01.19	

14. List of Distinguished Alumni

SI. No.	Name, Batch and Affiliation	Short Description
1.	Mr V Vaidyanathan (88-90)	Founder and Executive Chairman, IDFC First Bank
3	Mr Pulkit Trivedi (200-02)	Director, E Commerce, Travel and Financial Services, Facebook India.
4	Mr Pankaj Sinha (200-02)	Managing Director, Coca Cola Srilanka & Maldives.
5	Mr. Kamlesh Kumar Sharma (97- 99)	Vice President and Chief Communication Officer, Hindustan Coca Cola Beverages Pvt Ltd
6	Ms. Mridula Shekhar (99-01) batch)	Chief Marketing Officer, TATA AIA Life Insurance)



Department of Mathematics

SECTION 1 DEPARTMENTAL PROFILE

1. About the Department

Mathematics is one of the major foundation subjects in sciences, which leads to the study qualitative and quantitative relationships in various real world problems.

The Department of Mathematics was founded in 1956, under the name Department of Applied Mathematics. It started with only undergraduate program offering to engineering students. Mathematics play an important role in engineering, which reflects the courses offered in different branches of engineering, management, pharmaceutical sciences, architecture and the University polytechnic.

Currently, Department of Mathematics consists of 10 regular faculty members with expertise in both pure and applied mathematics. In addition to the regular faculty members, the department has 8 other faculty members who have joined through TEQIP. They are all well qualified, highly motivated towards teaching and always attempt to cooperate with students

inside and outside the classroom. Faculties are also involved in research activities and have published their articles in highly impact journals. They are also skilled in writing books on Optimization, Mathematical Modeling, Differential Equations, Operations Research, Vedic Mathematics, Discrete Mathematics, Music and Mathematics, and Algorithmic Complexity.

The Department runs Ph.D. programme, 2-year M.Sc. programme in Mathematics and 5-year Integrated M.Sc. programme in Mathematics and Computing. It has also been actively engaged in organizing conferences, workshops, summer and winter schools, invited lecture series. It also has initiated organizing seminars (two seminars in each month) aiming at distribution of knowledge about research areas among graduate and Ph.D students. The Department is equipped with a modern computer laboratory with latest scientific software such as Matlab, Mathematica, Mathcad, Minitab, SPSS, LINGO, Systat, etc..

SECTION 2 SEMINAR / CONFERENCE

2. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Dr. Ankur Kanaujiya	Advanced Pedagogies: Active learning and Digital Tools	TEQIP-III	IIT Hydrabad	IIT Hydrabad	June 10-14, 2019
2.	Dhriti Sundar Patra	Summer Training Program on Advanced Pedagogy	TEQIP	IIT Hyderabad	IIT Hyderabad	10 th to 14 th June, 2019
3.	Dhriti Sundar Patra	National Seminar on Mathematical and Theoretical Physics, Number Theory and Related Topics	Calcutta Mathematical Society	Calcutta Mathematical Society	Calcutta Mathematical Society	16 th February, 2019

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
4.	Dhriti Sundar Patra	National Conference on Mathematical Analysis and Mathematical Modelling	Calcutta Mathematical Society	Calcutta Mathematical Society	Calcutta Mathematical Society	7 th to 8 th December, 2018
5.	Dhriti Sundar Patra	Workshop on Algebraic Topology, Stochastic Modelling, Analytical and Computational Methods	Calcutta Mathematical Society	Calcutta Mathematical Society	Calcutta Mathematical Society	5 th to 6 th December, 2018
6	Dr. Abhinav Tandon	Training Programme on Dynamical Systems: Theory and Applications	INSTITUTE FUNDED	Department of Applied Mathematics, IIT (ISM), Dhanbad	IIT (ISM), Dhanbad	4 th Sept. 2018 – 8 th Sept., 2018
7.	Randhir Singh	Workshop on Mathematical Modeling and Research Methodology		Dept. of Mathematics, HBTU, Kanpur, India	Seminar Room, Dept. of Mathematics, HBTU, Kanpur	08-08-18 to 12-08-2018
8	Tanmay Choudhury	Summer Training Programme on Advanced Digital Pedagogy.	TEQIP	IIT Hyderabad	IIT Hyderabad	10-14 June, 2019.
9	Dr. D.V.V.P.R.V. B. Suresh	Advanced Pedagogies: Active learning and Digital Tools	TEQIP-III	IIT Hydrabad	IIT Hydrabad	June 10-14, 2019
10	Dr. D.V.V.P.R.V. B. Suresh	Real World Applications of Mathematics and Statistics	Amity University	Amity University, Ranchi	Amity University, Ranchi	02 May 2019 (Invited Speaker)
11	S.D. Jabeen	91st Orientation programme at Ranchi University	BIT	Ranchi University	Ranchi University	04.06.2018 to 01.07.2018
12	S.D. Jabeen	51 st Annual Convention and International Conference of ORSI	BIT	IIT Bombay	IIT Bombay	14-22, December 2018.
13	S.D. Jabeen	ICIAM	DST and BIT	University of Valencia, Spain	University of Valencia, Spain	15-19 July 2019
14	Seshadev Padhi	National Conference on Green technology and Sustainable Agriculture	Amity University	Amity University, Ranchi	Amity University, Ranchi	10 May 2019 (Invited Speaker)



SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
15	Seshadev Padhi	Real World Applications of Mathematics and Statistics	Amity University	Amity University, Ranchi	Amity University, Ranchi	02 May 2019 (Invited Speaker)
16	Seshadev Padhi	Faculty Development Programme on Research Methodology and Documentation	Amity University	Amity University, Ranchi	Amity University, Ranchi	08 August 2018 (Invited Speaker)
17	Dr. Soubhik Chakraborty	2nd International Conference on Computational Intelligence	TEQIP	BIT Mesra/ Springer	Deptt of CSE, BIT Mesra	Dec 10-11, 2018
18	Dr. Soubhik Chakraborty	Faculty Development Programme on Research Methodology and Documentation		Amity University, Jharkhand	Amity University, Jharkhand	Aug 3-9, 2018 (Invited Speaker)

SECTION 3 RESEARCH PUBLICATIONS

3. Publications in Journals: (International/National)

- Seshadev Padhi, John R. Graef and Ankur Kanaujiya. (2019). Positive Solutions to Nonlinear Elliptic Equations Depending on a Parameter with Dirichlet Boundary Conditions, Differential Equations and Dynamical Systems: doi.org/10.1007/s12591-019-00481-z.
- 2. D. S. Patra, solitons and Ricci almost solitons on para-Kenmotsu manifold, Bulletin of the Korean Mathematical Society, published online, doi. org/10.4134/BKMS.b181175.
- D. S. Patra and A. Ghosh, *-Ricci soliton within the frame-work of Sasakian and (k; μ)-contact manifolds, International Journal of Geometric Methods in Modern Physics, 15(7)(2018), pp-1850120.
- 4. Jangirala Srinivas, Dheerendra Mishra, Sourav Mukhopadhyay, Saru Kumari and Vandana Guleria, An Authentication Framework for Roaming Service in

- Global Mobility Networks, Information Technology and Control (SCIE, Impact Factor 0.8000), 48(1), 129-145, 2019.
- 5. Randhir Singh, Himanshu Garg and Vandana Guleria, Haar wavelet collocation method for Lane-Emden equations with Dirichlet, Neumann and Neumann-Robin boundary conditions, Journal of Computation and Applied Mathematics (SCI, Impact Factor 1.632), 340, 150-161, 2019.
- R. Singh: Analytical approach for computation of exact and analytic approximate solutions to the system of Lane-Emden-Fowler types equations arising in astrophysics, The European Physical Journal Plus, 133(8), (2018) 320.
- 7. R. Singh: Optimal homotopy analysis method for the non-isothermal reaction-diffusion model equations in a spherical catalyst, Journal of Mathematical Chemistry, Vol. 56, No.



- 9, (2018) 2579-2590.
- 8. R. Singh, A.M. Wazwaz: Optimal Homotopy Analysis Method for Oxygen Diffusion in a Spherical Cell with Nonlinear Oxygen Uptake Kinetics, MATCH Communications in Mathematical and in Computer Chemistry, 80(2), (2018) 369-382
- R. Singh, A. M. Wazwaz: An Efficient Algorithm Coupled for Solving Lane-Emden Boundary Value Problems in Catalytic Diffusion Reactions: The Homotopy Analysis Method. MATCH Communications in Mathematical and in Computer Chemistry 81(3), (2019), 785--800
- R. Singh, H. Garg, V. Guleria: Haar wavelet collocation method for Lane-Emden equations with Dirichlet, Neumann and Neumann-Robin boundary conditions, Journal of Computational and Applied Mathematics, 346, (2019) 151-160.
- 11. R. Singh, A.M. Wazwaz: Steady-State Concentrations of Carbon Dioxide Absorbed into Phenyl Glycidyl Ether: An Optimal Homotopy Analysis Method, MATCH Communications in Mathematical and in Computer Chemistry, 81(3), (2019), 800-812.
- 12. G. Kaur; R. Singh; M. Singh; J. Kumar; T. Matsoukas, Analytical approach for solving population balances: a homotopy perturbation method, Journal of Physics A: Mathematical and Theoretical, (2019) Accepted
- 13. R. Singh, J. Shahni, H. Garg, A. Garg, Haar wavelet collocation approach for Lane-Emden equations arising in mathematical physics and astrophysics, The European Physical Journal Plus, (2019) Accepted
- M. Singh, H.Y. Ismail, R. Singh, A.B. Albadarin, G. Walker: Finite volume approximation of nonlinear agglomeration population balance

- equation on triangular grid, Journal of Aerosol Science, 147, (2019), 105430.
- 15. Seshadev Padhi, John R. Graef and Smita Pati, Multiple positive solutions for a boundary value problem with nonlinear nonlocal Riemann-Stieltjes integral boundary conditions, Frac. Calc. Appl. Anal. 21(3)(2018), 716-745.
- 16. Jaffar Ali and Seshadev Padhi, Existence of multiple positive radial solutions to elliptic equations in an annulus, Communications in Applied Analysis, 22(4)(2018), 695-710.
- 17. Seshadev Padhi, B.S.R.V. Prasad, Satyam Narayan Srivastava and Shasanka Dev Bhuyan, Monotone iterative method for solutions of fractional differential equations, Memoires on Differential Equations and Mathematical Physics, 77(2019), 59-69.
- 18. Smita Pati, John R.Graef and Seshadev Padhi, Positive periodic solutions to a system of nonlinear differential equations with applications to Lotka-Volterra-type Ecological models with discrete and distrubuted delays, J. Fixed Point Theory and Applications, (2019), 21:80, https://doi.org/10.1007/s11784-019-0715-x.
- 19. Seshadev Padhi, B.S.R.V.Prasad and Divya Mahendru, System of Riemann-Liouville fractional differential equations with nonlocal boundary conditions Existence, uniqueness and multiplicity of solutions, Mathematical Methods in the Applied Sciences, (2019), https://doi.org/10.1002/mma.5812.
- 20. Pranav, P., Chakraborty S. & Dutta, S., (2019) A new cipher system using semi-natural composition in Indian raga, Soft Computing (2019), https://doi.org/10.1007/s00500-019-03983-8
- 21. Rahman A. and Chakraborty, S.,



- (Dec 2018) Statistical analysis of melody lenaths with formula for new computing melodic weight of a note in a a case study, Research Journal of Mathematical and Statistical Sciences, Vol. 6(8), p.1-6
- Rand 22. Gupta, Chakraborty, (May 2019) An efficient method of generation of random а sample using random numbers significantly less than the sample size, Research Journal of Mathematical and Statistical Sciences Vol. 7(2), p.27-29

4. Publications in Proceedings: (International/National)

- S.D. Choudhury, S. Chakraborty and N. Chatterjee, Raga Identification in Rabindra Sangeet Using Motif Discovery, in S.K. Sahana and V. Bhattacharjee (eds.), Advances in Computational Intelligence, Advances in Intelligent Systems and Computing 988, https://doi.org/10.1007/978-981-13-8222-2_20, p.245-253, Proceedings of Second International Conference on Computational Intelligence, BIT Mesra, Dec 10-11, 2018, [Springer]
- S. Tewari and S. Chakraborty, Modeling a Raga-Based Song and Evaluating its Raga Content: Why it Matters in a Clinical Setting, S.K. Sahana and V. Bhattacharjee (eds.), Advances in Computational Intelligence, Advances in Intelligent Systems and Computing 988, https://doi.org/10.1007/978-

- 981-13-8222-2_21, p. 255-264, Proceedings of Second International Conference on Computational Intelligence, BIT Mesra, Dec 10-11, 2018, [Springer]
- 3. A.B. Bal and S. Chakraborty, An Experimental Study of a Modified Version of Quicksort, in S.K. Sahana and V. Bhattacharjee (eds.), Advances in Computational Intelligence, Advances in Intelligent Systems and Computing 988, https://doi. org/10.1007/978-981-13-8222-2 27, p. 345-353, Proceedings of Second International Conference on Computational Intelligence, BIT Mesra, Dec 10-11, 2018, [Springer]
- 4. S. Priyanka, Sandip Dutta and S. Chakraborty, Human Tracking System Based on GPS and IOT (Internet of Things), in A. P. Pandian et al. (Eds.): ICCBI 2018, LNDECT 31, pp. 514–521, 2020. https://doi.org/10.1007/978-3-030-24643-3_61[Springer]

5. Book:

Co-Authored

- N. Saha and S. Chakraborty, Probabilistic Analysis of a Random Determinant, GRIN Verlag, 2019, ISBN 9783668965096
- A. Singh and S. Chakraborty, The Influence of Hindustani Classical Music on Bollywood Songs: A Statistical Outlook, GRIN Verlag, 2019, ISBN 9783668984356

SECTION 4

ACTIVITIES/ FACULTY MEMBERS / BOS

6. List of Faculties

Sl. No. Name		Designation	TEQIP Sponsored	
1	Dr. S. K. Jain	Professor	No	
2	Dr. S. Chakraborty	Professor	No	
3	Dr. Seshadev padhi	Professor	No	
4	Dr. A. P. Ghorai	Associate Professor	No	
5	Dr. Abhinav Tandon	Assistant Professor	No	

SI. No.	Name	Designation	TEQIP Sponsored
6	Dr. P. Kaur	Assistant Professor	No
7	Dr. Randhir Singh	Assistant Professor	No
8	Dr. Vandana	Assistant Professor	No
9	Dr. S.D. Jabeen	Assistant Professor	No
10	Dr. Ankur Kanaujiya	Assistant Professor	Yes
11	Dr. Dhriti Sundar Patra	Assistant Professor	Yes
12	Tanmay Choudhury	Assistant Professor	Yes
13	Dr. D.V.V.P.R.V.B. Suresh	Assistant Professor	Yes
14	Pawan Kumar Shaw	Assistant Professor	Yes

7. Board of Studies

SI. No.	Name of the Member	Designation	Role
1	Prof. S. Chakraborty	Ex-Officio, Prof. and Head	Chairman
2	Prof. S.K. Jain	Professor	Member
3	Prof. S. Padhi	Professor	Member
4	Dr (Mrs.) A.P. Ghorai	Associate Professor	Member
5	Dr. A. Tandon	Assistant Professor	Member
6	Dr. Vandana	Assistant Professor	Member
7	Prof. S. Konar	Professor, Dept. of Physics	Member
8	Dr. Abhijit Mustafi	Associate Professor, Dept. of C.Sc. Engg.	Member
9	Dr. D.K. Gupta	Prof. Dept. of Math., IIT Kharagpur	External Member
10	Dr. D. Kundu	Prof. Dept. of Stat., IIT Kanpur	External Member
11	Dr. K.C. Prasad	Retd. Prof. Dept. of Math. Ranchi University, Ranchi	External Member
12	Dr. S. Chakraborty	Prof. Dept. of math., NIT, Rourkela	External Member
13	Dr. S.B. Singh	Associate prof. PSM Dept. RIMS, Ranchi	External Member (Alumni)

SECTION 5 OTHER INFORMATION

1. Publication by students

- Seshadev Padhi, B.S.R.V. Prasad, Satyam Narayan Srivastava and Shasanka Dev Bhuyan, Monotone iterative method for solutions of fractional differential equations, Memoires on Differential Equations and Mathematical Physics, 77(2019), 59-69.
- Seshadev Padhi, B.S.R.V. Prasad and **Divya Mahendru**, System of Riemann-Liouville fractional differential equations with nonlocal boundary conditions - Existence, uniqueness and multiplicity of solutions, Mathematical Methods in the Applied Sciences, (2019), https:// doi.org/10.1002/mma.5812

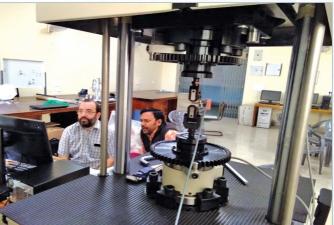


Department of Mechanical Engineering

SECTION 1

DEPARTMENTAL PROFILE





1. About the Department/Campus

Since its inception in 1955, the Department of Mechanical Engineering has a wide reputation for the quality of teaching and research it offers. It has been awarded top grades for both teaching and research activities from independent and government bodies. The excellent laboratory facilities, modern computer clusters, systematically designed curriculum, and dedicated faculty members make this Department a dynamic place to study.

Programmes Offered Under Graduate Programme (4 years):

B. Tech. in Mechanical Engineering

Post Graduate Programmes: (2 Years)

- M.Tech. Heat Power Engineering
- M.Tech. Design of Mechanical Equipments

- M.Tech. Computer Aided Analysis and Design
- M.Tech. Energy Technology

PhD. Programme:

Laboratory Facilities:

- Drawing Office
- Mechanics of Solids Lab
- Fluid Mechanics and Hydraulic Machines Lab
- Renewable Energy Lab
- Central CAD Lab
- Theory of Machines Lab
- Autonomous Systems Lab
- Computational Lab (For Research)
- Heat Transfer and RAC Lab
- I.C Engines Lab

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

c) Ongoing Projects

SI. No.	Project Title	PI / Co PI / Collaborator, if any				Duration of the Project
1.	Unnat Bharat	Dr. Rajeev	MHRD Govt. of India,	2 June	3.50 Lacs	3 years
	Abhiyan	Kumar	of Jharkhand state for	2017		
	project		technical interventions in			
			Rural areas			

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction		Duration of the Project
2.	Design and Development of Solar Collector and Concentrator for power generation through Stirling engine	Dr. Rajeev Kumar	Jharkhand council of Science and Technology	22.04. 2017	2.0 Lakhs	02 year
	Design and Development of a 6 DOF Gough-Stewart Platform for Virtual Simulators with Pneumatic Actuators		SMC Corporation (India) Pvt. Ltd., Noida	2018	2.35 Lakhs	1

SECTION 3 SEMINAR / CONFERENCE

3.1 Seminar / Conferences / Short – Term Courses Conducted by the Department/Campus

SI. No.	Title of Seminar/ Conference/ Short Term Courses/ Workshop	Coordinator	Funding / Sponsoring Agency	Date of Event
1.	One week workshop on Emerging Techniques in Mechanical Engg. And its Applications, Department of Mechanical Engineering	,	TEQIP III	05/03/2019- 09/03/2019
2.	National Conference on Recent Advancement in Mechanical Engineering, Dept. Of Mechanical Engineering		TEQIP III	18/02/2019- 19/02/2019

3.2 Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Dr. Richa Pandey	One week workshop on Emerging Techniques in Mechanical Engg. And its Applications, Department of Mechanical Engineering		Department of Mechanical Engineering Bit Mesra		05/03/2019- 09/03/2019
2.	Dr. Om Prakash	One week workshop on Emerging Techniques in Mechanical Engg. And its Applications, Department of Mechanical Engineering	-	Department of Mechanical Engineering Bit Mesra		05/03/2019- 09/03/2019



SI.	Name of the	Title of the	Funding			
No.	Faculty	Conference/ Seminar	Agency	Organizers	Venue	Date
3.	Dr. Sujeet Kumar Mishra	One week workshop on Emerging Techniques in Mechanical Engg. And its Applications, Department of Mechanical Engineering	_	Department of Mechanical Engineering Bit Mesra	Bit Mesra	05/03/2019- 09/03/2019
4.	Dr. Chandrahas Patel	One week workshop on Emerging Techniques in Mechanical Engg. And its Applications, Department of Mechanical Engineering	TEQIP III	Department of Mechanical Engineering Bit Mesra	Bit Mesra	05/03/2019- 09/03/2019
5.	Dr. Dipti Prasad Mishra	Summer Training Program on Active Learning Under TEQIP–III Initiative at IIT Gandhinagar	_	IIT Gandhinagar		June 18-22, 2018
6.	Dr. Sujeet Kumar Mishra	Summer Training Program on Active Learning Under TEQIP–III Initiative at IIT Gandhinagar	TEQIP – III		IIT Gandhinagar	June 18-22, 2018
7.	Dr Richa Pandey	Kumbh Conclave India Think Council at Allahabad		Kumbh Conclave	Allahabad	27-29 July 2018
8.	Dr. Anuj Bajpai	Faculty Development Programme at IIT-Madras	TEQIP – III	IIT-Madras	IIT-Madras	31/01/2018- 04/02/2018
9.	Dr. Ratnesh Kumar	Faculty Development Programmeat IIT-Madras	TEQIP - III	IIT-Madras	IIT-Madras	31/01/2018- 04/02/2018
10.	Mr. Inayath N.	Faculty Development Programme at IIT-Madras	TEQIP – III	IIT-Madras	IIT-Madras	31/01/2018- 04/02/2018
11.	Dr. Faisal Rahmani	Faculty Development Programme at IIT-Madras	TEQIP – III	IIT-Madras	IIT-Madras	31/01/2018- 04/02/2018
12.	Mr. Shalin	Faculty Development Programme at IIT-Madras	TEQIP – III	IIT-Madras	IIT-Madras	31/01/2018- 04/02/2018
13.	Dr. Mukesh Sharma	Faculty Development Programme at IIT-Madras	TEQIP – III	IIT-Madras	IIT-Madras	31/01/2018- 04/02/2018
14.	Mr. Shazee Rahmani	Faculty Development Programme at IIT- Kharagpur	TEQIP – III	IIT- Kharagpur	IIT- Kharagpur	19/02/2018- 23/02/2018
15.	Dr. Richa Pandey	National Seminar EEHVACR 2017-2018 atNepal House, Ranchi	Organizers		Nepal House, Ranchi	10/02/2018- 11/02/2018
16.	Dr. Richa Pandey		Organizers		Ranchi	15/02/2018- 16/02/2018
17.	Dr Richapandey	18 th IEEE International conference on Advanced Learning Technology at IIT Mumbai	Organizers	IIT Mumbai	IIT Mumbai	8-12 July 2018

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
18.	Dr Richapandey	National Conference On Emerging Trends in Mechanical Engineering at NIT Warangal		NIT Warangal	Warangal	09 – 10 JANUARY 2019,
19.	Dr. Rajeev Kumar	Renewable Energy and Environmental Challenges) NCREEC 2018, NIT Jamshedpur, Jharkhand		Jamshedpur,	NIT Jamshedpur, Jharkhand	26-27 Feb 2018
20.	Dr. Om Prakash	One week workshop on Industrial Process Simulation, Department of Chemical Engg., BIT Mesra, Ranchi		Department of Chemical Engg., BIT Mesra, Ranchi	Department of Chemical Engg., BIT Mesra, Ranchi	16 th to 20 th May, 2018

SECTION 4 RESEARCH PUBLICATIONS

4.1 Publications in Journals : (International/National)

- 1. Jindal, P., Agarwal, S., Roy, A.K. and Sharma, R.P. (2018). Enhancement of Film Cooling Effectiveness Using Rectangular Winglet Pair, ASME Journal of Thermal Science and Engineering Applications, 10 (4).
- 2. Zindani, D., and Kumar, K. (2019). Graphene-Based polymeric Nanocomposites: An Introspection into Functionalization, Processing Techniques and Biomedical Applications, Biointerface Research in Applied Chemistry, 9 (3), 3926 3933.
- Kumar, R., Kumar, K., Bhowmik, S., & Sharkhel, G. (2019). Tailoring the performance of bamboo filler reinforced epoxy composite: Insights into fracture properties and fracture mechanism, Journal of Polymer Research, 26 (2), 1-15.
- 4. Roy, A.K., & Kumar, K. (2019). Sustainability in Bio-Metallic Orthopedic Implants, Biointerface Research in Applied Chemistry, 9 (1), 3825–3829.
- Roy, A.K., & Kumar, K. (2018). Experimental Studies on Hydrodynamic Characteristics using an Oblique Plunging Liquid Jet, Physics of Fluids, 30, 122107.

- Kumar, R., Kumar, K., & Bhowmik, S. (2018). Mechanical characterization and quantification of tensile, fracture and viscoelastic characteristics of wood filler reinforced epoxy composite, Wood Science and Technology, 52 (3), 677-699.
- 7. Faisal, N., & Kumar, K. (2018). Optimization of Machine Process Parameters in EDM for EN 31 Using Evolutionary Optimization Techniques, Technologies, 6, 54.
- 8. Kumar, R., Kumar, K., & Bhowmik, S. (2018). Assessment and Response ofFunctionalized Cocos Nucifera Reinforced Toughened Epoxy Composite Towards Fracture and Viscoelastic Properties, Journal of Polymers and the Environment, 26 (6), 2522–2535.
- Dey, M., Jindal, P., Roy, A.K., & Kumar, K. (2018).Maximization of Cooling Effectiveness of Turbine Blade Surfaces Using Different Arrangement of Cooling Holes and Various Blowing Ratios, Journal of Engineering Science and Technology, 13 (4), 909-924.
- Zindani, D., and Kumar, K. (2018).
 Printing of Biomaterials: A Review, Divya Zindani and Kaushik Kumar, Biointerface Research in Applied Chemistry, 8 (1), 3023-3033.



- 11. Faisal, N., & Kumar, K. (2018). Mechanical and TribologicalBehaviour of Nano Scaled Silicon Carbide Reinforced Aluminium Composites, Journal of Experimental Nanoscience, 13 (Sup 1), S1 S13.
- 12. Kumari, N., &Kumar, K. (2018). Mechanical Behavior of Graphene and Carbon fibre Reinforced Epoxy Based Hybrid Nano Composites for Orthotic Calipers, Journal of Experimental Nanoscience, 13(Sup 1), S14 S23.
- 13. Zindani, D., and Kumar, K. (Accepted). An Insight into Additive Manufacturing of Fiber Reinforced Polymer Composite, International Journal of Lightweight Materials and Manufacture.
- 14. Roy, S., & Kumar, K. (Accepted). Strategic Planning of Optimizing Productivity: a '5S' under Lean Quality Approach, International Journal of Productivity and Quality Management.
- Minj, A., Roy, A. K., & Kumar, K. (Accepted). Analysis of Film Cooling Effectiveness Using Computational Approach, AIP Conference Proceedings.
- 16. Chandra, S., Roy, A. K., & Kumar, K. (Accepted).Forced Convection Heat Transfer in a Twin Cylinder System under Static Condition using Computational Approach, AIP Conference Proceedings.
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- 22. Zindani, D. and Kumar, K., Integrated Manufacturing System for Complex Geometries: Towards Zero Waste in Additive Manufacturing. In Uthayakumar, M., Aravind Raj, S., Ko, T.J., Thirumalai K.S., Davim, J.P. eds. Green Engineering Techniques for Modern Manufacturing. IGI Global USA pp. 14–23. DOI: 10.4018/978-1-5225-5445-5.ch002.
- 23. Zindani, D., Faisal, N. and Kumar, K., Optimization of Process Parameters for Electro-Chemical Machining of EN19: Using Particle Swamp Optimization. In Uthayakumar, M., Aravind Raj, S., Ko, T.J., Thirumalai K.S., Davim, J.P. eds. Green Engineering Techniques for Modern Manufacturing. IGI Global USA pp. 127–142. DOI: 10.4018/978-1-5225-5445-5.ch008.
- 24. Farrukh, Md., Faisal, N. and Kumar, K., Earthquake Resistant Design: Issues and Challenges. In Belgasmia, M. ed. Optimization of Design for Better Structural Capacity. IGI Global USA pp. 201–221. DOI: 10.4018/978-1-5225-7059-2.ch008.
- 25. Faisal, N. and Kumar, K., Recycling& Reuse of Building Materials from

- Construction and Demolition: An Environmental Evaluation for Sustainable Growth and Development. In eds. Koç, G. and Christiansen, B. Reusable and Sustainable Building Materials in Modern Architecture. IGI Global USA pp. 60–79. DOI: 10.4018/978-1-5225-6995-4.ch003.
- 26. Dhiman, S.K., and Samrah, T., Design and Analysis of Solar Cabinet Dryer for Drying of Potatoes, LectureNote of Mechanical Engineering Advances in Engineering Design, Springer Nature Singapore Pte Ltd, (2019). (DOI:10.1007/978-981-13-6469-3 10)
- 27. Ahmad, A., Prakash, O., andKumar, and Pandey, A., A Review of Solar Air Heater. Low Carbon Energy Supply Technologies and System, CRC Press. Accepted. To be published, 2019.
- 28. Kaviti, A.K., Kumar, A., and Prakash, O., Effect of Design Parameters on Productivity of Various Passive Solar Stills that will be published by Solar Desalination Technology: Concept, Design, Testing, Modeling, Economics, and Environment that will be published by Springer Singapore, 2019.
- 29. Pandey, P., Prakash, O., andKumar, A., Desalination and Solar Still: Boon to Earth that will be published by Solar Desalination Technology: Concept, Design, Testing, Modeling, Economics, and Environment that will be published by Springer Singapore, 2019.
- 30. Roy, A.D., Prakash, O., Singh, S., Kumar, A., Application of Software in Predicting Thermal Behaviours of Solar Still that

- will be published by Solar Desalination Technology: Concept, Design, Testing, Modeling, Economics, and Environment that will be published by Springer Singapore, 2019.
- 31. Kumar, D., Pandey, A., Prakash, O., Kumar, A., Devroy, A., Simulation, Modeling and Experimental Studies of Solar Distillation Systems that will be published by Solar Desalination Technology: Concept, Design, Testing, Modeling, Economics, and Environment that will be published by Springer Singapore, 2019.
- 32. Kant, R., Prakash, O., Tripathi, R., and Kumar, A., Exergy Analysis of Active and Passive Solar Still that will be published by Solar Desalination Technology: Concept, Design, Testing, Modeling, Economics, and Environment that will be published by Springer Singapore, 2019.
- 33. Sharma, M., Prakash, O., Sharma, A., and Kumar, A., (2018). Fundamentals and Performance Evaluation Parameters Solar Dryer, a book entitled "Recent Trends in Low Carbon Energy Supply Technologies & Management" published by Springer Press, page no 35-50,
- 34. Prakash, O., Kumar, A., Kaviti, A. K., Roy, A. D., and Pandey, A., (2018). Design and selection criteria of biogas digester, a book entitled "Recent Trends in Low Carbon Energy Supply Technologies & Management" published by Springer Press.

SECTION 5

AWARD/ PATENT/ COLLABORATIONS

5.1. Award / Recognition Bestowed on Faculties (State / National / International)

S	THO EXCILITY	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
1	. Dr. Kaushik Kumar	Rula International Awards, Malaysia		International	2019

	Sta			State /	
SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	National / International Level	Year / Duration
2.	Dr. Kaushik Kumar	Best Paper Award at ICMMSE 2019 for Paper titled "Forced Convection Heat Transfer in a Twin Cylinder System under Static Condition using Computational Approach"	ICMMSE 2019	International	2019
3.	Dr. Kaushik Kumar	Best Paper Award at ICIPDIMS 2019 for Paper titled "Generation of slip line fields incorporating BUE and shear zone to model machining using MATLAB"	ICIPDIMS 2019	International	2019
4.	Dr. Kaushik Kumar	Convener 9 th International Conference on Materials Processing and Characterization 2019 (ICMPC'19)	Gokaraju Rangaraju Institute of Engineering & Technology, Hyderabad - 500090 Telangana, INDIA	International	8 th – 15 th March – 2019
5.	Dr. Kaushik Kumar	Keynote Lecture on Rapid Prototyping Coupled Non-Traditional Machining Technique–ANewFormofHybrid Manufacturing Process at 1st International Conference on Manufacturing, Material Science and Engineering 2019 (ICMMSE2019),	CMR Institute of Technology, Hyderabad, INDIA	International	August 16– 17, 2019
6.	Dr. Kaushik Kumar	Keynote Lecture on Virtual Manufacturing at 1 st International Conference on Innovative Product Design and Intelligent Manufacturing System (ICIPDIMS-2019),	of Technology,	International	May 17–18, 2019
7.	Dr. Kaushik Kumar	Keynote Lecture on Rapid Prototyping Coupled Non Traditional Machining Technique at National Conference on Advancements in Materials, Design and Manufacturing Methods (AMDMM-2019)	National Institute of Technology, Rourkela, INDIA	National	March 29 -30, 2019
8.	Dr. Kaushik Kumar	Keynote Lecture on Functionally Graded Materials at 9 th International Conference on Materials Processing and Characterization-2019 (ICMPC'19), GRIET, Hyderabad, INDIA	GRIET, Hyderabad, INDIA	International	March 8 - 10 2019

SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
9.	Dr. Kaushik Kumar	Keynote Lecture on Optimization Techniques at National Conference on "Application Of Optimization Techniques to Engineering and Management Sciences"	Campus, Durgapur,	National	November 15 – 16, 2018
10.	Dr. Kaushik Kumar	Keynote Lecture on Additive Manufacturing at National Conference on "Recent Developments in Mechanical Engineering" (Theme: Coupled-Field Problems in Engineering),	of Technology,	National	July 27 -29, 2018
11.	Dr. Kaushik Kumar	Resource person Faculty Development Programme on Research Project Proposal and Research Paper writing,	Amity University Jharkhand, Ranchi, India	National	11-13 July 2019,
12.	Dr. Kaushik Kumar	Resource person Faculty Development Programme on Advanced Manufacturing Technologies	CMR Institute of Technology, Hyderabad, Telengana, India.	National	10-11 May, 2019,
13.	Dr. Kaushik Kumar	Resource person Eight Days Hands-on-Workshop on Application of Robotics & Automation Technology for Industrial Development,	RTC Institute of Technology, Ranchi, Jharkhand, India	National	April, 22– 29, 2019
14	Dr. Kaushik Kumar	Resource person AICTE Sponsored QIP 2018 organised by Department of Production Engineering	Veer SurendraSai University of Technology, Odisha	National	25 th June- 7 th July, 2018,
15	Dr. Kaushik Kumar	Session chair 1st International Conference on Manufacturing, Material Science and Engineering 2019 (ICMMSE2019)	CMR Institute of Technology, Hyderabad, INDIA	International	August 16- 17, 2019
16	Dr. Kaushik Kumar	Session chair 1st International Conference on Innovative Product Design and Intelligent Manufacturing System (ICIPDIMS-2019)	National Institute of Technology, Rourkela, INDIA	International	17 th – 18 th May – 2019

SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
17	Dr. Kaushik Kumar	Session chair 9 th International Conference on Materials ProcessingandCharacterization - 2019 (ICMPC'19),	Rangaraju Institute	International	8 th - 10 th March - 2019
Kumar C D E C		Session chair National Conference on "Recent Developments in Mechanical Engineering" (Theme: Coupled-Field Problems in Engineering National Institute of Technology, Rourkela, INDIA.	of Technology,	National), July 27– 29, 2018,
19.	Dr. Om Prakash	Book Reviewer of Engineering Drawing" by Prof. Basant Agarwal& Prof. C.M. Agarwal published by McGraw Hill Education India in 2018.	Education India in	National	2018
20.	Dr. Om Prakash	Session chair in the 4 th International Conference on Nano electronics Circuits & Communication Systems (NCCS-2018)		International	3 rd - 4 th November 2018
21.	Dr. Om Prakash	Organising secretary of National Conference on Recent Advancement in Mechanical Engineering	Deptt. of Mechanical Engineering at Birla Institute of Technology Mesra, Ranchi	National	18-19 February 2019.
22.	Dr. Richa Pandey	Expert Lecture	AMITY university Ranchi	National	2019
23.	Dr. Richa Pandey	Expert Lecture	Abdul Kalam University, Lucknow	National	2019
24.	Dr. Richa Pandey	Key Note Speaker at National workshop in Emerging Techniques in mechanical Engineering	Deptt. of Mechanical Engineering at Birla Institute of Technology Mesra, Ranchi	National	2019

5.2. MoUs / Collaborations

SI. No.	Name of Organisation / University	Purpose / Area	Year / Duration
1.	Unnat Bharat Abbhiyan	Cluster and formulation of project/ Gram Panchayat Development Plan	2018/2 year

SECTION 6

ACTIVITIES/ FACULTY MEMBERS / DOS/DAS

6.1 Departmental Students' Activities

SI. No.	Name of the Activity	Students' Co-Ordinator (If any)	Faculty Co- ordinator (if any)	Date / Duration
1.	Firebolt Racing	Kumar Apurva	Dr. Paritosh Mahata	2018-19

6.2 List of Faculties

SI. No.	Name (Please mention Dr. / Prof./ Mr./ Mrs. / Ms., as applicable)	Designation	TEQIP Sponsored (Yes / No)
1.	Dr. R.P. Sharma	Professor & HOD	No
2.	Dr. D.P. Mishra	Professor	No
3.	Dr. A.K. Roy	Associate Professor	No
4.	Dr. Rajeev Kumar	Associate Professor	No
5.	Dr. Kaushik Kumar	Associate Professor	No
6.	Dr. Richa Pandey	Assistant Professor	No
7.	Dr. S.K.Dhiman	Assistant Professor	No
8.	Dr. Praveen Mishra	Assistant Professor	No
9.	Dr. O.P. Pandey	Assistant Professor	No
10.	Dr. Sujeet Kr. Mishra	Assistant Professor	No
11.	Dr. Abhijit Nag	Assistant Professor	No
12.	Dr. D. Mahto	Assistant Professor	No
13.	Dr. Sankha Bhaduri	Assistant Professor	No
14.	Dr. Om Prakash	Assistant Professor	No
15.	Dr. Nirmal Kumar	Assistant Professor	No
16.	Dr. ArunDayalUdai	Assistant Professor	No
17.	Dr. ParitoshMahata	Assistant Professor	No
18.	Dr. L.S. Brar	Assistant Professor	No
19.	Dr. Ratnesh kumar	Assistant Professor	Yes
20.	Dr. Faisal Rahmani	Assistant Professor	Yes
21.	Dr. Chandrahas Patel	Assistant Professor	Yes
22.	Dr. AnujBajpai	Assistant Professor	Yes
23.	Dr. Mukesh Sharma	Assistant Professor	Yes
24.	Prof. Shalin	Assistant Professor	Yes
25.	Prof. Inayath. N	Assistant Professor	Yes
26.	Prof. LanjekarRajanDeorao	Assistant Professor	Yes
27.	Prof. ShazeeRahmani	Assistant Professor	Yes
28.	Prof. P. Pranith Kr. Reddy	Assistant Professor	Yes

6.3 List of Adjunct Faculties (Between 1st July 2018 to 30th June 2019)

SI. No.	Name (Please mention Dr. / Prof./ Mr./ Mrs. / Ms., as applicable)	Designation	Affiliation
1.	Dr.Randeep Agarwal	Visiting Expert	Department of Mechanical Engineering, University of Queensland, Australia
2.	Mr.Pawan Kumar Bhageria	Adjunct Fellow	President, Tata Motors Group Strategic Business Unit at Tata Technologies Ltd

6.4 Board of Studies

or board or boards			
SI. No.	Name of the Member	Designation (Kindly mention Ex-Officio, where applicable)	Role (Chairman/ Internal or External Member)
1.	Dr.R.P.Sharma	Professor & HOD (Ex-officio)	Chairman
2.	Dr. D.P.Mishra	Professor	Internal Member
3.	Dr. A.K.Roy	Associate Professor	Internal Member
4.	Dr. Kaushik Kumar	Associate Professor	Internal Member
5.	Dr. Rajeev Kumar	Associate Professor	Internal Member
6.	Dr. Praveen Mishra	Assistant Professor	Internal Member
7.	Dr. DhaneshwarMahto	Assistant Professor	Internal Member
8.	Dr. Anand Kumar Sinha	Professor, Civil Engg.	External Member
9.	Dr. Sanjay Kumar Jha	Associate Professor, Prod. Engg	External Member
Two	external experts (Any	two from attached list as per Their availability).	
1.	Dr. Sibnath Maity	Chief Scientist Head, Technology Innovation Centre Central Mechanical Engineering Research Institute (CMERI), M.G. Road, Durgapur West Bengal Mobile: 09434710952 Email: drsnmaity@yahoo.com	
2.	Dr. S.K. Dash	Professor Department of Mechanical Engineering IIT Kharagpur-721302, India Mobile: +91 9933017367	External Member
3.	Mr. Deepak Mishra	Head – Supplier Quality Tata Motors Limited, Jamshedpur–831010, India	External Member
4.	Dr. Kailash Agarwal	Associate Director, Outstanding Scientist Nuclear Recycling Group BARC, Trombay, Mumbai – 400 085 Ph: 022-25595529/1435 Email: kagar@barc.gov.in	External Member

SI. No.	Name of the Member	Designation (Kindly mention Ex-Officio, where applicable)	Role (Chairman/ Internal or External Member)
5.	Sri Alok Mukherjee	Scientist G & Head Robotics DRDO R & DE, Pune-411 015, Alandi Road, Dighi Phone: 020-27044800 Email: aamukherjee@rde.drdo.in	External Member
6.	Prof. Subir Kumar Saha	Head, Mechanical Engineering IIT Delhi, HauzKhas, New Delhi- 110 016 Phone: 011-26591135 saha@mech.iitd.ac.in	External Member
7.	Mr. Rakesh Kumar Singh	GM Bar Mill, JSPL, Patratu, Ranchi Mobile: 9771437567 Email: rakeshsingh@pat.jspl.com	External Member
8.	Mr.Prabhas Kumar	DGM (HOD, Energy Conservation) RDCIS, SAIL, Ranchi Mobile: 8986880120 Email: kumar_prabhas@yahoo.com pk@sail-rdcis.com	External Member
9.	Dr. Bharat Bhusan	GM (Process and Technology) Tata Consulting Engineers Ltd., Jamshedpur Mobile: 9910305458 Email: bharatb@tce.co.in	External Member
10.	Dr. Shine S.R.	Department of Aerospace Engg. Indian Institute of Space Science & Technology (IIST), Trivandrum, ISRO, Kerala Email: shine@iist.ac.in, Phone: 0471-2568427	External Member
11.	Mr. Richie Mittal	National Secretary Indian Society of Heating Refrigeration and Air-Conditioning Engineers K-43(Basement), Kailash Colony New Delhi – 110 048, India Phone:011–41635655/29234925 Mobile: +91 8744000065	External Member
12.	Dr.Shailendra Kumar	Professor, Department of Mechanical Engineering N.I.T., Jamshedpur, Jharkhand – 831014 Shalkumar.me@nitjsr.ac.in	External Member
13.	Sri Amit Kumar Pandey	Sr. D.G.M. Usha Martin, Tatisilawai, Ranchi Mobile: 9334389784 Email:amitkrpandey72@gmail.com	External Member

SECTION 7 OTHER INFORMATION

7.1 Student Entrepreneurship activities/Start-ups if any

Sr. No	Name of Student	Source of Funding	Title of Start up	Short Description
1.	Law Lasyap	Govt. of Jharkhand	livelihood mission	To enhance and diversify household income in select farm and non-farm sectors for targeted beneficiaries in project areas.
2.	Anurag Gupta	Self	Startup	
3.	Neeraj Kumar	Self	Startup	

7.2 Publication by students, if any (please follow the example as given in section 4, Please repeat here and highlight the name of student)

Journals

- Ahmad, Asim and Om Prakash (2019). Thermal analysis of north wall insulated greenhouse dryer at different bed conditions operating under natural convection mode. Environ Prog Sustainable Energy. 2019. e13257. ISSN: 1944-7450
- Kumari, N., & Kumar, K. (2018). Design and Evaluation of Adjustable Calipers Using CAD Tools. Materials Today: Proceedings. 5 (2), 13658.
- 3. Sanghamitra, D. & Kumar, K.(2018). Static Structural Analysis of a Powered Ankle Foot Prosthesis Mechanism. Materials Today: Proceedings, 5(2), 11616.
- 4. Dash, N., Roy, A.K. & Kumar, K. (2018). Design and Optimization of Mixed Flow Pump Impeller Blades with Hydrostatic Loading and Varying Semi-cone Angle. Materials Today: Proceedings, 5 (2), 11608.
- 5. Faisal, N. & Kumar, K. (2018). Optimization of Machine Process Parameters in EDM for EN 31 Using Evolutionary Optimization Techniques. Technologies.6 (54), 1.
- Faisal, N. & Kumar, K. (2018). Utilization of Particle Swarm Optimization Technique for Process Parameter Optimization in Electrical Discharge Machining. International Journal of Advanced Materials Manufacturing & Characterization.8 (1), 58.

- 7. Dey, M., Jindal, P., Roy, A.K. & Kumar, K. (2018). Maximization of Cooling Effectiveness of Turbine Blade Surfaces Using Different Arrangement of Cooling Holes and Various Blowing Ratios. Journal of Engineering Science and Technology. 13 (4), 909.
- 8. Faisal, N. & Kumar, K. (2018). Mechanical and Tribological Behavior of Nano Scaled Silicon Carbide Reinforced Aluminium Composites. Journal of Experimental Nanoscience. 13 (Sup 1), S1.
- 9. Kumari, N. & Kumar, K. (2018). Mechanical Behavior of Graphene and Carbon fibre Reinforced Epoxy Based Hybrid Nano Composites for Orthotic Calipers. Journal of Experimental Nanoscience. 13 (Sup 1), S14.
- 10. Dash, N., Roy, A.K. & Kumar, K. (2018). Design and Optimization of Mixed Flow Pump Impeller Blades by varying Semicone Angle. IOP Conf. Series: Materials Science and Engineering. 330, 12.
- 11. Kumari, N., Pradhan, S.K & Kumar, K. (2018). Suitability of Composite Material for Orthotic Calipers—Tribological Study.Materials Today: Proceedings. 5, 5608.
- 12. Srivastava, S., Roy, A.K. & Kumar, K. (2018). Design validation & stress analysis of mixed flow pump impeller blades under applied uniformly distributed and uniformly varying loads. Materials Today: Proceedings, 5, 4446.

- Dash, N., Roy, A.K. & Kumar, K. (2018).
 Design and Optimization of Mixed Flow Pump Impeller Blades—A Review. Materials Today: Proceedings. 5, 4460.
- Sanghamitra, D., & Kumar, K.(2018).
 Biomedical Design of Powered Ankle-Foot Prosthesis – A Review.Materials Today: Proceedings. 5, 3273.
- 15. Sanghamitra, D., & Kumar, K. (2018). Design and Analysis of Powered Ankle Foot Prosthesis Mechanism Using Hydraulic Systems. Applied Mechanics and Materials, Trans Tech Publications. 877, 384.
- Kumari, N. &Kumar, K. (2018). Application of Composites in Orthotic Calipers and its Experimental Validations. Applied Mechanics and Materials, Trans Tech Publications. 877, 44.
- 17. Bhuyan, D. & Kumar, K. (2018). Static Structural Analysis of Piston Valve of Twin Tube Dampers. IEEE Explore Digital Library. 9.
- Kumari, N. & Kumar, K. (2018).
 Mechanisms and Materials of Orthotic Calipers for Polio Infected Patients – A Review. IEEE Explore Digital Library. 12.

Proceedings(National/International)

- S., Kumar, and Pandey, R., Integration of Reverse Engineering and Additive Manufacturing for patient specific implants, National Conference on Emerging Trends in Mechanical Engineering, NIT Warangal, 09–10 January, 2019.
- S., Kumar, and Pandey, R, Development of Patient Specific Total Hip-Joint Replacement Using Reverse Engineering And Additive Manufacturing Technology, ISMEJOURNAL, NIT Jalandhar, 22nd-24th Dec., 2018.
- Pandey, R., and Mohanty, S., Design and Analysis of small Horizontal Axis wind turbine blade for low wind speed characteristics", NCREEC, NIT Jmashedpur, 26-27 Feb, 2018.
- 4. Gupta, U., Anas, A., Dubey, P., and

- Pandey, R., Development and Real time Simulation of All Wheel Steer On a Rear wheel Drive car", NCREEC, NIT Jmashedpur, 26-27 Feb, 2018.
- Pandey, R., Kumar, V., Das, N., Kant, M., and kumar, S., Design and Fabrication of Solar Powered Electric Bicycle", NCREEC, NIT Jamashedpur 26-27 Feb 2018
- 7. Pandey, R., Paul, D. S., Experimental Study of Liquid Fuel Passive Direct Methanol Fuel Cell, National Seminar EEHVACR2017-2018, Nepal House Ranchi, 10 -11 Feb, 2018.
- 8. Ahmad, A., and Prakash, O., Energy and Embodied Analysis of Greenhouse Dryer with Insulated North Wall at Different Floor Condition operating under Passive Mode. Solris 2019. An International Conference on Renewable Energy & Sustainable Climate, Jamia Milia Islamia, New Delhi February 7-9, 2019.
- Rajak, S.K., Ahmad, A., and Prakash, O., State of Art Review of Parabolic Trough Collector. National Conference on Recent Advancement in Mechanical Engineering (NCRAME 2019) on at Department of Mechanical Engineering, Birla Institute of Technology, Mesra, India, 18-19 February, 2019. e-ISBN: 978-93-8830-572-3.
- 10. Ahmad, A., and Prakash, O., Testing Method for Thermal Performance Based Rating of Green House Solar Dryer. National Conference on Recent Advancement in Mechanical Engineering (NCRAME 2019) on at Department of Mechanical Engineering, Birla Institute of Technology, Mesra, India, 18-19 February, 2019.e-ISBN: 978-93-8830-572-3.
- 11. Kumar, S., Prakash, O., Recent Review in Solar Still. National Conference on Recent Advancement in Mechanical Engineering (NCRAME 2019) on at Department of Mechanical Engineering, Birla Institute of Technology, Mesra, India, 18-19 February, 2019.e-ISBN: 978-93-8830-572-3.

7.3 Achievements of Students

Sr. No	Name of Student	Achievement/Position/Award etc	Organised by	Date and Venue
1.	Firebolt Racing	Overall Rank (Mega ATV Championship) - 9 th	MEGA ATV Championship- Querim Beach, Goa	17 th -20 th March, 2019
2.	Team Srijan	In Formula Bharat 18, held recently, the team stood first in Business Plan event, also, they stood fifth in the Statics and overall 11 th in Formula Bharat 18.		

8. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
1.	Mr. Vikas Kumar, Divyansh Agro Equipment's, Hatcheries and Farms	05.03.2019	Insert picture here

There might be some department specific information, which may be important, but cannot be entered in the headings given above. Please mention that information in this section.

9. List of Distinguished Alumni

SI. No.	Name, Batch and Affiliation	Short Description
1.	Gopi Krishna, 2018, Maruti Suzuki India Limited	Graduate engineer trainee
2.	Shailja Singh, 2018, Avtec	Graduate engineer trainee
3.	Ankit Kumar Agrawal, 2018, Tata Steel	Management Trainee Technical
4.	Kumar Satyam, 2019, ALTAIR	Project Trainee
5.	Jawaharlal Nehru, 2019, Novabeans Rapid Prototyping	Design Engineer
6.	Deepankar Kumar, 2019, Asahi India Glass	Master's Engineer Trainee

10. Any other relevant information

Admission in Ph.D programme During Session 2018-19

SI. No.	Roll No.	Name of candidate		
1	PHD/ME/10002/2018	Kunal		
2	PHD/ME/10006/2018	Apoorva Deep Roy		
3	PHD/ME/10005/2018	Md. Serajuddin		
4	PHD/ME/10003/2018	AnuAnand		
5	PHD./ME/10051/2018	Vivek Kumar Singh		



Department of Pharmaceutical Sciences and Technology

SECTION 1

DEPARTMENTAL PROFILE





1. About the Department

The Department of Pharmaceutical Sciences and Technology was established in 1972. It boasts of a robust scientific community comprising of qualified and competent faculties, technical staffs, undergraduate & postgraduate students and research fellows.

Highlights of the Department:

- B. Pharm. and M. Pharm. courses are recognized by both Pharmacy Council of India and AICTE.
- ii. Ranked 11th in Overall by National Institutional Ranking Framework (NIRF) 2019, Ministry of HRD, GOI in category of Pharmacy.
- iii. B. Pharm. Programme is accredited by NBA for Five Years (2017-2022).
- iv. Recognized amongst the 10 centres in the country for AICTE- Quality Improvement Program (QIP) in Pharmacy, since 2007.
- v. One of the Nodal Centre for the award of prestigious AICTE- National Doctoral Fellowship.
- vi. Average Teaching Experience of the faculty is 18 Years

Facilities:

Total Built up area : 36000 Sq. ft.

Total number of Labs : 17

Central Instrumentation Laboratory: 02

Library/ Reading room : 01
Animal House : 01
Medicinal Plant Garden : 01

Academics: The department offers following UG, PG courses:

- 1. B. Pharm (Seats: 60; Duration: 4-year; 8-semester)
- 2. M. Pharm (Seats: 15/ Specialization; Duration: 2-year, 4-semester)
 - i. Pharmaceutical Chemistry
 - ii. Pharmaceutics
 - iii. Pharmacology
 - iv. Pharmaceutical Quality Assurance
 - v. Pharmacognosy
- 3. M. Pharm. Programme under AICTE Q.I.P (offered to academia sponsored candidates only).
- 4. Ph. D. (in Pharmaceutical Sciences and allied research applications).

Research:

- An array of research strategies is being encouraged in the field of:
- a) Novel Drug Delivery Systems
- b) Natural Products Chemistry
- c) Development of Synthetic Medicinal Agents
- d) Biochemical Pharmacology & Toxicology
- e) Computer Aided Drug Design

- Total Research Grants of 390.36 Lacs during 2013-2018, from National and International funding agencies like DST, UGC, AICTE, DRDO, CSIR, ICAR, ICMR, BMBF (Germany), UGC-UKIERI etc.
- No. of SCI publication/ faculty/year: 2.40
- Contemporary state of the art laboratories for Instrumental Analysis,

Molecular Biology and Molecular Modelling supporting high end research.

Major recruiters:

 Dr. Reddy's Lab, Strides Pharma Ltd., Sun Pharma, Torrent Pharma Ltd., Mylan Labs, MacLeods Pharma Ltd., Leiutis Pharma Ltd., Associated Capsules Group Ltd., Cipla etc.

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

a) Ongoing Projects

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Lakhs)	Duration of the Project
1	Packaging design and some clinical study of hair dyes	Dr. K. Jayaram Kumar	TRIFED, GOI.	4.1.2019	6.3	7 months
2	Development of a robust method for enrichment of shellac and isolation of Laccaic acid B from lac dye.		Tajna Shellac Pvt. Ltd Industry Sponsored Research Project	19.5.2019	2.80	2 Years
3	Phyto-chemical characterization of polyphenols in Ocimumtenuiflorum and investigation on its protective potentials against oxidative stress and DNA damage	Dr. Biswatrish Sarkar (PI)	DST-SERB	15.03.2018	34.232	3 Years
4	Design and Synthesis of Substrate Based Peptide Inhibitors of DENV Protease for the treatment of dengue viral infection	Dr. B.N. Sinha (PI) Dr. Biswatrish Sarkar (Co PI) Dr. Venkatesan J. (Co PI)	DST-SERB	07.08.2017	45.6	3 Years
5	Design & development of inhibitors of DENV methyl transferase for the treatment of dengue viral infection	Dr. Venkatesan J. (PI)	AICTE-RPS	04.08.2017	17.38	3 Years
6	Evaluation of Anticancer Potential of few Coumarin Derivatives with Plasmonic up Conversion Luminescent Nanomaterials; A Non- Invasive Theranostic Approach for Breast Cancer		AICTE-RPS	04.08.2017	23.47	3 Years

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Lakhs)	Duration of the Project
7	Prophylactic Transdermal Patch Against Neurotoxin Poisoning Biological Warfare Situations		BIRAC-SRISTI (PMU) (Society for Research)	11.03.2017	7.5	2 years
8	Phenyloxazoline Synthetase Inhibitors as Antitubercular Agents (POSIAA)	Dr. Venkatesan J. (PI) Dr. Abhimanyu Dev (Co-PI)	DST-SERB	29.11.2016	53.73	3 years

b) Projects Completed

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Date of completion of the Project
1.	•	Dr. K. Jayaram Kumar	GOI-TRIFED	30.03.2016	9.83	2016-2018 2 years

SECTION 3

SEMINAR / CONFERENCE

3. Seminar / Conferences / Short – Term Courses Conducted by the Department/Campus

	SI. No.	Title of Seminar/ Conference/ Short Term Courses/ Workshop	erm Courses/ Coordinator		Date of Event
	1	PCI-sponsored "Continuing Education Program 2018' on "Recent Trends in Pharmaceutical Education & Research	·	Pharmacy Council of India	Sep 12- 14, 2018
2		Patient Safety Career opportunity for Pharmacy Graduates'		IPA-Jharkhand State Branch	Sep 12, 2018
	3	Patient Safety -Current scenario and Ways Forward	·	IPA-Jharkhand State Branch	Sep 24, 2018
	4	Innovations and Challenges in Newer Drug Delivery Systems	Chief Coordinator: Dr. S. Samanta Coordinator: Dr. K. Jayaram Kumar Faculty coordinator: Dr. S. K. Singh & Dr. T. Bal	AICTE-QIP	Nov 30- Dec 13, 2018
	5	AICTE-QIP: Cutting Edge& Emerging Technologies in Pharmaceutical Education & Research	Chief Coordinator: Dr. S. Samanta Coordinator: Dr. K. Jayaram Kumar Faculty coordinator: Dr. M. Ghosh & Dr. M. P. Chopra	AICTE-QIP	Jan 11- 24, 2019
	6	Developmental path for phytopharmaceuticals towards future perspective	Chief Coordinator: Dr. S. Samanta Coordinator: Dr. K. Jayaram Kumar Faculty coordinator: Dr. A. Pandey & Dr. S. Banerjee	AICTE-QIP	Feb 1-15, 2019

SI. No.	Title of Seminar/ Conference/ Short Term Courses/ Workshop	Coordinator	Funding / Sponsoring Agency	Date of Event
7	Drug Discovery, Designing and Development	Ganguly, Co-Cordinator: Dr. Venkatesan J. and Dr. Sandeep Singh	Make Intern and e-cell IIT Kharagpur with Dept. of Pharm. Sci. and Tech., BIT Mesra	5 th to 7 th March 2019.
8	One Day Workshop on Tackling Antimicrobial Resistance in Tuberculosis by Dr. Sanjib Bhakta, Professor, University of London and UCL		Dept. of Pharm. Sci. and Tech., BIT Mesra	April 11, 2019

4. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

	1 4 3 4 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1					
SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Dr. Manik	ET702x Designing Learner- Centric MOOC	IITBombayX	IIT Bombay	MOOC Online	02.08.18 to 06.09.18
2	Dr. Manik	FDP301x Mentoring Educators in Educational Technology	Pandit Madan Mohan Malaviya National Mission for Teachers and Teaching (PMMMNMTT), MHRD, GoI	BombayX,	MOOC Online	17.05.18 to 27.06.18
3	Dr. Manik	Learn Moodle 3.5 Basics	Learn Moodle MOOC run by Moodle HQ	Moodle HQ	MOOC Online	01.06.18 to 31.06.18
4		AICTE Sponsored Quality Improvement Programme on "Cutting Edge and Emerging Technologies in Pharmaceutical Education and Research"	AICTE	Dept. of Pharm. Sci. and Tech., BIT Mesra	BIT Mesra	11.01.19 to 24.01.19
5	•	MOOC Course on ANATOMY403.4x: Anatomy: Gastrointestinal, Reproductive and Endocrine Systems	University of Michigan	University of Michigan	MOOC Online	24.01.19
6	Dr. Manik	Developmental Path of Phytopharmaceuticals towards Future Perspective	AICTE Sponsored Quality Improvement Program: 2018-19	•	BIT Mesra	01.02.19 to 15.02.19
7	Dr. M. P. Chopra	Cutting Edge & Emerging Technologies in Pharmaceutical Education & research	AICTE	Dept. of Pharm. Sci. and Tech., BIT Mesra	BIT Mesra	11.01.19 to 24.01.19

SECTION 4 RESEARCH PUBLICATIONS

4. Publications in Journals

International/National

- Acharjee, S., Maity, T. K., Samanta, S., Mana, S., Chakraborty, T., Singha, T., Mondal, A. (2018). Antihyperglycemic activity of chalcone based novel 1-{3-[3-(substituted phenyl) prop-2enoyl] phenyl} thioureas. Synthetic Communications an International Journal for Rapid Communication of Synthetic Organic Chemistry. DOI: 10.1080/00397911.2018.1539178.
- Pramodh, B., Lokanath, N.K., Naveen, S., Naresh, P., Ganguly, S., Panda, J. (2018). Molecular structure, Hirshfeld surface analysis, theoretical investigations and nonlinear optical properties of a novel crystalline chalcone derivative: (E)-1-(5-bromothiophen-2-yl)-3-(p-tolyl) prop-2-en-1-one.Journal of Molecular Structure 1161, 9.
- Debnath, B., Wang, P., Yang, L., Zheng, Y., Ganguly, S. (2018). Synthesis and Biological Evaluation of Novel (2-Oxo-3-(Arylimino)Indolin-1-YI)-N-Aryl Propanamides As Anti-Human Immunodeficiency Agents. Asian Journal of Pharmaceutical and Clinical Research, 11(12), 1.
- 4. Ashok Kumar Varma, C., Kumar, K.J. (2018), Characterization and evaluation of smart releasing polysaccharide from yellow poinciana seed of Jharkhand Int. J. Biol. Macromol., 118, 2156-2162.
- Molla, A., Ranjan, S., Rao, M.S., Dar, A.H., Shyam, M., Jayaprakash, V., Hussain, S. (2018) Borax Catalysed Domino Synthesis of Highly Functionalised spirooxindole and Chromenopyridine Derivatives: X-Ray Structure, Hirshfeld Surface Analysis and Molecular Docking Studies Chemistry Select3, 8669-8677.
- Nath, C., Badavath, V. N., Thakur, A., Ucar, G., Acevedo, O., Siddique, M. U. M., Jayaprakash, V. (2018) Curcumin-based pyrazoline analogues

- as selective inhibitors of human monoamine oxidase A MedChemComm 9, 1164-1171.
- Venkatesan, J., Singh, S.K., Sukumaran, A., Kim. S.K., Shim, M.S. (2018). Preparation, characterization and biological applications of Biosynthesized Silver Nanoparticles with Chitosan-Fucoidan Coating, Molecules 1429, 1-12.
- 8. Ali, H., & Singh, S.K., (2018) Preparation and characterization of solid lipid nanoparticles of furosemide using quality by design, Particulate Science and Technology 36, 695-709.
- Dey, S., Ghosh, M. (2018). A LC/MS-MS Guided Isolation of Laccaic Acid-A: A Potent Antimicrobial Agent. Indian J of Pharmaceutical Education and Research, 52, S287-S295
- 10. Behera, P.C., Ghosh, M. (2018). Evaluation of antioxidant, antimicrobial, and antiurolithiatic potential of different solvent extracts of Aerva lanata linn flowers. Pharmacognosy Magazine, 14, 53-57.
- 11. Donalisio, M., Cagno, V., Civra, A., Gibellini, A., Musumeci, G., Rittà, M., Ghosh, M., Lembom D. (2018). The traditional use of Vachellianilotica for sexually transmitted diseases is substantiated by the antiviral activity of its bark extract against sexually transmitted viruses. Journal of Ethnopharmacology, 213, 403-408
- 12. Dey, S., Shah, S., Ghosh, M., Karki, N., Basak, S., Sahoo, N.G. (2018). A Novel, Quick Column Switching RP-HPLC Guided Metabolite Profiling of Albendazole-Praziquantel in Rat Plasma: Designing New Combination Dosage Regimen with Higher Therapeutic Window. Current Analytical Chemistry, 14, 604-614.



- 13. Sarkar, B., Vyas, P., Haque, I., Mukhopadhyay, K. (2018). A rapid UPLC method for simultaneous separation and detection of anthocyanidins from Ocimum, Hibiscus and Syzygium species and estimation of their antioxidant activity. Journal of Liquid Chromatography & Related Technologies. 41(10), 658–667
- 14. Soni, S.R., Kumari, N., Bhunia, B. K., Sarkar, B., Mandal, B., Ghosh, A. (2018). Synthesis and characterization of a non-cytotoxic and biocompatible acrylamide grafted pullulan-Application in pH responsive controlled drug delivery. International Journal of Biological Macromolecules, 120, 753-762.
- Soni, S.R., Kumari, N., Bhunia, B. K., Sarkar, B., Mandal, B., Ghosh, A. (2018). In vitro and in vivo evaluation of pirfenidone loaded acrylamide grafted pullulan-poly (vinyl alcohol) interpenetrating polymer networks. Carbohydrate Polymers, 202, 288-298.
- Rangra, N. K., Samanta, S., Pradhan. K. K. (2019). A comprehensive review on phytopharmacological investigations of Acacia auriculiformis A. Cunn. ex Benth., Asian Pacific Journal of Tropical Biomedicine 9(1), 1.
- 17. Toppo, A. J., Chandra, S., Jha, D. &Mitra Mazumder, P. (2019). In vitro evaluation of anti-acetylcholinesterase and free radical scavenging potential of leaf extracts of some selected medicinal plants., Asian Pacific Journal of Tropical Biomedicine; 9(2): 60-65.
- 18. Jha, D.&Mitra Mazumder, P. (2019). High fat diet administration leads to the mitochondrial dysfunction and selectively alters the expression of class 1 GLUT protein in mice. Molecular Biology Reports; 46(2): 1727–1736
- 19. Das, D., Kumar, K. J. (2019) Enhancing resilient property of

- Kaempferia galanga rhizome starch by succinylation, Int. J. Biol. Macromol., 124, 1033-1039.
- 20. Deshkar, D., Gupta, R.N., Kumar, K. J., (2019) Studies on effect of coprocessing on palmyrah and maize starch mixtures using DOE approach, Int. J. Biol. Macromol., 122, 417-424.
- 21. Mondal, A., Kumar, K. J.(2019)Effect of thermal modification on the release characteristics of pink potato starch of Jharkhand, India, Int. J. Biol. Macromol., 140, 1091-1097.
- 22. Abdelnabi, R., Geraets, J. A., Ma, Y., Mirabelli, C., Flatt, J. W., Domanska, A., Delang, L., Jochmans, D., Kumar, T. A., Jayaprakash, V., Sinha, B. N., Leyssen, P., Butcher, S. J., Neyts J. (2019) A Novel Druggable Interprotemer Pocket in the Capsid of Rhino- and Enteroviruses, PLoS Biology 17 (6), e3000281, 1-17.
- 23. Sonawane, V. R., Siddique, M. U. M., Gatchie, L., Williams, I. S., Bharate, S. B., Jayaprakash, V., Sinha, B. N., Chaudhuri, B. (2019) CYP Enzymes, Expressed within Live Human Suspension Cells, are superior to microsomal widely-used enzymes CYP1A1/ identifying in potent CYP1B1 inhbitors: Identification of quinazolinones as CYP1A1/CYP1B1 inhibitors that efficiently reverse B[q] P toxicity and cisplatin resistance European Journal of Pharmaceutical Sciences 131, 177-194.
- 24. Sonawane, V., Siddique, M. U. M., Jadav, S. S., Sinha, B. N., Jayaprakash, V., Chaudhuri, B. (2019) Cink4T, a quinazolinone-based dual inhibitor of Cdk4 and tubulin polymerization, identified via ligand-based virtual screening, for efficient anticancer therapy European Journal of Medicinal Chemistry 165, 115-132.
- 25. Siddique, M.U.M., Barbhuiya, T.K., Sinha, B.N., Jayaprakash, V. (2019) Phytoestrogens and their synthetic

- analogues as substrate mimic inhibitors of CYP1B1 European Journal of Medicinal Chemistry 163, 28-36.
- 26. Hussain, A., Shakeel, F. Singh, S. K., Alsarra, I. A., Faruk, A., Alanazi, & F. K., Christoper, G.V. P., (2019). Solidified SNEDDS for the oral delivery of rifampicin: Evaluation, proof of concept, in vivo kinetics, and in silico GastroPlus™ simulation, International Journal of Pharmaceutics 566, 203-217.
- Kant, K., Lal, U.R., Ghosh, M. (2019). Antibacterial Activity with Bacterial Growth Kinetics and GC-MS Studies on Leaf and Tuber Extracts of Arisaematortuosum (Wall.) Schott. Indian Journal of Pharmaceutical Education and Research, 53, S280-S287.
- Nayan, S., Mishra, C.K., Priyadarshini, D., Pradhan, K.K., Ghosh, M., Pattnaik, A. (2019). Wound Healing Activity of Gel Formulated Leaves Extract of Neolamarckiacadamba (Roxb) Bosser. Indian Journal of Pharmaceutical Education and Research, 53, S416-S422
- Kumar, G., Ghosh, M., Pandey, D. (2019). Method development for optimized green synthesis of gold nanoparticles from Millettiapinnata and their activity in Non-small cell lung cancer cell lines. IET Nanobiotechnology, 13, 626-633.
- 30. Kant, K., Lal, U. R., Kumar, A., Ghosh, M. (2019). A merged molecular docking, ADME-T and dynamics approaches towards the genus of Arisaema as herpes simplex virus type 1 and type 2 inhibitors. Computational Biology and Chemistry, 78, 217–226.
- 31. Mittal, A., Sardana, S., Pandey, A. (2019). Scientific validation of wound healing potential of Jasminum sambac Ait. South African Journal of Botany, 121, 584-589.
- 32. Mehta, B. K., Singh, K. K., &Banerjee, S. (2019). Effect of Exercise on Type 2 Diabetes associated cognitive impairment in rats, Int J Neurosci, 31, 1-12.

- 33. Roy Sarkar, S.&Banerjee, S.(2019). Gut microbiota in neurodegenerative disorders, J Neuroimmunol, 9, 328:98-104
- 34. Mehta, B. K., Singh, K. K., &Banerjee, S.(2019). Minocycline reverses diabetes-associated cognitive impairment in rats, Pharmacol Rep, 71(4), 713-720.

National Journals

- Biswas, A. &Banerjee, S. (2018). Effect of Valeriana wallichii on alcohol addiction in mice, Phcog Mag, 14, 613-618
- 2. Naresh, P., Ganguly, S., Panda, J. (2018). Synthesis, Antimicrobial Evaluation and Molecular Docking Studies of Novel Oxazolidinone-Thiophene Chalcone Hybrid Derivatives. Research Journal of Pharmacy and Technology, 1, (12), 5611
- 3. Rangra, N. K., Samanta, S., Pradhan. K. K. (2019) In Vivo Anti-inflammatory Potential of Leaf Extracts of Acacia auriculiformis Benth., Indian Journal of Pharmaceutical Sciences 81(4).
- 4. Ganguly, S. & Shaw, P. (2019). Synthesis, Antimicrobial Activity and Binding Mode Analysis of Some New Diaryl Imidazole Derivatives. Indian Journal of Heterocyclic Chemistry, 29 (01), 5.
- 5. Panigrahi, N., Ganguly, S., Panda, J. (2019). Ultrasound Assisted Synthesis, Characterization and Antimicrobial Evaluation of Novel Oxazolidinone-Biphenyl Chalcone Hybrid Derivatives, Indian Journal of Pharmaceutical Education and Research, 53(2), 22.
- Das, J., & Mitra Mazumder, P. (2018). Quercetin as a modulator of Diabetic macrovascular complications in murine and chick embryo models, Indian Journal of Pharmaceutical Education and Research; 52(4): 594 – 601.
- 7. Srivastava, S., Yadav, S. K. S., Roy Chowdhury, A., Thombare, N.K., &Mitra



- Mazumder, P. (2018). Evaluation Of Wound Healing Properties Of Tannin Isolated From Butea Gum., Multilogic In Science; 8(Special Issue (A)): 368 369.
- 8. Jha, D. & Mitra Mazumder, P. (2019). Amelioration of Metabolic Syndrome in High Fat Fed Mice by Hydro-ethanolic Fraction of M. longifolia (J. Koenig)., Indian Journal of Pharmaceutical Education and Research; 53(1):104-111.
- 9. Kishore L., Mazumder, P.M., Lal, U.R. (2019). FingerPrint Analysis by HPTLC, Isolation, Evaluation of its In-vitro Antioxidant Activity and Spectroscopic Characterization of Bioactive Compounds of Trigonellafoenum-graecum Seeds., International Journal of Pharmacognosy and Phytochemical Research; 11(2):53-59.
- 10. Kishore L., &Mazumder, P. M. (2019). Extraction and evaluation of Trigonella foenum-graecum L. seeds extract for attenuating the progression of nephropathy in diabetic rats., Asian Journal of Pharmacy and Pharmacology; 5(5):933-941.

6. Publications in Proceedings

- Chatterjee, A., Kispotta, S., Mitra Mazumder, P. Sharma, N. Evaluation of immunomodulatory properties of active fraction of Bombax ceiba Linn leaves, In Proceedings of 3rd Pharm. Tech. IAPST on International Conference Molecular mechanism of disease and novel therapeutic approaches" held at Centurion University Bhubaneshwar, Odisha, 19–20th January 2019, IAPST/ ABS/P-05 (PAGE No. 3-4).
- Agrawal, M., Jha, D., Abdullah, S. M., Mitra Mazumder, P. To develop and evaluate acute asthma model induced by ovalbumin and formaldehyde exposure in mice. In Proceedings of 7th International Symposium on Current Trends in Drug Discovery Research, CSIR- CDRI, Lucknow, February 20-23, 2019. abstract no P22-32.

- 3. Tripathi, S., Mitra Mazumder, P. Protective Effect of Bioflavonoid (Chrysin) On Scopolamine Induced Memory Impairment In Albino Mice. In Proceedings of 2nd National Conference on "Recent Advances and Challenges in Healthcare", (REACH) held at GD Goenka University, Sohna, Haryana, on March 16, 2019 Abstract Number-4
- Kumari, U., Mitra Mazumder, P., Tripathi, S. Microelement leads to cognitive impairment in mice. In Proceedings of BCRCPiCON-2019, held at Dr. B.C. Roy College of Pharmacy & Allied Health Sciences, Durgapur, West Bengal, on date: 4th & 5th February, 2019, Abstract book on page 35.
- Kumar Varma, C.A., & Jayaram Kumar, K., Impact of carboxymethylation on the physicochemical, morphological and thermal characteristics of yellow poinciana seed polysaccharide. In Proceedings of the International Conference on Recent Trends in Science & Technology, S.S.S.K.R. InnaniMahavidyalaya, Karanja (Lad), 2018.
- Deshkar, D., Bose, S., Jayaram Kumar, K., Physicochemical characterization and drug release profile of carboxymethylated starches prepared from pink potato. In Proceedings of the International Conference on Recent Trends in Science & Technology, S.S.S.K.R. InnaniMahavidyalaya, Karanja (Lad), 2018.
- 7. Dutta, D., Das, S., Ghosh, M., Validated HPTLC method for the determination of nintedanib in bulk drug. In Proceedings of The 22nd International Electronic Conference on Synthetic Organic Chemistry session Bioorganic, Medicinal and Natural Products Chemistry, 2018 (doi:10.3390/ecsoc-22-05675).
- 8. Baag, S., Pradhan, K. K., Stability Studies of Olopatadine hydrochloride by using UV-Visible Spectrophotometric method as per ICH guideline, In Proceedings of International Conference on Key concern and considerations in Pharmaceutical

- Sciences and Technology: South-East Asian Perspective, BCRCPicon-2019, WB.
- Roy, A, Pradhan, K. K., Development of a Validated UV-Visible Spectrophotometric for the Estimation of Olopatadine hydrochloride, In Proceedings of International Conference on Key concern and considerations in Pharmaceutical Sciences and Technology: South-East Asian Perspective, BCRCPicon-2019, WB.
- 10. Das, A, Pradhan, K. K. Development, Validation and Stability Study of Perinopril by using UV-Visible Spectrophotometric method per ICH guideline, In Proceedings International Conference concern and considerations Key Pharmaceutical Sciences and Technology: South-East Asian Perspective, BCRCPicon-2019, WB.

7. Book:

Single Authored

 Ghosh, M. (2019). Pharmaceutical Validation. Kindle Direct Publishing (KDP) Amazon Digital Services, Inc. ISBN-10: 1076506569; ISBN-13: 9781076506566

Edited Books

- Jayaprakash, V., Castagnolo, D. & Ozkay, Y. (Eds.). (2019) Medicinal Chemistry of Neglected and Tropical Diseases: Advances in the Design and Synthesis of Antimicrobial Agents, Boca Raton, NY: CRC Press, Taylor & Francis Group
- Chapter(s) in Edited Book

- Venkatesan, J., Anil, S., Singh, S. K., & Kim, S.K. (2018). Marine Polysaccharides: Advances and Multifaceted Applications, Ahmed, S., & Soundararajan, A., (Eds.), Recent Advances of Alginate Biomaterials in Tissue Engineering, Chapter 9, (pp. 207-233), Pan Stanford Publishing Pte. Ltd. (CRC Press).
- Das, S., Singh, A., Kar, S., Ghosh, R., Pal, M., Fatima, M., Singh, N., Singh, S.K., (2019). Pharmaceutical Quality by Design, Beg, S., and Hasnain, M.S., (Eds), Application of QbD Framework for Development of Self-Emulsifying Drug Delivery Systems, Chapter 14, (pp 297-350), Academic Press
- Anushree Verma, Pankaj Dagur, Manik Ghosh (2019). Chapter 2: Achyranthes aspera L. in Medicinal Plants in India: Importance and Cultivation - Volume - II, JAYA PUBLISHING HOUSE, Delhi-110089, ISBN: 978-93-89235-03-62.
- 4. Pankaj Dagur, Anushree Verma, Rojalini Samanta, Manik Ghosh (2019). Chapter 24: Oroxylumindicum (L.) (Kurz)-Sona in Medicinal Plants in India: Importance and Cultivation-Volume–II, JAYA PUBLISHING HOUSE, Delhi-110089, ISBN: 978-93-89235-03-62.
- 5. Joshi D, Roy S & Banerjee S. Prebiotics: A Functional Food in Health and Disease. In SC Mandal, V Mandal & T. Konishi (Eds.), Natural Products in Drug Discovery: An Integrated Approach (pp.507-523). Amsterdam, NL: Elsevier

SECTION 5

AWARD/ PATENT/ COLLABORATIONS

8. Award / Recognition Bestowed on Faculties (State / National / International)

SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
1	Dr. R.N. Gupta	IPA President Oration Award 2018	Indian Pharmaceutical Association	National	2018

SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
2	Dr. R.N. Gupta	Prof. M L Khorana Best Paper Award 2017	Indian Pharmaceutical Association	National	2018
3	Dr. R. N. Gupta	Nominated as Vice Chairman in multidisciplinary Researcher	_	State	2018
4			Ministry of Health, Govt. of India	National	2019
5	Gupta member by Indian		Indian Pharmacopoeia Commission Ministry of Health and FamilyWelfare, Govt. of India	National	2019
6	Mentoring Educators in Educational Technology		Pandit Madan Mohan Malaviya National Mission for Teachers and Teaching (PMMMNMTT), MHRD, GoI, IIT Bombay	National	2018
7	Dr M. P. Chopra	Pharma Achievement Award 2018	IPGA	State	2018

9. Patents (Applied / Granted)

SI. Name of the Inventor		Title of the Invention	Application / Patent No. (As applicable)	Year
1.	Manik, Suddhasattya	Automatic Mobile Phase	J-4/3552/2019-KOL	2019
	Dey, Kalidas Acharya	Delivery System for HPLC	15/04/2019	

SECTION 6

ACTIVITIES/ FACULTY MEMBERS / BOS

10. Departmental Students' Activities

SI. No.	Name of the Activity	Students' Co-Ordinator (If any)	Faculty Co- ordinator (if any)	Date / Duration
1	IPA "Pharma Cup Tournament 2019"	Yashaswee Raman Kumar Kush, Nikhil Kumar, Anand Kumar	Dr. R.N. Gupta & Dr. M.P. Chopra	Feb 20-Mar 22, 2019
2	'Public Speaking' Organized by IPA, Jharkhand State Branch		•	August 29, 2018
3	Quiz Competition, Organized by IPA, Jharkhand State Branch	Shivjyoti Mukherjee. Mr Dipen Roy and Asutosh Sengupta	Dr. R.N. Gupta & Dr. M.P. Chopra	October 26, 2018
4	State level NEC- 2018		Dr. R.N. Gupta & Dr. M.P. Chopra	October 30, 2018

12. List of Faculties

SI. No.	Name	Designation	TEQIP Sponsored (Yes / No)
1	Dr. Subir Samanta	Professor & Head	No
2	Dr. Barij Nayan Sinha	Professor	No
3	Dr. Priya Ranjan Prasad Verma	Professor	No
4	Dr. Sivesh Jha	Professor	No
5	Dr. Roop Narayan Gupta	Professor	No
6	Dr. (Ms.) Swastika Ganguly	Professor	No
7	Dr. (Mrs.) Papiya Mitra Mazumder	Professor	No
8	Dr. K. Jayaram Kumar	Professor	No
9	Dr.Saurabh Manaswita Verma	Professor	No
10	Mrs. Shaila G. Panpalia	Associate Professor	No
11	Dr. Venkatesan J.	Associate Professor	No
12	Dr. Ashok Kumar Pattnaik	Associate Professor	No
13	Dr. Manik Ghosh	Assistant Professor	No
14	Dr. Shakti Prasad Pattanayak	Assistant Professor	No
15	Dr. Abhimanyu Dev	Assistant Professor	No
16	Dr. Biswatrish Sarkar	Assistant Professor	No
17	Dr. Trishna Bal	Assistant Professor	No
18	Dr. Anima Pandey	Assistant Professor	No
19	Dr. Neelima Sharma	Assistant Professor	No
20	Dr. Sandeep Kumar Singh	Assistant Professor	No
21	Dr. Animesh Ghosh	Assistant Professor	No
22	Dr. Sugato Banerjee	Assistant Professor	No
23	Dr. Kishanta Kumar Pradhan	Assistant Professor	No
24	Dr. Mahendra Pratap Chopra	Assistant Professor	No

11. Board of Studies

	SI. No.	Name of the Member	Designation (Kindly mention Ex-Officio, where applicable)	Role (Chairman/ Internal or External Member)
-	L	Dr. S. Samanta (HOD)	Ex-Officio	Chairman
2	2	Dr. P.R.P. Verma	Professor	Internal Member
3	3	Dr. B.N. Sinha	Professor	Internal Member
4	1	Dr. S. Jha	Professor	Internal Member
	5	Dr. R.N. Gupta	Professor	Internal Member
6	5	Dr. (Ms.) S. Ganguly	Professor	Internal Member
7	7	Dr. (Mrs.) Papiya Mitra Mazumder	Professor	Internal Member
8	3	Dr. K. Jayaram Kumar	Professor	Internal Member
g	9	Dr. (Mrs.) S.M. Verma	Professor	Internal Member
	10	Dr. Ashok Kumar Pattnaik	Associate Professor	Internal Member
	11	Dr. ManikGhosh	Assistant Professor	Internal Member
	12	Dr. G. Sarkhel	Professor	External Member
	13	Dr. Ashoke Sharon	Associate Professor	External Member

SI. Name of the Member		Designation (Kindly mention Ex-Officio, where applicable)	Role (Chairman/ Internal or External Member)
14	Dr. Tapan Kumar Maity	Professor, Dept. of Pharmaceutical Technology, Jadavpur University, Kolkata	External Member
15	Dr. Sushil Kumar Singh	Professor, Dept. of Pharmaceutical Enineering, IIT-BHU, Varanasi	External Member
16	Mr. Shamkant L. Shimpi	Centaur Pharmaceutical Ltd., Pune	External Member
17	Mr. Naveen Sharma	President, Cliantha Research Ltd., Ahmedabad	External Member

SECTION 7 OTHER INFORMATION

12 Publication by students

- Soni, S.R., Kumari, N., Bhunia, B.K., Sarkar, B., Mandal, B., Ghosh, A. (2018). Synthesis and characterization of a noncytotoxic and biocompatible acrylamide grafted pullulan- Application in pH responsive controlled drug delivery. International Journal of Biological Macromolecules, 120, 753-762.
- 2. Soni, S.R., Kumari, N., Bhunia, B. K., Sarkar, B., Mandal, B., Ghosh, A. (2018). In vitro and in vivo evaluation of pirfenidone loaded acrylamide grafted pullulan-poly (vinyl alcohol) interpenetrating polymer networks. Carbohydrate Polymers, 202, 288-298.
- 3. Das, J., & Mitra Mazumder, P. (2018). Quercetin as a modulator of Diabetic macrovascular complications in murine and chick embryo models, Indian Journal of Pharmaceutical Education and Research; 52(4): 594 601.
- 4. Ali, H., & Singh, S.K., (2018) Preparation and characterization of solid lipid nanoparticles of furosemide using quality by design, Particulate Science and Technology 36, 695-709.
- Biswas, A., & Banerjee, S. (2018).
 Effect of Valeriana wallichii on alcohol addiction in mice, Phcog Mag, 14, 613-618.
- 6. Jha, D. & Mitra Mazumder, P. (2019). High fat diet administration leads to

- the mitochondrial dysfunction and selectively alters the expression of class 1 GLUT protein in mice. Molecular Biology Reports; 46(2): 1727–1736
- 7. Jha, D. & Mitra Mazumder, P. (2019). Amelioration of Metabolic Syndrome in High Fat Fed Mice by Hydro-ethanolic Fraction of M. longifolia (J. Koenig)., Indian Journal of Pharmaceutical Education and Research; 53(1):104-111.
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- Mehta, B. K., Singh, K. K., & Banerjee,
 S. (2019). Effect of Exercise on Type 2
 Diabetes associated cognitive impairment in rats, Int J Neurosci, 31, 1-12.

- 11. Roy Sarkar, S. & Banerjee, S. (2019). Gut microbiota in neurodegenerative disorders, J Neuroimmunol, 9, 328:98-104.
- 12. Mehta, B.K. & Banerjee, S. (2019). Minocycline reverses diabetes-associated cognitive impairment in rats, Pharmacol Rep, 71(4), 713-720.

13. Achievements of Students

SI No	Name of Student	Achievement/Position/ Award etc	Organised by	Date and Venue
1	Bina K Mehta	Article of the year at Indian Journal of Pharmaceutical Sciences	Indian Pharmaceutical Association (IPA)	Dec 12, 2018 New Delhi
2. Suparna Roy Sarkar		Best Poster award at 6 th International Congress of Society of Ethnopharmacology	Society for Ethnopharmacology, India & Manipal College of Pharmaceutical Sciences	Feb 10, 2019 Manipal Academy of Higher Education, Manipal

14. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
1.	Dr. Subhas Mandal, Chairman, RAD, IPA and Vice President IPA	September 12, 2018	Carter Opportunities of Pharmacity Dr. Subhan C. Radul La Hamman Carter of Pharmacity Dr. Subhan C. Radul La Hamman Carter of Pharmacity Dr. Subhan C. Radul La Hamman Carter of Pharmacity Dr. Subhan C. Radul La Hamman Carter of Pharmacity La Ham
2.	Dr. Mohan Raj, Secretary of IPA, Anantapur Branch	January 11, 2019	Per a balance
3.	Dr.Probir Banerjee, President IPA, Bengal State branch	February 10, 2019	

15. List of Distinguished Alumni

SI. No.	Name, Batch and Affiliation	Short Description		
1.	Dr. C. Veeresham, Professor, Kakatiya University, Warrangal (1984 Batch, M. Pharm)	He is the Ex-Principal & Head, Dept. of Pharmacy, Kaktiya University, Warrangal		
2.	Ms. Ritu Sahay Drug Controller, Jharkhand State (1984 batch B. Pharm)	She is serving as Director, Drugs Control Administration, Ministry of Health, Govt. of Jharkhand since February 2015		

SI. No.	Name, Batch and Affiliation	Short Description
3.	Mr. Raweesh Chaudhary, Director of Medical Alignment–AstraZeneca Medical Affairs, USA (1992 batch B. Pharm)	He has 23 years of wide-ranging experience and stellar track record in Medical Affairs, Product management and commercial roles spread across countries like India, Canada and USA
4.	Dr. Dharmendra Singhal Vice President / Global Head Small Molecules CMC Dev at Roche- Genentech Pharma Group (1992 batch B. Pharm)	He is leading a global organization responsible for CMC (API/Chemistry, drug product and analytics) development to advance NCEs from preclinical stage through clinical development to commercial manufacturing and ensuring marketed support/technical life-cycle management of Roche SM commercial products.
5.	Dr. Susmita Chanda Executive VP, Preclinical Development at Aligos Therapeutics USA (1984 batch M. Pharm)	Shehasover20 years of experience in the pharmaceutical industry in drug discovery and development safety assessment for a variety of therapeutic indications

16. Any other relevant information

- 1. World Pharmacist Day was celebrated on September 25, 2018 by IPA Jharkhand State branch in collaboration with Dept. of Pharmaceutical Sciences and Technology, BIT, Mesra. Dr. R.N. Gupta (Chairman, Hospital Pharmacy Division, IPA), Dr. S. Samanta (HOD), Dr. B. N. Sinha (Vice President, IPA-State Branch), Dr. M.P. Chopra (Secretary, IPA-State Branch) and Dr. P.M. Mazumdar (Council Member, IPA-State Branch)addressed the gathering at BIT auditorium on the occasion.
- 2. IPA Jharkhand state branch celebrated 57th National Pharmacy Week (NPW) at Ranchi. The inaugural programme was held at auditorium of Dept of Pharmaceutical Sciences & Technology on 21st November 2018.
- 3. Dr. Swastika Ganguly organized a virtual lecture on "Cardiac Pulmonary Resuscitation" given by Dr. Vemuri Murthy, Faculty of the Department of EmergencyMedicine, University of Illinois at Chicago on 17th January 2019.



Department of Physics

SECTION 1

DEPARTMENTAL PROFILE





1. About the Department

The Department of Physics (previously known as Department of Applied Physics) since its inception in 1955 has played a pivotal role in the Institute. The Department has a strong pool of highly qualified and motivated faculty members. The Department is well supported financially through "Fund for Improvement in Science & Technology Infrastructure" (FIST) programme of the Department of Science and Technology, New Delhi twice and under Special Assistance Programme (SAP) of the UGC. The Department has also received significant funds under TEQIP-I & II phases. The Department has been funded by agencies, viz. UGC, DST, BRNS, ARDB, ISRO, DRDO and CSIR for pursuing different research projects. Recently the Department has completed several international (Indo-German, Indo-Russian, Indo-Israel) projects aswell. The Department of Physics has procured following equipments in the year 2019:

Other than BE Courses, the important thrust of the Department of Physics is the 5-year Integrated M.Sc. Programme which has been offering since 2011. The course aims to train the young students with the following objectives:

- To impart high quality Science education in a vibrant academicambience.
- To prepare students to take up challenges as a researcher in diverse

- areas of theoretical and experimental physics.
- Excellent lab, library and internet facilities.
- Opportunity of pursuing high end research as project work. During 9th and 10th semester, students may opt special papers for the following areas: CondensedMatter Physics, Electronics, Photonics and Plasma Sciences. Exit option available after completion of three years with a B.Sc. (Honours) Degree that enables students to take admission in the Integrated M.Sc. plus Ph.D. programs of different prestigious research organizations.

Achievements of Alumni:

Availing exit option, some of the previous students have been admitted to the Integrated Ph.D. programs of Tata Institute of Fundamental Research, Bombay; Indian Institute of Science, Bangalore; Harish-Chandra Research Institute, Allahabad; etc.

Some students have excelled in the GRE and TOEFL for higher studies in US universities whereas some others have made their way to German and Canadian Universities.

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

a) Ongoing Projects

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
1.	Investigation on Optical Pulse and Beam Propagation in Semiconductor Quantum Well and Quantum Dot Nanostructures with Emphasis to the Development of Photonic Device	S Konar PI	DRDO	05.01.2018	24.60 Lakhs	3 Years
2.	Development of environment Friendly perovskite materials forself- powdered vibrational energy harvesting device applications	S K Rout PI	DST	July 2017	55.80 Lakhs	3 years
3.	Study of stochastic heat engines using active particles	Sourabh Lahiri PI	Science and Engineering Research Board	April 27, 2018	23.00 Lakhs	3 years
4.	Nonlinear rheology of dense colloidalsuspensions	Madhu Priya PI	ECR-SERB grant	14.09.2018	22.45 Lakhs	3 years
5.	Development of rare earth modified Zirconate as an efficient proton conducting material at intermediate temperature.	Ela Sinha PI	DST, India	14.03.2017	29.68 Lakhs	3 years
6.	Defect Engineered Fluorescence from "Nano-Diamond" for Nano- photonics and Bio-Imaging.	Dilip Kumar Singh	DST, Govt. of India	30.01.2014	35.00 Lakhs	5 Years

SECTION 3

SEMINAR / CONFERENCE

3. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Dr. S. Keshri	International Conference on Nano- Structured Materials and Devices		Delhi University	Delhi University	17-20 December, 2018 (Invited talk)
2.	Dr. Nishi Srivastava	TROPMET-2018, National Symposium on Understanding Weather and Climate Variability: Research for Society	Indian Meteorological Society	Indian Meteorological Society	Banaras Hindu University, Varanasi, Uttar Pradesh	24 to 27 October, 2018,

SECTION 4 RESEARCH PUBLICATIONS

4. Publications in Journals: (International/National)

- 1. Sonali Biswas, Sunita Keshri, (2019) Room temperature magneto impedance of manganites, 92. (https://doi.org/10.1080/01411594.2 019.1566826).
- 2. Sarit K Ghosh, Kaushik Mallick, B Tiwari, E Sinha and S K Rout, (2018) Relaxor-ferroelectric BaLnZT (Ln=La, Nd, Sm, Eu, and Sc) ceramics for actuator and energy storage application Mater. Res. Express 5, 015509.
- 3. S. K. Rout, V. Chauhan, D. K. Kushvaha, E. Sinha, A. Hussain, B. Tiwari (2018) Impact of multiple phases on ferroelectric and piezoelectric performances of BNKT-BZT ceramic, J. Mater. Science: Materials in Electronics, 29(22), 19524-19531.
- 4. D. K. Kushvaha, S. K. Rout, B. Tiwari, Structural, piezoelectric and highdensity energy storage properties of lead-free BNKT-BCZT solid solution, (2019) Journal of Alloys and Compounds, 782 270-276
- 5. Avishek Satapathy, Ela Sinha, S.K. Rout (2019) Investigation of proton conductivity in Sc and Yb co-doped barium zirconate ceramics, Mater. Res. Express, 6 056305

- Nalin Prasant, Poddar, S. K. Mukherjee, (2019) "Effect of substrate and post – deposition annealing on re-sputtered Al-doped ZNO(AZO) thin films", Journal of Materials Science: Materials in Electronics, 30, 14269-14280.
- 7. Nalin Prasant Poddar, S. K. Mukherjee, Investigation on preferencially oriented Al-doped ZNO films using rf magnetron sputtering, (2019) Journal of Materials Science: Materials in Electronics, 30, 537-548.
- 8. Nishi Srivastava, (2019) Association of Modeled PM2.5 with Aerosol Optical Depth: Model vs Satellite, Natural Hazards, DOI: 10.1007/s11069-019-03590-8.
- 9. Ravi Kumar, Dilip K. Singh, Prasant Kumar, Raj Kumar, S R Dhakate (2019) Influence of degree of air oxidation and functionality on ensemble emission from nitrogen vacancy centres in nano-diamonds Diamond and Related Materials, 97, 107431.
- Pawan Kumar Dubey Tripathi, L. N. (2019) Hybrid Metal nano-antenna 2D-material photovoltaic device Solar Energy Materials & Solar Cells, 200, 109918.



11. Chandra Sagarika, Nishi Srivastava, Manoj Kumar, (2018), Vertical structure of atmospheric boundary layer over Ranchi during the summer monsoon season Meteorology and Atmospheric Physics. https://doi.org/10.1007/s00703-018-0600-y.

Publications in Proceedings:

1. Nishi Srivastava, Impact of Urban Terrain on Simulation of Air-Pollutants, Conference of Indian Aerosol Science and Technology Association, 2018, "Aerosol Impacts: Human Health to

- Climate Change", 26-28 Nov, 2018, IIT-Delhi, Organized by: Center for Atmospheric Sciences, I.I.T-Delhi
- Sunita Keshri, International Conference on Nano-Structured Materials and Devices, Delhi University, 17-20 December, 2018 (Invited talk).
- Investigation of sliding wear behaviour of HVOF carbide coating, T K Mishra, A. Kumar, S. K. Sinha, S. Sharma, Materials Today Proceedings 5 (9), 19539-19546, (2018)

SECTION 5

ACTIVITIES/ FACULTY MEMBERS / BOS

6. List of Faculties

SI. No.	Name (Please mention Dr. / Prof./ Mr./ Mrs. / Ms. as applicable)	Designation	TEQIP Sponsored (Yes / No)
1.	Dr. S. Konar	Professor	No
2.	Dr. (Mrs.) S. Keshri	Professor& Head	No
3.	Dr. S.K. Sinha	Professor	No
4.	Dr. R.K. Paul	Associate Professor	No
5.	Dr. S.K. Rout	Associate Professor	No
6.	Dr Kingshuk Bose	Assistant Professor	No
7.	Dr Ela Sinha	Assistant Professor	No
8.	Dr. Nishi Srivastava	Assistant Professor	No
9.	Dr Sanat Kumar Mukherjee	Assistant Professor	No
10.	Dr Rishi Sharma	Assistant Professor	No
11.	Dr SourabhLahiri	Assistant Professor	No
12.	Dr Dilip Kumar Singh	Assistant Professor	No
13.	Dr Madhupriya	Assistant Professor	No
14.	Dr. SourabhBarua	Assistant Professor	Yes
15.	Dr Laxmi Narayan Tripathi	Assistant Professor	Yes
16.	Dr Ravindra Kumar	Assistant Professor	Yes

7. Board of Studies

SI. No.	Name of the Member	Designation	Role
1.	HOD, Ex-Officio- Chairperson		
2.	Dr. S. Konar	Professor, Dept. of Physics	Member
3.	Dr. (Mrs.) S. Keshri	Prof. & Head, Dept. of Physics	Member
4.	Dr. S.K. Sinha	Professor, Dept. of Physics	Member

SI. No.	Name of the Member	Designation	Role
5.	Dr. R.K. Paul	Assoc. Prof, Dept. of Physics	Member
6.	Dr. S.K. Rout	Asso. Prof. Dept. of Physics	Member
7.	Dr. Nishi Srivastava	Asst. Prof., Dept. of Physics	Member
8.	Dr. (Mrs.) Usha Jha	Professor, Dept. of Chemistry	Member
9.	Dr. S.K. Ghorai	Professor, Dept. of ECE	Member
10.	Dr. P.K. Datta	Professor, Dept of Physics Indian Institute of Technology Kharagpur – 721302	External Member
11.	Dr. Anil Kumar Nirala	Professor, Dept. of Physics, Indian Institute of Technology Dhanbad	External Member
12.	Dr. B.S. Murty	Professor, Dept. of Materials and Materials Engineering, IIT Madras, Chennai-600036	External Member
13.	Dr. V. Subramanian	Professor, Dept. of Physics, IIT Madras, Chennai-600036	External Member
14.	Dr. Prasanta K. Panigrahi	Professor, Dept. of Physical Sciences, Indian Institute of Science Education Research, Kolkata, Mohanpur-741246, West Bengal, India	External Member
15.	Dr. (Mrs.) S.K. Mishra	Scientist E-II, MST Division, National Metallurgical Laboratory, Jamshedpur, India-831007	External Member

SECTION 7 OTHER INFORMATION

9. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of visitor with affiliation	Date of visit	Picture
1.	Dr. Binay Kumar Professor, Department of Physics & Astrophysics, University of Delhi	12.07.2019	
2.	Dr. Arindam Chakraborty Associate Professor, IISc. Bangalore	06.08.2019	
3.	Dr. Amarendra Kumar Sarma Professor, Department of Physics, Indian Institute of Technology, Guwahati-781039, Assam, India	02.09.2019	

Department of Production Engineering

SECTION 1

DEPARTMENTAL PROFILE





1. About the Department

Department of Production Engineering since its inception in 1964 has been trying to impart quality education to undergraduates and train them to meet the demands of the manufacturing industry. The main objective of production engineering is integration of technology with management in planning and controlling the design, development and operation of manufacturing system. The department offers two courses: B.Tech. in Production Engineering and Automated Manufacturing M.Tech. in Systems. Rapid advances in manufacturing technology, e.g., computer controlled processes and management information systems, ERP and new manufacturing concepts like lean manufacturing, agile

manufacturing, sustainable manufacturing etc., are reinforcing the recognition of technological, organizational, economic and human factors. Furthermore, specialized in manufacturing technology training is necessary for industries in India and abroad. Central workshop and laboratories have been established to impart the state of art knowledge to the students in the field of production engineering. number of sophisticated equipment are available in these laboratories/ shops, which not only being utilized for the training of undergraduate and postgraduate students but also utilized for the Research work of the department and giving support to the other research work going in the Institute.

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

a) Ongoing Projects

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
1.	"Additive Manufacturing of	Kumar (PI)	MHRD,	18.06.2019	Rs. 12,85,000.00	June-2019 to Sept-2020
	Aluminium based alloys"	Dr. S.K. Jha, Dr. Joyjeet Ghose, Dr. Animesh Mandal,	India TEQIP-III			
		Dr. Ajit Behera	(CK3)			

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
2.	"Experimental investigation on the Micro-EDM characteristics of Aluminium based composites"	Dr. Shailesh Kumar Dewangan, Dr. S.V.S.K. Deepak Kumar (Co-PI) Dr. S. K. Jha, Dr. Vishesh Ranjan Kar	NPIU, MHRD, India TEQIP-III (CRS)	18.06.2019	Rs. 5,94,000.00	June-2019 to Sept-2020
3.	"Thixoforming of Aluminum based alloys and composites"	Dr. S. V. S. K. Deepak Kumar (PI)	TEQIP-III (SEED Money Scheme)	July-2018	Rs. 2,00,000.00	July-2018 to June2020
4.	Experimental investigation on the Micro-EDM characteristics of Aluminium based Composites.	PI- Shailesh Kumar Dewangan	CRS- TEQIP III	18.6.2019	Rs. 5,94,000.00	1 year
5.	Studies on Metal Inert Gas Welding based Additive Manufacturing of Aluminium Alloys	PI – Sonu Rajak	CRS- TEQIP III	18.6.2019	Rs. 14,50,000.00	1 year
6.	Modelling and analysis of Nonlinear Energy Sink with Energy Harvester	PI – Prakash Kumar	CRS- TEQIP III	18.6.2019	Rs. 13,45,000.00	1 Year

SECTION 3

SEMINAR / CONFERENCE

3. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. Io.	Name of the Faculty	Title of the Conference/Seminar	Funding Agency	Organizers	Venue	Date
1.	Dr. L N	7 th International & 28 th	TEQIP-III	Anna	Anna	13-15 Dec
	Pattanaik	All India Manufacturing		University,	University,	2018
		Technology, Design		Chennai	Chennai	
		and Research				
		Conference 2018				
		(AIMTDR 2018)				
2.	- 1- 1		Self-financed	National	National	July 13-20,
	Acherjee	Term Training		Institute of	Institute of	2018
		Program on		Technical	Technical	
		Induction Training		Teachers'	Teachers'	
				Training and	Training and	
				Research,	Research,	
				Kolkata	Kolkata	



SI. No.	Name of the Faculty	Title of the Conference/Seminar	Funding Agency	Organizers	Venue	Date
3	Dr. S.V.S.K. Deepak Kumar	SMART Foundry-2018 (workshop)	VNIT-Nagpur	IIT Bombay & VNIT-Nagpur	VNIT-Nagpur	31.08.2018 to 02.09.2018
4	Dr. S.V.S.K. Deepak Kumar	MARFF-2018 (workshop)	TEQIP-III	B.I.T Sindri,	B.I.T Sindri, Dhanbad	3.10.2018 to 05.10.2018
5	Dr. S.V.S.K. Deepak Kumar	Faculty Development Program on Digital Pedagogies (FDP- 2019)	NPIU, TEQIP-III	NPIU, TEQIP-III IIT Hyderabad	IIT Hyderabad	10.06.2019 to 14.06.2019
6	Dr. S.V.S.K. Deepak Kumar	ICPCM-2018 (Conference)	NIT Rourkela	NIT Rourkela	NIT Rourkela	06.12.2018 to 08.12.2018
7	Dr. S.V.S.K. Deepak Kumar	FLAME-2018 (Conference)	Amity Univ. Noida	Amity University	Amity Univ. Noida	3.10.2018 to 05.10.2018
8	Dr. S.V.S.K. Deepak Kumar	ICDP-2019 (Conference)	AICTE, New Delhi, NPIU	AICTE, New Delhi, NPIU	AICTE, New Delhi	01.04.2019 to 03.04.2019
9	Dr. S.V.S.K. Deepak Kumar	ICAMME-2019 (Conference)	KIIT Bhubaneswar	KIIT Bhubaneswar	KIIT Bhubaneswar	15.03.2019 to 17.03.2019
10	Dr. S.V.S.K. Deepak Kumar	MMMAC-2019 (workshop)	TEQIP-III	TEQIP-III	NIT Jamshedpur	20.05.2019 to 25.05.2019
11	Dr. S.V.S.K. Deepak Kumar	APAM-2019 (workshop)	TEQIP-III, NPIU	TEQIP-III, NPIU	NIT Rourkela	23.05.2019 to 27.05.2019
12	Dr. S.V.S.K. Deepak Kumar	ICSD-2019 (Conference)	JRU-Ranchi	JRU-Ranchi	JRU-Ranchi	01.06.2019 to 02.06.2019
13	Dr. Shailesh Kumar Dewangan	Advance Pedagogies; Active learning and digital tools	TEQIP-III	IIT Hyderabad	IIT Hyderabad	10-14 June 2019

SECTION 4 RESEARCH PUBLICATIONS

4. Publications in Journals: (International/National)

- Avinash, K., Pattanaik, L.N. and Rajeev Agrawal (2019), Optimal sequence planning for multi-model reconfigurable assembly system, The International Journal of Advanced Manufacturing Technology 100: 1719-1730.
- 2. L.N. Pattanaik and Abinash Jena (2019), Tri-objective optimization of mixed model reconfigurable assembly system for

- modular products, International Journal of Computer Integrated Manufacturing, 32:1, 72-82.
- 3. Acherjee B., Maity D., Prakash S., Kuar A.S. & Mitra S. (2018) Optimal process parameter selection of underwater Nd:YAG laser micro-channeling on PMMA by firefly algorithm and flower pollination algorithm, Journal of

- the Chinese Society of Mechanical Engineers, 39 (5), 515-533.
- 4. Abhilash J., Apeksha & Acherjee B. (2018) Simulation of friction stir welding using thermo-mechanical coupled finite element method, IOP Conf. Series: Materials Science and Engineering, 455, 012113.
- Jamal F., Rath S. & Acherjee B. (2019) Process modelling of flat rolling of steel, Advances in Materials and Processing Technologies, 5 (1), 104-113.
- Subhendu, N., Jena, H., Priyanka and Deepak Sahini (2018). Analysis of Mechanical Properties of Jute Epoxy Composite with Cenosphere Filler, Journal of Silicon. 11(2), 659-671.
- Dewangan, S.K. Tiger, C. & Nayak N. (2018). Optimization of EDM Process Parameters by using PCA based Grey Relation Analysis. International Journal of Mechanical and Production Engineering, 6 (2), ISSN: 2320-2092.
- Dewangan, S. K. Kumar P. & Jha. S.K. Optimization of Quality and Productivity of Wire EDM by using L₉ Orthogonal Array. Advances in Industrial and Production Engineering, Lecture Notes in Mechanical Engineering. 2019, 93-100. ISBN no. 978-981-13-6411-2, 978-981-13-6412-9.
- 9. Md. Shahzar Jawaid, Dr. Sharad Chandra Srivastava, Dr. S. Datta, Savings of Total Energy Consumption By Using Sequencing Rule-Based System, International Journal of Engineering Technology Science and Research (IJETSR) 2018, Volume 5, Issue 4. ISSN 2394 3386

5. Publications in Proceedings (International/National)

 L.N. Pattanaik and Ch. Koteswarapavan, "Assessment of Lean Manufacturing Using Data Envelopment Analysis (DEA) on Value Stream Maps", Proceedings of 1st International

- Conference on Innovative Product Design and Intelligent Manufacturing System (ICIPDIMS-19), 17-18 May, 2019, NIT-Rourkela.
- 2. S. Deepak kumar, Shailesh Dewangan, S.K. Parida, S. K. Jha, "Optimization of EDM process parameters of Thixoformed A356-5TiB₂ in-situ composites", Proc. of ICPCM-2018, NIT Rourkela, 6-8th Dec-2018, p.42.
- 3. Sourav Chakraborty, P Arvind, Shalini Sinha, S Deepak Kumar, (2019). Implementation of IoT based PLC in Smart Relaying Applications, 6(2), 249-252. ISSN 2394 7780.
- Md. Shahzar Jawaid, Dr. S.C. Srivastava, Dr. S. Datta, "An approach of minimizing energy consumption in the machining system using job sequences varying technique", 7 th International & amp; 28th All India Manufacturing Technology, Design and Research Conference 2018 (AIMTDR 2018 Conference)

6. Book:

Chapter(s) in Edited Book

- 1. Pattanaik L.N., Paras Agarwal, Saloni Ranjan and Urja Narayan (2020), Bi-objective Optimization of a Reconfigurable Supply Chain Using a Self-organizing Migration Algorithm, Advances in Computational Intelligence, Advances in Intelligent Systems and Computing 988, pp. 39-53. (Springer Nature Singapore)
- Kumar A., Pattanaik L.N., Agrawal R. (2019) Multi-objective Scheduling Model for Reconfigurable Assembly Systems. In: Chattopadhyay J., Singh R., Bhattacherjee V. (eds) Innovations in Soft Computing and Information Technology. Springer, Singapore, pp 209-217
- 3. Acherjee B. (2019). FEM ANN sequential modelling of laser transmission welding for prediction of weld pool dimensions. In K. Kumar,



- N. Kumari & J.P. Davim (Eds), Non-Conventional Machining in Modern Manufacturing Systems (pp. 249-261), IGI Global, ISBN: 9781522561613 (Hardcover), 9781522561620 (eBook).
- 4. S. Deepak kumar, Joyjeet Ghose, A. Mandal, Thixoforming of light-weight alloys and composites: an approach toward sustainable manufacturing, Sustainable Engineering Products and Manufacturing Technologies. Chapter No. 2, Elsevier, Academic Press May-2019, Pages 25-43, 2019. ISBN:978-0-12-816564-5.
- 5. S. Deepak Kumar, A. Chattree, S.K Jha, N.K Singh, A. Mandal,

- Deformation Behavior of Semi-solid Forged A356-5TiB2 Nano-In Situ Composites" Advances in Industrial & Production Engineering, Lecture notes in Mechanical Engineering, Publisher: Springer, Singapore, pp. 77-84, 2019. ISBN:978-981-13-6411-2.
- S. Deepak Kumar, D. Karthik,
 S. K. Parida, S. K. Jha, Optimization of Semi-solid-Forging Parameters of A356-5TiB2 In Situ Composites Using ANSYS and DEFORM Simulation, Innovations in Soft Computing & Information Technology, Publisher: Springer, Singapore, pp. 279-286, 2019.ISBN:978-981-13-3184-8.

SECTION 5

ACTIVITIES/ FACULTY MEMBERS / BOS

7. List of Faculties

SI. No.	Name Designation		TEQIP Sponsored
1	Dr. Sanjay Kumar Jha	Associate Professor, Head	No
2	Dr. Ritesh Kumar Singh	Associate Professor	No
3	Dr. L.N. Pattanaik	Associate Professor	No
4	Dr. S.C. Srivastava	Associate Professor	No
5	Dr. Joyjeet Ghose	Associate Professor	No
6	Dr. Binay Kumar	Assistant Professor	No
7	Dr. Somak Datta	Assistant Professor	No
8	Dr. Bappa Acharjee	Assistant Professor	No
9	Dr. S.V.S.K Deepak Kumar	Assistant Professor	Yes
10	Dr. Shailesh Kumar Dewangan	Assistant Professor	Yes
11	Dr. Prakash Kumar	Assistant Professor	Yes
12	Dr. Sonu Rajak	Assistant Professor	Yes
13	Mr. Vivek Prabhakar	Assistant Professor	Yes

8. List of Adjunct Faculties

SI. No.	Name (Please mention Dr. / Prof./ Mr./ Mrs. / Ms., as applicable)	Designation	Affiliation
1.	Mr. Pawan Kumar Bageria	Adjunct Fellow	President, Tata Motors Group SBU, Tata Technologies, Bangalore

9. Board of Studies

SI. No.	Name of the Member	Designation (Kindly mention Ex-Officio, where applicable)	Role (Chairman/ Internal or External Member)
1.	Dr. S.K. Jha	Head- Production Engineering (Ex-officio)	Chairman

SI. No.	Name of the Member	Designation (Kindly mention Ex-Officio, where applicable)	Role (Chairman/ Internal or External Member)
2.	Dr. R.K. Singh	Associate Professor, Department of Production Engineering	Internal Member
3.	Dr. L.N. Pattanaik	Associate Professor, Department of Production Engineering	Internal Member
4.	Dr. Somak Datta	Assistant Professor, Department of Production Engineering	Internal Member
5.	Dr. Utpal Baul	Dean (A&IR) and Professor, Department of Management	Internal Member
6.	Dr. R. P. Sharma	Professor & Head, Mechanical Engineering	Internal Member
7.	One representative, Faculty	BIT Patna off Campus	Internal Member
8.	One representative, Faculty	BIT Deoghar off Campus	Internal Member
9.	One UG Student Representative		Internal Member
10.	One PG Student Representative		Internal Member
11.	Dr. Govind Sharan Dangayach Professor & Head	Department of Mechanical Engineering, Malaviya National Institute of Technology, J I Nehru Marg, Jaipur - 302017 Mobile: +91-9950344500 Email: dangayach@gmail.com	External Member
12.	Dr. Saroj Kumar Patel Professor	Department of Mechanical Engineering, National Institute of Technology Rourkela, Odisha, India - 769008 Mobile: +91 9437484951 E-mail: skpatel@nitrkl.ac.in	External Member
13.	Dr. Ghanshyam Das Professor	Head, Department of Metallurgy & Materials, National Institute of Foundry & Forge Technology (NIFFT), Hatia - 834003, Ranchi, Jharkhand Mobile: +91-7352060676 Email: drgdas.nifft@gov.in	External Member
14.	Mr. Rohit Saboo President and CEO (Alumni of Prod. Department)	National Engineering Industries Limited, Jaipur - 302006 Mobile: +91-1412222335 Email: rsaboo@nbcbearings.in	External Member
15.	Mr. P.Pathak DGM	Rolling Technology, R&D SAIL, Ranchi Mobile: +91-8986880223 Email: ppathak@sail-rdcis.com	External Member
16.	Mr. Rajneesh Kumar, Chief Manager (E&M) (Alumni of Prod. Department)	CMPDIL, Coal India Limited, Ranchi - 834031 Mobile: +91-9431102543 Email: rajneesh.kumar@coalindia.in	External Member
17.	Mr. Prabhakar Kadapa, CEO	AVTEC Limited, Delhi. Email: prabhakar.kadapa@avtec.in	External Member
18.	Mr. Vishwajit Kumar Senior Manager	Iron Making Division, MECON Ltd, Doranda, Ranchi-834002 Mobile: 09431186722 Email: vishwajit@mecon.co.in	External Member

SECTION 6 OTHER INFORMATION

10. Publication by students, if any

- Pattanaik L.N., Paras Agarwal, Saloni Ranjan and Urja Narayan (2020), Bi-objective Optimization of a Reconfigurable Supply Chain Using a Self-organizing Migration Algorithm, Advances in Computational Intelligence, Advances in Intelligent Systems and Computing 988, pp. 39-53. (Springer Nature Singapore)
- Kumar A., Pattanaik L.N., Agrawal R. (2019) Multi-objective Scheduling Model for Reconfigurable Assembly Systems. In: Chattopadhyay J., Singh R., Bhattacherjee V. (eds) Innovations in Soft Computing and Information Technology. Springer, Singapore, pp 209-217.
- L.N. Pattanaik and Ch. Koteswarapavan, "Assessment of Lean Manufacturing Using Data Envelopment Analysis (DEA) on Value Stream Maps", Proceedings of 1st International Conference on Innovative Product Design and Intelligent Manufacturing

- System (ICIPDIMS-19), 17-18 May, 2019, NIT-Rourkela.
- 4. Avinash, K., Pattanaik, L. N. and Rajeev Agrawal (2019), Optimal sequence planning for multi-model reconfigurable assembly system, The International Journal of Advanced Manufacturing Technology 100: 1719-1730.
- 5. L. N. Pattanaik and Abinash Jena (2019), Tri-objective optimization of mixed model reconfigurable assembly system for modular products, International Journal of Computer Integrated Manufacturing, 32:1, 72-82.
- 6. Abhilash J., Apeksha and Acherjee B. (2018) Simulation of friction stir welding using thermo-mechanical coupled finite element method, IOP Conf. Series: Materials Science and Engineering, 455, 012113.

11. Achievements of Students

SI. No.	Name of Student	Achievement/Position/Award etc	Organised by	Date and Venue
1.	ADITYA SINGH (BE/10664/16)	Rank 1 in Cyber Threat Competition, 3 Lakhs cash prize and pre placement offer	Deloitte Techno Utsav	April 16 2019 Bangaluru
2.	ADITYA KUMAR LAL (BE/10016/16)	Rank 1 in Cyber Threat Competition, 3 Lakhs cash prize and pre placement offer	Deloitte Techno Utsav	April 16 2019 Bangaluru

12. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of Visitor with Affiliation	Date of Visit
1.	Invited lecture in One Day Workshop on the topic "FEM using Hyperworks" by Mr. Ghanshyam Gope, Faculty, CAD/CAM/CAE from Jharkhand Government MSME Tool Room, Ranchi And Mr. Purnendu Pankaj, Engineer- Training	31/08/2018.



SI. No.	Name of Visitor with Affiliation	Date of Visit
2.	Expert lecture in One Day, Workshop- "Manufacturing Simulation Technologies" by Mr. Kaushik Maity, Manager, Altem Technologies, Bangalore	15/03/2019
3.	Expert lecture in One Day Workshop- "X-RayResidual stress analyzer" by Mr. Amit Bandyopadhyay, General Manager (Business Development) and Mr. Ryo Masuya (Productapplication specialist), of Pulstec, Japan	24/05/2019





DEPARTMENT OF REMOTE SENSING

SECTION 1

DEPARTMENTAL PROFILE





1. About the Department

Department of Remote Sensing was established in 1997 with an aim to meet the increasing demand for qualified manpower in this rapidly developing field. Application of Remote Sensing/ Geoinformatics techniques using tools such as Geographic Information System (GIS) and Global Positioning System (GPS) in various activities including resources evaluation, environmental monitoring and land use/land cover mapping etc, has grown considerably during the last few decades and RS data products are increasingly being used for plan formulation at all levels. An essential pre-requisite to partaking in these opportunities is the building of various indigenous capacities for the development and utilization of space science and technology.

Department of Remote Sensing is a FIST-DST sponsored department and is also supported by UGC SAP (Special Assistance Programme). A multi-disciplinary team of faculty members is the strength of the department and they are also engaged in various R&D project and consultancy projects from various government and international organizations. The department also participates in the Distance learning Programmes (EDUSAT) conducted by IIRS, ISRO, Dehradun.

offered **Postgraduate Programmes** by the department: Department offers two Post Graduate Programmes of 2 years duration: (a) M. Tech. in Remote Sensing, (b) M.Sc. in Geoinformatics. Our M.Tech **Programme is NBA-Accredited.** In M.Tech. course, first year focuses on Theoretical and Practical Aspects of Remote Sensing, GIS, GPS, Photogrammetry, Programming, Geostatistics and various geo-spatial applications. Second year focuses mainly on developing Independent Research Skill through individual geo-spatial research project.

For M.Sc. the period of theoretical study is spread over 3 semesters with examination requirements at the end of each semester. In Fourth Semester, main emphasis is on Research Project.

Department of Remote Sensing also offers Ph.D. programme in interdisciplinary mode.

The Department has state-of-art laboratories equipped with latest software, hardware to provide hands-on training to its postgraduate students. The Department has seven dedicated labs catering to Digital Image Processing (DIP), GIS, Digital Photogrammetry, Satellite Navigation & GPS, Remote Sensing Research & Project, and departmental library for Satellite Data and Maps.

Major equipment in different labs are as follows:

- Leica Smart Station (Total Station with DGPS)
- 2. Leica Deferential Global Positioning System
- Unmanned Aerial Surveillance Vehicle with Thermal Sensor, Optical Sensor and Surveillance Camera
- 4. Ground Water Resistivity Meter

- 5. Hand held GPS
- 6. i7 Desktops with IR emitter, 3D vision kit, 3D monitor & Leica Photogrammetry Suit
- 7. i7 Desktops with 24" TFT monitor with ERDAS Image Processing Software
- 8. i5 Desktops with 19" TFT monitor with Arc GIS software
- 9. A0 plotter & scanner (Multi-function printer)

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

a) Ongoing Projects

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
1.	SMG-BIT Agri Research Project	Dr. C. Jeganathan (PI) Dr. A.P. Krishna Dr. Vandana Bhattacharjee Dr. Abhijit Mustafi Dr. Sudhanshu Mishra	Skymap Global Pvt. Ltd.	01-01-19	7.5 Lakhs	1 Year
2.	"Geophysical characterization of subsurface Calcrete deposits in semi arid - arid region of Rajasthan using fully polarimetric L- and S-band SAR data"	Dr. V.S. Rathore (PI) Dr. A.P. Krishna & Dr. Gulab Singh IITB (Co-PI)	SAC, ISRO, Ahmedabad	14.05.2018	13.44 Lakhs	2 Years
3.	Land Use Land Cover Mapping of Eastern UP and Western Bihar – 3 rd Cycle	Dr. C. Jeganathan (PI) Dr. A.P. Krishna (Co-PI) Dr. V.S. Rathore (Co-PI) Mrs. Richa Sharma (Co-PI) Mr. Nitish Kr. Sinha (Co-PI)		August, 2016	51.48 Lakhs	3 Years
4.	Estimation of TIS derived Martian Surface temperature and assessment of its inter-annual variability in the current Martian climate in accordance with MCC derived morphological units	Dr. Mili Ghosh Nee Lala (PI), Dr. A. P. Krishna (Co-PI), Dr. C. Jeganathan (Co-PI)	ISRO, Bangalore	18-08-16	17.43 Lakhs	3 Years

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
5.	Refinement of existing algorithms for FeO and TiO2 mapping using HySI data and a comparative assessment of the HySI generated maps with that of Clementine and Moon Mineralogy Mapperderived FeO and TiO2 products	Lala (PI), Dr. A.P. Krishna (Co- PI),	ISRO, Bangalore	17-08-16	17.20 Lakhs	3 Years
6	National Wasteland Change Analysis -2015-2016	Dr. V.S. Rathore (PI), Dr. A.P. Krishna (Co-PI), Dr. C. Jeganathan Mr. Nitish Kr. Sinha (Co-PI)	NRSC, ISRO, Hyderabad	2016 (22.07.2016 and LUCMD: BH-UP-WCA: 3CY:30)	13.25 Lakhs	2 Years

b) Projects Completed

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Date of completion of the Project
1.	Ground Water Quality Mapping In Parts Of MP State under RGNDWM Ph IV	PI: Dr. V. S. Rathore	National Remote Sensing Center,	2.6.11	45.25 Lakhs	2.6.11 - 31.12.18
2	National Land degradation Mapping- 2 nd Cycle	Dr. A.P. Krishna (PI) Dr. C. Jeganathan (Co-PI) Dr. V.S. Rathore (Co-PI) Mr. Nitish Kr. Sinha	NRSC, ISRO, Hyderabad	26-05-16	16.66 Lakhs	Jul, 2018
3.	IWMP-KANKE	Executive Committee (Dr. V.S. Rathore, Nodal Officer, Head, DRS, Project Coordinator, Dean Student Welfare, Project Director, Head, Civil & Environmental Engg, Mission Director)	Mord, dolr, Govt of India	30.06.11	594 Lakhs (5.94 Crore)	30.06.11 -31.3.2019
4.	Locating Ground Water Table near Bokaro town at 16 different locations	Dr. V.S. Rathore	ONGC, Bokaro	20.08.2018	1.20 Lakhs	(September to October, 2018)

SECTION 3 SEMINAR / CONFERENCE

3. Seminar / Conferences / Short – Term Courses Conducted by the Department/Campus

SI. No.	Title of Seminar/ Conference/ Short Term Courses/ Workshop	Coordinator	Funding / Sponsoring Agency	Date of Event
1.	Workshop on National Information System for Climate and Environment Studies (NICES) Data Products	` ` '	NRSC (ISRO), Hyderabad	31-01-19

4. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Dr. A.P. Krishna Dr. Mili Ghosh	2 nd Lunar Science Meet	ISRO	ISRO	ISRO HQ, Bangalore	13-14 th June, 2019
2.	Dr. V.S. Rathore	Advancements in Remote Seensing Data Analysis	Department of Civil Engineering, IIT Roorkee	IIT Roorkee	IIT Roorkee	17-21 June 2019
3.	Mrs. R.N.K. Sharma	4 th Int. Conf. on Adv. Machine Learning Tech. & Appli (AMLTA-19)	Self financed	SRGE, Cairo University, Egypt	Cairo	28-30 th Mar, 2019
4.	Dr. A.P. Krishna Dr. C. Jeganathan Dr. N. Patel Dr. V.S. Rathore Mrs. RNK Sharma Dr. Mili Ghosh Nee Lala	Workshop on National Information System for Climate and Environment Studies (NICES) Data Products	ISRO	Dept. of Remote Sensing, BIT Mesra and NRSC, ISRO	BIT Mesra, Ranchi	31st Jan, 2019
5.	Dr. C. Jeganathan	International Conference on Environmental Challenges and Sustainability (ICECS 2018)	Central University of Jharkhand, Brambe, Ranchi	Central University of Jharkhand, Brambe, Ranchi	Central University of Jharkhand, Brambe, Ranchi	31 st Oct to 2 nd Nov, 2018
6.	Dr. C. Jeganathan,	Advancing Drought Monitoring, Prediction and Management Capabilities	India-UK Water Centre	India-UK Water Centre	Lancaster University, UK	18 th Sep to 20 th Sep, 2018
7.	Dr. V.S. Rathore	One day workshop prevention of harassment at work place	TEQIP-III	BIT Mesra, Ranchi	BIT Mesra, Ranchi	June 25, 2019
8.	Dr. V.S. Rathore	One day workshop on "Intellectual Property Rights Management"	TEQIP- III	IPR Cell, BIT Mesra, Ranchi	R&D Seminar Hall, BIT Mesra, Ranchi	June 10, 2019
9.	Dr. C. Jeganathan	One day workshop on "Intellectual Property Rights Management"	TEQIP- III	IPR Cell, BIT Mesra, Ranchi	R&D Seminar Hall, BIT Mesra, Ranchi	June 10, 2019

SECTION 4 RESEARCH PUBLICATIONS

5. Publications in Journals: (International/National)

- 1. Suman Sinha, Santra, A., Sharma, L.K., Jeganathan, C., Nathawat, M.S., Das, A.K. and Shiv Mohan (2018). Multipolarized Radarsat-2 satellite sensor in assessing forest vigor from above ground biomass. Journal of Forestry Research, 29(4), 1139-1145.
- Niraj Priyadarshi, V.M. Chowdary, Iswar Chandra Das, Jeganathan C., Y.K. Srivastava, G Srinivasa Rao, Uday Raj & Chandra Shekhar Jha (2018). Wavelet and non-parametric statistical based approach for long term land cover trend analysis using time series EVI data. Geocarto International. DOI: 10.1080/10106049.2018.1520925.
- Saptarshi Mondal and Jeganathan, C. (2018). Evaluating the performance of multi-class and single-class classification approaches for mountain agriculture extraction using time series NDVI. Journal of Indian Society of Remote Sensing, 46(12), 2045-2055.
- Margaret Johnson, Petrutza C. Caragea, Wendy Meiring, C. Jeganathan and Peter M. Atkinson (2018). Bayesian Dynamic Linear Model for estimation of phenological events from Remote sensing data. Journal of Agricultural, Biological and Environmental Statistics. DOI: 10.1007/s13253-018-00338-y.
- Suman Sinha, A. Santra, A.K. Das, L.K. Sharma, Shiv Mohan, M.S. Nathawat, S.S. Mitra & C. Jeganathan (2019). Accounting tropical forest carbon stock with synergistic use of space-borne ALOS PALSAR and COSMO-Skymed SAR sensors. Tropical Ecology, 60(1), 83-93. DOI 10.1007/s42965-019-00011-6.
- Hazra, P and Krishna, AP, 2019. Spatiotemporal change assessment of glacier extent in Sikkim Himalaya, India using geospatial techniques, Environmental Earth Sciences, DOI: 10.1007/s12665-019-8390-1;

- 7. Kumar, A, Krishna, A P, 2019. Groundwater vulnerability and contamination risk assessment using GIS-based modified DRASTIC-LU model in hard rock aquifer system in India, Geocarto International, DOI: 10.1080/ 10106049.2018.1557259
- 8. Kumar, A, Krishna, AP, 2018. Assessment of groundwater potential zones in coal mining impacted hard-rock terrain India by integrating geospatial and analytic hierarchy process (AHP) Geocarto International, approach, Vol. 33, No. 2, pp. 105-129; DOI: 10.1080/10106049.2016.1232314;
- Gulab Singh, Rashmi Malik, Shradha Mohanty, Virendra Singh Rathore, Kanta Yamada, Maito Umemura, and Yoshio Yamaguchi (2019). Seven-Component Scattering Power Decomposition of POLSAR Coherency Matrix, IEEE Transactions On Geoscience And Remote Sensing. DOI: 10.1109/ TGRS.2019.2920762 Pandey, A.K. and Sharma, Richa, N.K. Sharma, G. P. (2019). Forest-cover change over Chotanagpur – An empirical approach on periodic sequence, Indian Forester, 145 (6): 501-512.
- 10. Mushtaq F, Lala MGN, Anand A (2018). Spatio-temporal variability of lightning activity over J&K region and its relationship with topography, vegetation cover, and absorbing aerosol index (AAI). Journal of Atmospheric and Solar-Terrestrial Physics, 179, 281-292.
- 11. Mushtaq F, Ahmad P and Lala MGN, (2018). Spatio-temporal change of surface temperature of Himalayan Lake and its inter-relation with water quality and growth in aquatic vegetation. Geocarto International, DOI:10.1080/10106049.2019.1590 467.

6. Publications in Proceedings (International/National)

- Swadhina Koley and Jeganathan, C. (2018). Geospatial technology: the emerging global trend towards the new horizon of sustainable agriculture. National Conference for Education in Science, Mathematics & Technology, Organised by Taurian World School, Ranchi, 11th August 2018. (2nd Best Paper Award).
- 2. Beependra Singh, C. Jeganathan and V.S. Rathore. (2018). Remote Sensing Technology for Monitoring and Modelling Ecological Processes, National Conference on Education in Science, Mathematics and Technology (NCESMT), at Taurian World School, Ranchi, Jharkhand on 11th August 2018.
- 3. Beependra Singh, C. Jeganathan and V.S. Rathore (2019). Assessment of Ecosystem health: A case study of Saranda forest, West Singhbhum district of Jharkhand, Central Indian Landscape Symposium, at Melghat, Maharashtra, India 3rd-6th January, 2019 (Poster Presentation) (Sponsored by Network for Conserving Central India).
- Farzana Shaheen, Nayama Valsa Scariah, Mili Ghosh Nee Lala, A.P. Jeganathan, C. (2019). Estimation of Atmospheric Optical Depth at Nili Patera region of Martian surface using Mars Color Camera image, National Space Science Symposium, Organised by Savitribai Phule Pune University (formerly university of pune) along with Inter-University Center for Astronomy and Astrophysics (IUCAA) and National Centre for Radio Astrophysics (NCRA) during 29-31 January, 2019. (Poster Presentation).
- Jeganathan, C. and Saptarshi Mondal (2018). Pitfalls, Challenges and Opportunities in time-series remote sensing, International Conference on Environmental Challenges and

- Sustainability (ICECS 2018) during 31st October to 2nd November 2018. (Presentation only).
- Jeganathan, C., Saptarshi Mondal, Sudhanshu Shekhar Jha and Beependra Singh (2018). Drought Modelling and Challenges. India-UK Water Centre Workshop on "Advancing Drought Monitoring, Prediction and Management Capabilities", 18th to 20th September, 2018, Lancaster University, UK. (Presentation Only).
- 7. Jeganathan, C. (2018). Forest Phenology outlook from Space Observation. Two-days Brainstorming workshop on "Future Prospects of Space Technology in Forest and Environmental Applications". Space Application Centre (SAC), ISRO, Ahmedabad during 27-28 June, 2018. (Presentation only).
- 8. Shaheen F., Krishna A.P., Rathore V.S. (2019) Delineation of Mine Fire Pockets in Jharia Coalfield, India, using Thermal Remote Sensing. In: Sahana S., Bhattacharjee V. (eds) Advances in Computational Intelligence. Advances in Intelligent Systems and Computing, vol 988. Springer, Singapore
- Beependra Singh, C. Jeganathan, V.S. Rathore (2018). Remote Sensing Technology for Monitoring and Modelling Ecological Processes. In: Er. Yogesh Popat (ed.) Conference Proceedings of National conference for Education in Science, Mathematics and Technology (NCESMT/TGC/120917) vol.1 (1), pp. 62-69 held on 11 August 2018, Ranchi, India.
- Mukhopadhy, U.K., Richa Sharma, N.K., Anwar, Shamama and Atmadeep Dutta (2019). Correlating Thermal Anomaly with Earthquake Occurrences using Remote Sensing Data, Advances in Intelligent Systems and Computing, vol 921. Springer, pp 863-875.
- 11. Rangarajan V G, Ghosh M, Seasonal Variations in SEB Components over



Gale crater, European Planetary Science Congress (EPSC-2018), Organized by Europlanet Society at TU Berlin, Germany on 16-21st Sep, 2018.

- 12. Rangarajan V G, Ghosh M, Localised seasonal dust deposition at Gale crater: Inferences from THEMIS thermal inertia, 50th Lunar & Planetary Science Conference (LPSC-2019), Organized by Lunar and Planetary Institute and NASA at The Woodlands, Texas on18-22nd Mar, 2019
- 13. Bose S, Krishna A.P. and Ghosh M, Chandrayaan-1:India's maiden mission to Moon, National Conference for Education in Science, Mathematics & Technology (NCESMT), at Taurian World School, Ranchi, Jharkhand on 11th August 2018.
- 14. Nayama V S, Ghosh M and Krishna A.P., Mars Exploration: An overview of Indian and International Mars Missions, National Conference for Education in

Science, Mathematics & Technology (NCESMT), at Taurian World School, Ranchi, Jharkhand on 11th August 2018.

Book:

7. Chapter(s) in Edited Book

- Somak Das, C. Jeganathan, Saptarshi Mondal & Richa Sharma (2018). Geospatial modelling of Human-Elephant conflicts in Dalma Wildlife Santuary and its surroundings in India. In: Michael Campbell (eds.) Geomatics and Conservation Biology, Nova Science Publishers, Inc., USA, ISBN: 978-1-53614-469-7.
- 2. C. Jeganathan and Praveen Kumar (2019). Mapping Agriculture Dynamics and Associated Flood Impacts in Bihar using Time-series Satellite Data. In: Sheraz Mahdi, Syed (Ed.), Climate Change and Agriculture in India: Impact and Adaptation, DOI: 10.1007/978-3-319-90086-5_5.

SECTION 5

AWARD / PATENT / COLLABORATIONS

8. Award / Recognition Bestowed on Faculties (State / National / International)

SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
1.	Dr. C. Jeganathan	Delivered an invited talk in the AICTE sponsored Quality Improvement Program "Developmental Path of Phytopharmaceuticals towards Future Perspective"	Pharmaceutical Sciences and Technology	National	14th Feb, 2019
2.	Mrs. RNK Sharma	Chaired a session in on "Soft Computing Applications in Environmental and Earth Sciences" in 4 th Int. Conf. on Adv. Machine Learning Tech. & Appli (AMLTA-19)	University, Egypt	International	28-30 th Mar, 2019

SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
3.	Dr. V.S. Rathore	"SAMAJ BANDU AWARD in the category of RS, GIS and Space Sciences	Prantik Care the Earth a non-Governmental organisation, Birbhum West Bengal	National	August 2 nd , 2018
4.	Dr. C. Jeganathan	Selected as "Associate Editor "in the Prestigeous "Journal of Indian Society of Remote Sensing", Springer.	Remote Sensing,	International	2 nd August 2018
5.	Dr. C. Jeganathan	Committee member "	Indian Society of Agriculture I n f o r m a t i o n Technology (INSAIT)	National	25 th Feb, 2019
6.	Dr. C. Jeganathan	Invited to be an external expert for Scientist selection committee	North-Eastern Space Application Center (NESAC, Dept. of Space), Shillong	National	3 rd April 2019

9. Patents (Applied / Granted)Nil

10. MoUs / Collaborations

SI. No.	Name of Organisation / University	Purpose / Area	Year / Duration
1.	National Remote Sensing Center (NRSC), ISRO, Hyderabad	Research Project	2018-21
2.	Space Application Center (SAC), ISRO, Ahmedabad.	Research Project	2018-21

SECTION 6

ACTIVITIES/ FACULTY MEMBERS / DOS /DAS

11. Departmental Students' Activities

	SI. No.	Name of the Activity	Students' Co-Ordinator (If any)	Faculty Co- ordinator (if any)	Date / Duration
	1.	Study Tour to Western Ghats	-	Mrs. RNK Sharma	18-02-19 to 01-03-19
\	2.	Field Tour to Dipa Toli Cant	-	Dr. C. Jeganathan and Dr. V.S. Rathore	09-02-19
	3.	Internship by students			
\		Monalisa Nath			10 th June to 9 th July, 2019 at National Crime Records Bureau, MHA, New Delhi
/		Rakhee Banerjee Vivek Rakshit Saptoparni Ghosh			17.12.18 to 15.01.19 at Geological Survey of India, Kolkata

SI. No.	Name of the Activity	Students' Co-Ordinator (If any)	Faculty Co- ordinator (if any)	Date / Duration
	Soumita Patra Kaushik Surojit Mandal Moumita Das			10.12.18 to 10.01.19 at CMPDI, Ranchi
4	Project internship			
	Subhadeep Maishal			01.10.18 to 31.04.19 at Department of Ocean Engineering & Naval Architecture, IIT Kharagpur
	Rashmi Singh			July, 2018 to June, 2019 at IIT Mumbai
5.	Paper presentation in conference	ences		
	Farzana Shaheen			29-31 Jan, 2019 at National Space Science Symposium,
	Swadhina Koley			11 th Aug, 2018 at National Conference for Education in Science, Mathematics & Technology, Organised by Taurian World School, 2 nd Best paper award
	Nayma Valsa Scariah			11 th Aug, 2018 at National Conference for Education in Science, Mathematics & Technology, Organised by Taurian World School
	Subhadyoti			11 th Aug, 2018 at National Conference for Education in Science, Mathematics & Technology, Organised by Taurian World School, 2 nd
	Beependra			11 th Aug, 2018 at National Conference for Education in Science, Mathematics & Technology, Organised by Taurian World School



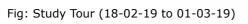




Fig: Field Tour (Feb, 2019)

12. List of Faculties

SI. No.	Name	Designation	TEQIP Sponsored	
1.	Dr. C. Jeganathan	Professor & Head	No	
2.	Dr. A.P. Krishna	Professor	No	
3.	Dr. N. Patel	Professor	No	
4.	Dr. V.S. Rathore	Assistant Professor	No	
5.	Mrs. RNK Sharma	Assistant Professor	No	
6.	Dr. Mili Ghosh Nee Lala	Assistant Professor	No	

13. Board of Studies

SI. No.	Name of the Member	Designation	Role
1.	Dr. C. Jeganathan	Professor, DRS, BIT, Mesra	Chairman
2.	Dr. A. K. Saraf	Professor, IIT-Roorkee	External Member
3.	Dr. Dibyendu Dutta	Scientist-SG, NRSC, ISRO, Hyderabad	External Member
4.	Dr. A. K. Sinha	Professor, CEE, BIT, Mesra	External member
5.	Dr. Mrs. Manjari Chakraborti	Professor, DArch, BIT, Mesra	External member
6.	Dr. A. P. Krishna	Professor	Internal member
7.	Dr. N. Patel	Professor	Internal member
8.	Dr. V.S. Rathore	Asst. Professor	Internal member
9.	Dr. Mili Ghosh	Asst. Professor	Internal member
10.	Mrs. Richa Sharma	Asst. Professor	Internal member

SECTION 7 OTHER INFORMATION

14. Publication by students, if any

- Saptarshi Mondal and Jeganathan, C. (2018). Evaluating the performance of multi-class and single-class classification approaches for mountain agriculture extraction using time series NDVI. Journal of Indian Society of Remote Sensing, 46(12), 2045-2055. (Dec, 2018)
- Hazra, P and Krishna, A P, 2019. Spatiotemporal change assessment of glacier extent in Sikkim Himalaya, India using geospatial techniques, Environmental Earth Sciences, DOI: 10.1007/s12665-019-8390-1;
- Kumar, A, Krishna, A P, 2019. Groundwater vulnerability and contamination risk assessment using GIS-based modified DRASTIC-LU model in hard rock aquifer system in India, Geocarto International, DOI: 10.1080/ 10106049.2018.1557259
- 4. Kumar, A, Krishna, AP, 2018. Assessment of groundwater potential zones in coal mining impacted hard-rock

- terrain of India by integrating geospatial and analytic hierarchy process (AHP) approach, Geocarto International, Vol. 33, No. 2, pp. 105–129; DOI: 10.1080/10106049.2016.1232314;
- Patel, Effects of Landuse and Landcover Dynamics on the Migration and Demographic Pattern of Tribal Population Using Geospatial Techniques, Theoretical and Empirical Researches in Urban Management (SCOPUS indexed) (Accepted for Publication)
- Gulab Singh, Rashmi Malik, Shradha Mohanty, Virendra Singh Rathore, Kanta Yamada, Maito Umemura, and Yoshio Yamaguchi (2019). Seven-Component Scattering Power Decomposition of POLSAR Coherency Matrix, IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING.
- 7. Mukhopadhy, U.K., Sharma, Richa, N.K., Anwar, Shamama and Dutta,



- Atmadeep (2019). Correlating Thermal Anomaly with Earthquake Occurrences using Remote Sensing Data, Advances in Intelligent Systems and Computing, vol 921. Springer, pp 863-875.
- 8. Bose S, Krishna A.P and Ghosh M, (2018). Chandrayaan-1:India's maiden mission to Moon, National Conference for Education in Science, Mathematics & Technology (NCESMT), at Taurian World School, Ranchi, Jharkhand on 11th August 2018.
- Nayama V S, Ghosh M and Krishna A.P, (2018). Mars Exploration: An overview of Indian and International Mars Missions, National Conference for Education in Science, Mathematics & Technology (NCESMT), at Taurian World School, Ranchi, Jharkhand on 11th August 2018.
- Somak Das, C. Jeganathan, Saptarshi Mondal & Richa Sharma (2018). Geospatial modelling of Human-Elephant conflicts in Dalma Wildlife Santuary and its surroundings in India. In: Michael Campbell (eds.) Geomatics and Conservation Biology, Nova Science Publishers, Inc., USA, ISBN: 978-1-53614-469-7. (Sep, 2018).
- 11. C. Jeganathan and Praveen Kumar (2019). Mapping Agriculture Dynamics and Associated Flood Impacts in Bihar using Time-series Satellite

- Data. In: Sheraz Mahdi, Syed (Ed.), Climate Change and Agriculture in India: Impact and Adaptation, DOI: 10.1007/978-3-319-90086-5_5. (January 2019).
- 12. Shaheen F., Krishna A.P., Rathore V.S. (2019) Delineation of Mine Fire Pockets in Jharia Coalfield, India, using Thermal Remote Sensing. In: Sahana S., Bhattacharjee V. (eds) Advances in Computational Intelligence. Advances in Intelligent Systems and Computing, vol 988. Springer, Singapore
- 13. Farzana Shaheen, Nayama Valsa Scariah, Mili Ghosh Nee Lala, A.P. Krishna, Jeganathan, C. (2019). Estimation of Atmospheric Optical Depth at Nili Patera region of Martian surface using Mars Color Camera image, National Space Science Symposium, Organised by Savitribai Phule Pune University (formerly university of pune) along with Inter-University Center for Astronomy and Astrophysics (IUCAA) and National Centre for Radio Astrophysics (NCRA) during 29-31 January, 2019. (Poster Presentation).
- 14. Mukhopadhy, U.K., Sharma, Richa, N.K., Anwar, Shamama and Dutta, Atmadeep (2019). Correlating Thermal Anomaly with Earthquake Occurrences using Remote Sensing Data, Advances in Intelligent Systems and Computing, vol 921. Springer, pp 863-875. https://doi.org/10.1007/978-3-030-14118-9_85

15. Achievements of Students

SI. No.	Name of Student	Achievement/ Position/Award etc	Organised by		Date and Venue		е		
1.	Swadhina Koley	2 nd Best paper award	Taurian School,	World		Aug, erence			
					Scien	ce, Matl	nematio	cs & Te	chnology

16. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
1.	Dr. C.S. Dubey, Prof., Dept. of Geology, University of Delhi	14-10-18	The same of the sa



SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
2.	Dr. S.K. Ghosh, Prof. & Head, Dept. of Civil Engg., IIT Roorkee.	18-04-19	
3.	Dr. D. Dutta, Scientist/Engr. 'SG' and Group Director (CSG), NRSC, ISRO, Hyderabad, NRSC	31-01-19	
4	Shri Mahesh P, Scientist, NRSC, ISRO, HYDERABAD	31-01-19	
5	Shri A. Bhuvana Chandra, Scientist, NRSC ISRO, HYDERABAD	31-01-19	
6	Miss Shalu, Scientist, NRSC ISRO, HYDERABAD	31-01-19	
7	Mr. Sarvesh Singhal, Director, JSAC and Special Secretary (IT) Jharkhand Government	31-01-19	
8	Dr. Pradosh Nag and Dr. Atasi, Centre for Knowledge Ideas and Development Studies, Calcutta	18-03-19	

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
9	Dr. Harish Karnatak, Scientist/Engineer - SF & Head, Geoweb Services, IT & Distance Learning (GIT&DL) Department, IIRS Dehradun	9 th to 10 th April, 2019	
10	Dr. Omkar Dixit, Professor, Department of Civil Engineering, IIT Kanpur	19-11-18	
11	Dr. Padmini Pani, Associate Professor Centre for the Study of Regional Development, School of Social Sciences, JNU, New Delhi	17-05-19	

Other Notable Achievements:

- 1. Dr. C. Jeganathan has been selected as an Associate Editor in the Prestigeous "Journal of Indian Society of Remote Sensing", Springer.
- 2. Dr. C. Jeganathan has been selected as an Executive Committee member of "Indian Society of Agriculture Information Technology (INSAIT)".
- 3. Dr. C. Jeganathan visited Lancaster University, UK as he was one of the few selected Indian Delegates (fully sponsored) to participate and make presentation in India-UK Water Center Workshop on "Advancing Drought Monitoring, Prediction and Management Capabilities" organised during 18th to 20th September, 2018, Lancaster University, UK.
- 4. Dr. C. Jeganathan was invited to be an external exprt for Scientist selction committee of North-Eastern Space Application Center (NESAC, Dept. of Space), Shillong.
- 5. Dr. A.P. Krishna and Dr.Mili Ghosh Participation in the Second Lunar Science Meet on Chandrayan-2 Mission at Antariksh Bhawan, Indian Space Research organisation(ISRO), Bangalore (June 13-14, 2019)
- 6. Dr. N. Patel has Editorship in Journals
 - i. Member, Editorial Board, Arabian Journal of Geosciences (Springer), SCIE, Scopus.
 - ii. Member, Editorial Board, International Journal of Sustainable Development and World Ecology (Taylor & Francis), Scopus.
 - iii. Member, Editorial Board (Associate Editor), Journal of Forestry Research (Springer), SCIE, Scopus.
 - iv. Journal of Ecology and Sustainable Development, Sweden.
 - v. Member, Editorial Board, Journal of Earth Sciences and Climate Change, USA (IF=1.0).
 - vi. Member, Editorial Board, International Journal of Agricultural and Statistical Sciences (ESCI, Scopus, NAAS rating 5.13).

- vii. Member, Journal of Environmental Geology, Pulsus Journals.
- viii. Member, Editorial Board, AMBIENCIA, Brazil.
- ix. Member, Advisory Board, Advances in Applied Research, NAAS Rating (2016) 3.22.
- x. Member, Editorial Board, Journal of Advanced Research in Remote Sensing and Geoscience, Advance Research Publications.
- 7. Dr. V.S. Rathore has been Conferred the "SAMAJ BANDU AWARD" in the category of RS, GIS and Space Sciences by Prantik Care the Earth a non-Governmental organisation, Birbhum West Bengalon August 2nd, 2018.
- 8. Mrs. R N K Sharma attended and Chaired a session entitled "Soft Computing Applications in Environmental and Earth Sciences (SCAEES 2019)" in an international Conference, Advanced Machine Learning Technologies and Applications (AMLTA2019), Cairo, Egypt, March 2019.







UK trip of Dr. Jeganathan (Sept, 2018)



Egypt Visit of Mrs. R.N.K. Sharma (March, 2019)



2nd Lunar Science Meet attended by Dr. A.P. Krishna and Dr. Mili Ghosh(June, 2019)

17. List of Distinguished Alumni

SI. No.	Name, Batch and Affiliation	Short Description				
1	Dr. C. P. Singh(1998-2000)	Scientist / Engineer - SF, Agriculture, Biosphere and Hydrology Group, Space Application Center				
2	Mr. Amitabh Kumar (1998-2000)	Scientist / Engineer - SF & Deputy Project Director Chandrayaan-2 at SAC (ISRO)				
3	Dr. Milap Punia (1997-99)	Professor, Centre for the Study of Regional Development, School of Social Sciences, JNU				
4	Dr. Poonam S Tiwari (1997-99)	Scientist / Engineer – SF, Remote Sensing and Geoinformatics Group, IIRS Dehradun				
5	Dr. Hina Pandey (1997-99)	Scientist / Engineer – SF, Photogrammetry and Remote Sensing IIRS				



Department of Space Engineering and Rocketry

SECTION 1

DEPARTMENTAL PROFILE





Supersonic Wind Tunnel Facility(WT0406)

About the Department:

The Department of Space Engineering and Rocketry was established in 1964 at BIT Mesra campus. It offers two-year postgraduate degree programs, leading to M. Tech. in Space Engineering and Rocketry with two specializations, namely Aerodynamics and Rocket Propulsion. The two programmes of the department have received NBA accreditation in 2018 for two years.

The departmental facilities consist of laboratories housing equipment for research and curriculum development in the related areas. The facilities for Aerodynamics include subsonic and supersonic wind tunnels, water tunnel, calibration rig, and a new supersonic free jet facility. The associated instrumentation include, Schlieren system, high-speed data acquisition system, 2-channel hot wire CTA system, dynamic pressure transducers, strain gage, pressure calibrators, high speed camera etc. Rocket propulsion laboratories consist of static fire test stands for solid, liquid and hybrid rockets, propellant preparation and characterization facilities. Combustion laboratory is equipped with pressure-controlled combustion set ups, flame propagation and stability setup, stereomicroscope, and optical pyrometer. A separate instrumentation laboratory is equipped with simultaneous thermal analyzer (DSC+TGA+DTG), UV-Vis spectrophotometer, bomb calorimeter, and Brookfield viscometers. All major data acquisition tasks are done using dedicated sensors and data acquisition cards. Computing needs are fulfilled by a dedicated computational fluid dynamics laboratory housing ten terminals. It includes research grade software including ANSYS suite and MatLab.

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

a) Ongoing Projects

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency			Duration of the Project
1.	Open Cavity Studies	Dr. Sudip Das, PI	RESPOND,	June 2016	24.46 Lakhs	3 years
	at Supersonic	Dr. Priyank Kumar, Co-PI	ISRO			
	Speed					

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
2.	Effect of protrusion on regression rate and combustion instabilities at varying L/D of hybrid rocket motor	_	SERB, DST, Govt. of India	23 rd August, 2016	31.20 Lakhs	3 Years
3.		Dr. Priyank Kumar, PI Dr. Sudip Das, Co-PI	AR & DB	29.06.2018	26.86 Lakhs	3 Years

SECTION 3 SEMINAR / CONFERENCE

3. Seminar / Conferences / Short – Term Courses Conducted by the Department/Campus

S	l. o.	Title of Seminar/ Conference/ Short Term Courses/ Workshop	Coordinator	Funding / Sponsoring Agency	Date of Event
1		32nd National Convention of Aerospace	Dr. Sudip Das	IE(I) and BIT	27.10.2018
		Engineers & National Seminar on Advances in	Dr. Priyank Kumar	Mesra	to
		Aerospace Sciences and Technologies			28.10.2018

4. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Dr. Sudip Das	32 nd National Convention of Aerospace Engineers,	IE (I)	IE(I) and BIT	BIT Mesra, Ranchi	Oct. 27-28, 2018
2	Dr. Mohan Varma	32 nd National Convention of Aerospace Engineers,	IE (I)	IE(I) and BIT	BIT Mesra, Ranchi	Oct. 27-28, 2018
3	Dr. Priyank Kumar	32 nd National Convention of Aerospace Engineers,	IE (I)	IE(I) and BIT	BIT Mesra, Ranchi	Oct. 27-28, 2018
4	Dr. Rajiv Kumar	12 th National Workshop on Recent Trends in Software Testing	TEQIP-III	Department of Computer Science and Engineering, BIT Mesra, Ranchi	BIT Mesra, Ranchi	May 20-24, 2019
5	Dr. Rajiv Kumar	· · · · · · · · · · · · · · · · · · ·	NRSC, ISRO, Hyderabad	Department of Remote Sensing, BIT Mesra, Ranchi	BIT Mesra, Ranchi	Jan. 31, 2019
6	Dr. Rajiv Kumar	One day workshop on "Intellectual Property Rights Management"	TEQIP- III	IPR Cell, BIT Mesra, Ranchi	BIT Mesra, Ranchi	June10, 2019

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
7	Dr. Rajiv Kumar	One Day Workshop on "Awareness of Fire Safety"	TEQIP- III	Determent of Chemical Engineering, BIT Mesra, Ranchi	R&D Seminar Hall BIT Mesra, Ranchi	March29, 2019
8	Dr. Rajiv Kumar	One-week workshop on "Emerging Techniques in Mechanical Engineering and Its Applications	TEQIP- III	Determent of Mechanical Engineering, BIT Mesra, Ranchi	R&D Seminar Hall, BIT Mesra, Ranchi	Feb. 25 to March 2, 2019
9	Dr. Partha Mondal	20th Annual AeSI CFD Symposium, Bangalore, India	TEQIP-III	NAL, Bangalore	Bangalore	August 9-10, 2018.
10	Dr. Partha Mondal	32nd National Convention of Aerospace Engineers	TEQIP-III	BIT Mesra, Ranchi	BIT Mesra, Ranchi	October 27 - 28, 2018
11	Dr. Shelly Biswas	32nd National Convention of Aerospace Engineers	TEQIP-III	BIT Mesra, Ranchi	BIT Mesra, Ranchi	October 27 - 28, 2018
12	Dr. Shelly Biswas	Designing Learner- Centric MOOC, IITBombay	NA	an online learning initiative of Indian Institute of Technology Bombay	NA	Aug 2 to Sept 6 2018.
13	Dr. Shelly Biswas	Pitfalls and Remedies under BIT & ICT Mumbai	TEQIP-III	BIT Mesra, Ranchi and ICT Mumbai	BIT Mesra, Ranchi	Dec17, 2018
14	Dr. Shelly Biswas	Workshop on "National Information System for Climate and Environment Studies (NICES) Data Products	NRSC, ISRO Hyderabad	Department of Remote Sensing, BIT Mesra, Ranchi	CAAT Hall, BIT Mesra, Ranchi	January31, 2019
15	Dr. Shelly Biswas	One Week Workshop on Emerging Trends in Mechanical Engineering and its Application	TEQIP-III	Department of Mechanical Engineering, BIT Mesra, Ranchi	R&D Seminar Hall, BIT Mesra, Ranchi	March5-9, 2019
16	Dr. Shelly Biswas	NRB DRDO Sponsored workshop on Awareness of fire safety	NRB DRDO	NRB DRDO	BIT Mesra, Ranchi	March29, 2019
17	Dr. Shelly Biswas	12 th National Workshop on Recent Trends in Software Testing	TEQIP-III	Department of Computer Science & Engineering, BIT Mesra, Ranchi	BIT Mesra, Ranchi	May 20-24, 2019
18	Dr. Shelly Biswas	One day workshop prevention of harassment at work place	TEQIP-III	BIT Mesra, Ranchi	BIT Mesra, Ranchi	June 25, 2019

SECTION 4 RESEARCH PUBLICATIONS

5. Publications in Journals: (International/National): 09

- Aravind, S. and Kumar, R. (2019). "Supersonic Combustion of Hydrogen Using an Improved Strut Injection Scheme", International Journal of Hydrogen Energy, 44, 257-270.
- 2. Das, S., Kumar, P. and Prasad, J.K. (2019). "Hypersonic Flow over Hemispherical Blunt Body with Spikes", Scientia Iranica, 26(1), 358-366.
- 3. Dinesh M. and Kumar, R. (2018). "Development of EVA-SEBS based Wax Fuel for Hybrid Rocket Applications", Acta Astronautica, 152, 325-334.
- Dinesh M. and Kumar, R., Utilities of Multi-Protrusion as the Performance Enhancer in Hybrid Rocket Motor" Journal of Propulsion and Power, 2019DOI:10.2514/1.B37491.
- Kumar, B.A., Kumar, P., Das, S. and Prasad, J. K. (2018). "Effect of leading edge shapes on 81°/45° double-delta wing at low speeds" Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 232 (16), 3100-3107.
- Kumar, P. and Prasad, J. K. (2018). "Effect of multiple rings on side force over an ogive-cylinder body at subsonic speed", Chinese Journal of Aeronautics, 31(6), 1181 - 1188.
- 7. Saranyamol, V. S., Kumar, P. and Das, S. (2018). "Influence of Impinging Wall Ramping Modification on the Flow Field of Open Cavity at M=2.0", J. Fluids Eng, Transactions of ASME, 140(7),, DOI: 10.1115/1.4039247.
- 8. Roy D., Kumar, P. and Das, S. (2019). "Effect of Anhedral/Dihedral angles on a 76/40° Double Delta Wing at Low Speeds", Journal of Aerospace Engineering, American Society of Civil Engineers, https://doi.org/10.1061/(ASCE)AS.1943-5525.0001079.

9. Padwal M. B., and Varma, M. (2018). Thermal Decomposition Behavior and Combustion Characteristics of HTPB-Coarse AP Composite Solid Propellants Catalyzed with Fe2O3, Combustion Science & Technology, 190 (9), 1614-1629.

6. Publications in Proceedings (International/National)

International Conference: 05

- 1. Sahoo, D., Das, S., and Cohen, J., "Effect of body nose fairing on the unsteady flow characteristics over spiked flat faced cylinder at supersonic speed", AIAA-2316-2019, AIAA SciTech Forum, San Diego, California Jan. 7-11, 2019.
- 2. Das, S., and Cohen, J., "Reducing cavity flow pressure oscillations by change in rear face geometries at transonic speed", 21st Australasian Fluid Mechanics Conference, Adelaide, Australia, Dec.10-13, 2018.
- 3. Dinesh, M. and Kumar, R. "Investigation on Performance of Hybrid Rocket Motor with Non-Conventional Protrusion Configuration", Proceedings of Seventh Asian Joint Workshop on Thermophysics and Fluid Science, Trivandrum, Nov. 21-24, 2018.
- Kumar, S.P., Pooja, V.V. and Kumar, R. "Effect of Injector Configuration on the Performance of Tribrid Rocket Engine", Proceedings of Seventh Asian Joint Workshop on Thermophysics and Fluid Science, Trivandrum, Nov. 21-24, 2018.
- Mondal, P., "Application of Modified Discrete Vortex Method in Ground Effect Studies", 20th Annual AeSI CFD Symposium, Bangalore, India, Aug. 9-10, 2018.

National Conference: 12

1. Kumar, N., Dinesh, M. and Kumar, R. "Effect of Activated Charcoal on

- the Performance of Hybrid Rocket Motor" National Aerospace Propulsion Conference, IIT Kharagpur, Dec. 17-19, 2018.
- Rajput, S. S., Dinesh, M. and Kumar, R., "Studies on the Effect of Protrusion in Liquefying and Non-Liquefying Hybrid Rocket Fuels" National Aerospace Propulsion Conference, IIT Kharagpur, Dec. 17-19, 2018.
- Krishna, T. V., Kumar, P., Desikan, S. L. N., and Das, S., "Experimental investigation of cavity flows with rear corner and face modifications", Proceedings of the 2nd National Aero Propulsion Conference, NAPC-2018, IIT Kharagpur, Dec. 17-19 2018.
- Krishna, T. V., Kumar, P., Desikan, S. L. N., and Das, S., "Experimental investigation of cavity flows with stepped impinging wall at Mach 2.0", CP 023, SAROD 2018, 8th Symposium on Applied Aerodynamics and Design of Aerospace Vehicles, Bengaluru Nov. 29-Dec 1, 2018.
- Uma, V., Joshi, P. C., and Biswas, S., Regression rate and combustion characteristics of shellac based hybrid fuel, 32nd National Convention of Aerospace Engineers & National Seminar on Advances in Aerospace Sciences and Technologies, BIT Mesra, Ranchi, Oct. 27-28, 2018.
- Mondal, P., "Euler Simulation Using a 3D Unstructured Compressible Solver", 32nd National Convention of Aerospace Engineers, BIT Mesra, Ranchi, Oct. 27-28, 2018.
- 7. Dinesh, M. and Kumar, R. "Performance Evaluation of Mg-Iron Based Wax Fuels for Hybrid Rocket Applications" 32nd National Convention of Aerospace Engineers & National Seminar on Advances in Aerospace Sciences and Technologies, Oct. 27-28, 2018.
- Kumar, N., Bala. V. D. and Kumar, R. "Effect of Adding Ammonium

- Perchlorate on The Performance of Hybrid Rocket Motor" 32nd National Convention of Aerospace Engineers & National Seminar on Advances in Aerospace Sciences and Technologies, Oct. 27-28, 2018.
- Arvind, S. and Kumar, R. "Numerical Investigation on the Effects of Velocity Gradient on Shear Layer in Scramjets" 32nd National Convention of Aerospace Engineers & National Seminar on Advances in Aerospace Sciences and Technologies, October 27-28, 2018.
- Saranyamol, V. S., Kumar, P., and Das, S., "Influence of cavity floor on the unsteady characteristics of flow inside an open cavity at supersonic speed", 32nd National Convention of Aerospace Engineers, NCAE 2018, BIT Mesra, Ranchi, Oct. 27-28, 2018.
- 11. Swain, S. K., Mohanta, D. K., Das, S., "Outcome Based Education Program Outcome Assessment for an Engineering Undergraduate Course", Poster Paper at 4th World Summit on Accreditation, Challenges and Opportunities in Outcome Based Accreditation (WOSA 2018), New Delhi, Sept.7-9 2018.
- 12. Sehajpal, J. and Varma, M., Thermal Decomposition and Burn Rate Studies of AP-HTPB Based Composite Solid Propellants with Added Surfactant, Proc. 32nd National Convention of Aerospace Engineers, BIT, Ranchi, Oct. 27-28, 2018.

7. Book:

Chapter(s) in Edited Book

1. Varma, M. and Lokeshwaran N. (2019). Catalytic Thermal Decomposition and Combustion of HTPB-AP Composite Solid Propellants in Presence of Nanosized Bimetallic TMOs in, Kalyna Jocosa Pace (Ed), Thermal Decomposition: Process and Effects, (pp. 29-68). Nova Publisher, New York.

SECTION 5

AWARD / PATENT / COLLABORATIONS

8. Award / Recognition Bestowed on Faculties (State / National / International)

SI. No.		Title of the Award/ Honour	Organisation	State / National / International Level	Year / Duration
1.	Dr. Sudip Das	Eminent Engineering Personality Award 2018	Aerospace Division Board, IE (India) at the 32 nd NCAE - 2018	National	Oct. 27- 28, 2018
2.	Dr. Mohan Varma	Expert Panel Member	Gas Turbine Research Establishment (DRDO),		2018- 2019
3.	Dr. Rajiv Kumar	Jury Member	Inspire Project Exhibition and Competition	State	Jan. 08, 2019

SECTION 6

ACTIVITIES/ FACULTY MEMBERS / DOS /DAS

9. Departmental Students' Activities

SI. No.	Name of the Activity	Students' Co-Ordinator (If any)	Faculty Co- ordinator (if any)	Date / Duration
1.	Poster Presentation Competition for judging the best two Master's Thesis M.E. students (Batch 2017-19) of the Department		Dr. Shelly Biswas	03.05.2019
2.	A team 14 students visited SDSC SHAR to witness the launch of GSLV MkIII scheduled on Nov. 14, 2018.		Dr. Partha Mondal	14.11.2018

10. List of Faculties as on 30.6.2019

SI. No.	Name	Designation	TEQIP Sponsored
1.	Dr. Mohan Varma	Professor	No
2.	Dr. Sudip Das	Professor and Head	No
3.	Dr. Priyank Kumar	Assistant Professor	No
4.	Dr. Partha Mondal	Assistant Professor	No
5.	Dr. Rajiv Kumar	Assistant Professor	No
6.	Dr. Shelly Biswas	Assistant Professor	No
7.	Dr. Swarupkumar Y. Jejurkar	Assistant Professor	No

11. List of Adjunct Faculties

SI. No.	Name	Designation	Affiliation	
1.	Prof. Rajkumar S. Pant	Professor	IIT Bombay	
2.	Padmashri Prof. R. M. Vasagam	Chancellor	Dr. MGR Educational and Research Institute, Chennai	

12. Board of Studies

SI. No.	Name of the Member	Designation	Role	
1.	HOD/in-Charge	Chairman (Ex-officio)	Internal Member	
2.	Dr. Mohan Varma	Professor	Internal Member	
3.	Dr. Sudip Das	Professor	Internal Member	
4.	Dr. Priyank Kumar	Asst. Professor	Internal Member	
5.	Dr. Rajiv Kumar	Asst. Professor	Internal Member	
6.	Dr. D. P. Mishra	Professor	Internal Member	
7.	Dr. M. Mukherjee	Professor	Internal Member	
		Any two of the following		
8.	Dr. M. K. Laha	Professor, Deptt. of Aerospace Engg., IIT, Kharagpur	External Member	
9.	Dr. D. P. Mishra	Professor, Deptt. of Aerospace Engg., IIT, Kanpur	External Member	
10.	Dr. Debopam Das	Professor, Deptt. of Aerospace Engg., IIT, Kanpur	External Member	
11.	Dr. S. R. Chakravarthy	Professor, Deptt. of Aerospace Engg., IIT Madras, Chennai	External Member	
12.	Dr. S. B. Verma	Dy. Head, Experimental Aerodynamics Division, NAL, Bangalore	External Member	
13.	Shri P. Pathak	Dy. GM, R&D Centre of Steel Authority of India Ltd. Shyamli Colony, Doranda, Ranchi - 834002	External Member	

SECTION 7 OTHER INFORMATION

13. Achievements of Students

SI. No.	Name of Student	Achievement/Position/ Award etc	Organised by	Date and Venue
1.	Mr. Sidhharth Behal	1 st Prize in Poster Presentation Completion	-1	03.05.2019 SER, BIT Mesra
2.	Ms. Vempalli Vani Pooja	2nd Prize in Poster Presentation Completion	Deptt. of SER, BIT Mesra, Ranchi	03.05.2019 SER, BIT Mesra

14. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
1.	Shri S. Somanath, Director, Vikram Sarabhai Space Centre, Trivandrum	27.10.2018	
2.	Shri. S. Pandian, Director, Satish Dhawan Space Center, Sriharikota, Nellore	27.10.2018	
3.	Dr. (Mrs.) Tessy Thomas, Director General, Aeronautical Systems (DG-Aero) of Defence Research and Development Organisation (DRDO)	27.10.2018	
4	Padmashri R. M. Vasagam, Retired Scientist, Vikram Sarabhai Space Centre, Trivandrum	27.10.2018	
5	Shri. S. K. Mishra, Managing Director, Brahmos	28.10.2018	

15. List of Distinguished Alumni

Sr. No	Name, Batch and Affiliation	Short Description
1.	Shri E V S Namboodiry Batch: 1967-1968	Chairman, Cryogenic Project Deputy Director, Liquid Propulsion Systems Centre (LPSC), ISRO (1999)
2.	Shri A. K. Chakrabarty Batch: 1972-1974	Director, Defence Research & Development Laboratory, DRDL (2012)
3.	Shri Sibnath Som Batch: 1983-1985	Director, Defence Research and Development Laboratory, DRDL (2014)
4.	Padma Shri M. C. Dathan Batch: 1984-1986	Director, Satish Dhawan Space Centre (2008) Director, Vikram Sarabhai Space Centre (2014)
5.	Dr. D. Narayan Batch : 1989-1991	Scientist 'G' Group Director, Aeronautical Development Agency (ADA)

16. Any other relevant

- 1. **9** numbers of Invited Lectures have been arranged during AY 2018-2019.
- 2. **2** numbers of Special Course Lecture have been arranged during AY 2018-2019.
- 3. **5** numbers of New R&D Project Proposal have been submitted to various agencies during AY 2018-19



BIT MESRA Off Campuses and University Polytechnic

Birla Institute of Technology has well established off campuses at Deoghar, Lalpur (Ranchi), Patna, Noida, & Jaipur and a University Polytechnic at Mesra, Ranchi.

Deoghar Off-Campus

SECTION 1 CAMPUS PROFILE





1. About the Campus

BIT Mesra, Off-Campus Deoghar was established in 2007 with the financial and infrastructural supports from the Govt. of Jharkhand. This Off Campus has entered into 13th year of its successful operation. Over the years, the Institute has established itself as an important, fully residential, AICTE approved educational hub in Santhal Pargana, Jharkhand. The campus is well equipped with modern instrumental and software facilities for the undergraduate engineering courses in CSE, ECE, EEE, Mechanical and Production Engineering with a total intake capacity of 270.

The campus has its own staff quarters, library (having more than 28, 900 volumes), language lab, gymnasium, health centre, ambulance facility, ATM, canteen, play ground, two basket ball courts, entrepreneur development cell, training and placement cell and is under CC TV surveillance. Most of the faculty members of this campus are engaged in R&D activities; organise conferences, workshops & seminars and regularly publish quality research articles in journals of international repute. The NSS members of the campus regularly arranges for blood donation camps and literacy drives in nearby villages as a part of the Institute's social responsibilities.

The campus celebrates a number of events including Independence Day, Republic Day, Saraswati puja, Viswakarma puja, Karma, Dandia night, International Yoga day, annual techno-cultural fest Utthaan, annual literary fest Aurora, annual sports meet etc. Over the years, the Institute has encouraged its students to take part in various inter college affairs including athletic and sports events and literary activities. Over the years, the Institute has witnessed its students to get well placed not only in Govt. sectors, like defence, ONGC, IOCL, power plants, renewable energy, electricity distribution etc., but the alumni of this campus are efficiently working in multi-national companies, like TCS, CTS, Wipro, Amdocs, IVP, Samsung etc. The Institute has also produced a number of entrepreneurs, who are successfully running their own companies and business ventures. Apart from giving quality education and healthy lifestyles, the Institute is also very keen in developing the moral characters of its students and thus regularly arranges for spiritual events in association with Art of Living, Ram Krishna Math and Mission, International Society for Krishna Consciousness etc.

SECTION 2 SEMINAR / CONFERENCE

2. Seminar / Conferences / Short – Term Courses Conducted by the Department/Campus

SI. No.	Title of Seminar/ Conference/ Short Term Courses/ Workshop	Coordinator	Funding / Sponsoring Agency	Date of Event
	•	·	,	20.05.19 – 24.05.19
	Engineering Industry 4.0	Dr. Vinay Sharma (Convener) & Dr. Pankaj Mishra (Co-Convener)	BIT Deoghar	14/02/2019 - 16/02/2019

3. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Dr. Chinmay Chakraborty	Smart Sensors and Systems	AICTE	IIT BHU	IIT BHU	22.10.18 - 27.10.18
2.	Mr. Akash Kumar Gupta	Application of Biomedical Signal Processing Techniques in Healthcare 2018	-	MeitY, Govt. Of India	IIT Patna	07 th -09 th Sep 2018
3.	Mr. Akash Kumar Gupta	VLSI Design Trend using FPGA Implementation Verilog/VHDL	-	MeitY, Govt. Of India	NIT patna	08 th -12 th Oct 2018
4.	Mr. Akash Kumar Gupta	Wireless and Mobile Communication	-	MeitY, Govt. Of India	NIT patna	03 rd -07 th Dec 2018
5.	Mr. Akash Kumar Gupta	DSP and Sensors	-	MeitY, Govt. Of India	NIT patna	10 th -14 th Dec 2018
6.	Mr. Akash Kumar Gupta	AI and Machine Learning	-	MeitY, Govt. Of India	NIT patna	17 th -21 st Dec 2018
7.	Mr. Akash Kumar Gupta	Network Security	-	MeitY, Govt. Of India	BIT Mesra, Deoghar Campus	20 th -24 th May 2019
8.	Dr. Ram Krishna Sarkar	development	Ministry of Electronics and Information Technology	IIT Guwahati, NIT Patna and others	BIT Mesra, Off-Cmpus Deoghar	20.06.2019 to 24.06.2019
9.	Dr. Soumen Karmakar		Ministry of Electronics and Information Technology	IIT Guwahati, NIT Patna and others	BIT Mesra, Off-Cmpus Deoghar	20.06.2019 to 24.06.2019
10.	Dr. Manoj Kumar Dutta	One-week Faculty development Program on Network Security	Ministry of Electronics and Information Technology	IIT Guwahati, NIT Patna and others	BIT Mesra, Off-Cmpus Deoghar	20.06.2019 to 24.06.2019



SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
11.	Dr. Babu Lal Shahu	One-week Faculty development Program on Network Security	Ministry of Electronics and Information Technology	IIT Guwahati, NIT Patna and others	BIT Mesra, Off-Cmpus Deoghar	20.06.2019 to 24.06.2019
12.	Dr. Manoj Kumar Dutta	2nd International Conference on Computational Intelligence, ICCI 2018	BIT Mesra & TEQIP-III	BIT Mesra	Dept. of Computer Science	11.12.2019 to 12.12.2019
13.	Dr. Nishi Kant Kumar	One-week Faculty development Program on Network Security	Ministry of Electronics and Information Technology	IIT Guwahati, NIT Patna and others	BIT Mesra, Off-Cmpus Deoghar	20.06.2019 to 24.06.2019
14.	Dr. Kamta Nath Mishra	IEEE Sponsored International Conference on Recent Innovations in Electrical Electronics and Communication Engineering (IEEE-ICRIEECE), Bhubaneshwar	BIT Deoghar	KIIT Bhubaneshwar	Bhubaneshwar	July 27-28, 2018
15.	Dr. Ranjan Chattaraj	AICTE sponsored Short-term course on Liner Algebra and Differential equations	AICTE	Department of Mathematics, IIT, Kharagpur	IIT, Kharagpur	24 th –28 th August, 2018
16.	Dr. Amit Kumar	"Recent Advancement in Engineering - Industry-4.0 Ready" One week FDP on	BIT Mesra, Tech Labs & Edgate & TI University Electronics &		BIT Mesra, Off-Campus Deoghar	14 th -16 th February 2019 20 th -24 th
17.	Dr. Ritesh Kumar Upadhyay	Network Security FDP on Network Security	ICT Academies Government of India	ICT Academies Ministry of Electronics and Information Technology	BIT Mesra off campus Deoghar	May 2019 20 th May- 24 th May, 2019
18.	Mr. Ashutosh Kumar	FDP on Students Induction	Government of India / AICTE	Ministry of HRD	Maharshi Dayanand University, Rohtak Haryana	23 May to 3 June 2019
19.	Mr. Ashutosh Kumar	GIAN Course on Entrepreneurship and Advanced Manufacturing	Government of India	Ministry of HRD	College of Engineering, Pune	July 2019

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
20.	Mr. Ashutosh Kumar	Workshop on Recent Advancement in Engineering Industry 4.0	BIT Mesra off campus Deoghar	BIT Mesra off campus Deoghar	BIT Deoghar	February 2019
21.	Mr. Nilesh Kumar Rajalwal	Modelling & simulation of custom power devices for power quality improvement		E&ICT Academy, MNIT Jaipur	MNIT, Jaipur, Rajasthan	19 th -23 rd Nov. 2018
22.	Mr. Nilesh Kumar Rajalwal	International Conference on intelligent Systems and Green Energy		IEEE Vizag Bay Sub-Section	Andhra Univercity Campus, Visakhapatnam, A.P.	29 th -30 th June 2019
23.	Mr. Prabhat Kumar Ranjan	Renewable Energy & Applications (REA-2018)	TEQUIP-III	NIT, Patna	NIT, Patna	19 th -23 rd Dec 2018
24.	Mr. Prabhat Kumar Ranjan	Recent Advancement in Engineering Industry 4.0 Ready		BIT, Deoghar	BIT, Deoghar	14 th -16 th Feb 2019
25.	Mr. Prabhat Kumar Ranjan	IoT based Power Electronic Interface for Green Energy System	TEQIP-III	BIT, Mesra	BIT, Mesra	20 th -24 th May 2019
26.	Mr. Piyush Kumar Ojha	Renewable Energy & Applications (REA-2018)	TEQIP-III	NIT, Patna	NIT, Patna	19 th -23 rd Dec 2018
27.	Mr. Piyush Kumar Ojha	IoT based Power Electronic Interface for Green Energy System	TEQIP-III	BIT, Mesra	BIT, Mesra	20 th -24 th May 2019
28.	Mr. Deep Shekhar Acharya	Recent Advancement in Engineering Industry 4.0 Ready		BIT, Deoghar	BIT, Deoghar	14 th -16 th Feb 2019
29.	Mr. Deep Shekhar Acharya	5 th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON)		IEEE UP Section	MMMUT, Gorakhpur	2 nd –4 th Novermber 2018
30.	Mr. Deep Shekhar Acharya	International Conference on Intelligent Computing and Smart Communication (ICSC-2019)		Springer	THDC- IHET, Tehri, Uttarakhand	19 th -21 st April 2019

SI.	Name of	Title of the	Funding			
No.	the Faculty	Conference/ Seminar	Agency	Organizers	Venue	Date
31.	Mr. Srihari Gude	Recent Advancement in Engineering Industry 4.0 Ready		BIT, Deoghar	BIT, Deoghar	14 th -16 th Feb 2019
32.	Mr. Srihari Gude	Advanced DSP Design Techniques		IIT, Kharagpur	IIT, Kharagpur	25 th -29 th Sept 2018
33.	Dr. Pankaj Mishra	Short Term Course on Component and Application of IoT (CAIoT)		IIT Patna	IIT Patna	24 th –28 th September 2018
34.	Mrs. Payal Bhardwaj	One Week Faculty Development Programme on Network Security	AICTE	Electronics And Ict Academies, Nit Patna	BIT Deoghar	20-24 May, 2019
35.	Mrs. Payal Bhardwaj	Recent Advancement In Engineering Industry-4.0 Ready	BIT Mesra	BIT Deoghar	BIT Deoghar	14-16 Feb, 2019
36.	Dr. Randhir Kumar	Environmental Performance of Manufacturing Systems: Modelling and Application	BIT Mesra Ranchi	IIT Kharagpur	IIT Kharagpur	25 March 2019 to 29 March 2019
37.	Dr. Randhir Kumar	Network Security	BIT Mesra Ranchi Ministry of Electronics and Information Technology (MeitY), Government of India.	BIT Deoghar	BIT Deoghar	20.05.2019 to 24.05. 2019
38.	Dr. Randhir Kumar	Recent Advancement in Engineering Industry 4.0 Ready	BIT Deoghar	BIT Deoghar	BIT Deoghar	14.02.2019 - 16.02.2019
39.	Dr. Abhishek Kumar Singh	Environmental Performance of Manufacturing Systems: Modelling and Application	BIT Mesra Ranchi	IIT Kharagpur	IIT Kharagpur	25 March 2019 to 29 March 2019
40.	Dr. Abhishek Kumar Singh	Network Security	BIT Mesra Ranchi Ministry of Electronics and Information Technology (MeitY), Government of India.	BIT Deoghar	BIT Deoghar	20.05.2019 to 24.05. 2019

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
41.	Mr. Prafulla Kumar Manoharan	Network Security	BIT Mesra Ranchi Ministry of Electronics and Information Technology (MeitY), Government of India.	BIT Deoghar	BIT Deoghar	20.05.2019 - 24.05. 2019
42.	Mr. Prafulla Kumar Manoharan	Recent Advancement in Engineering Industry 4.0 Ready	BIT Deoghar	BIT Deoghar	BIT Deoghar	14.02.2019 - 16.02.2019
43.	Mr. Balaram Mandal	(i) Recent Advancement in Engineering- Industry4.0 Ready (ii) Big Data Computing: A	(i) BIT, Deoghar (ii) CEP	(i) BIT, Deoghar (ii)IIT, Patna	(i)BIT, Deoghar (ii)IIT, Patna	(i) February 14-16, 2019 (ii) Dec 3-7, 2018
		Practical Approach				
44.	Mr. Sridhar Chintala	Faculty Development for Student Induction		MDU Rothak	MDU	24-30 May, 2019
		Regional Workshop for "Orientation of Participating Institutes to Initiate Work in Adopted Village Clusters", under UBA		IIT, Patna	IIT	21.12.2018
45.	Mr. Raja Ram Dutta	One week FDP on Network Security	Ministry of Electronics and Information Technology (MeitY)	BIT Deoghar with NIT Patna	BIT Deoghar	20.5.2019 to 24.5.2019
46.	Mr. Raja Ram Dutta	Recent Advancement in Engineering – Industry 4.0 Rady	BIT Deoghar	BIT Deoghar	BIT Deoghar	14.2.2019 to 16.2.2019
47.	Mr. Raja Ram Dutta	Workshop on Machine Learning	AICTE	CL Education Limited	AICTE HQ, New Delhi	7.2.2019 to 8.2. 2019
48.		Short Term Course / FDP on Bigdata Computing :A Practical Approach	BIT Deoghar	IIT Patna	IIT Patna	3.12.2018 to 7.12.2018
49.	Mrs. Anita Kushwaha	Workshop on Data Analytics and Machine learning		IIITA Allahabad	IIITA Allahabad	25 th May till 31 st May



SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
50.	Mrs. Anita Kushwaha	FDP on Network Security		NIT Patna	BIT DEOGHAR	20 th May 2019
51.	Mrs. Anita Kushwaha	Recent Advancement in Engineering – Industry 4.0-ready		BIT Mesra, Edgate Technologies Pvt. Ltd	BIT DEOGHAR	14 th -16 th February 2019
52.	Mrs. Anita Kushwaha	Workshop on Data Analytics and Machine learning		IIITA Allahabad	IIITA Allahabad	25 th May till 31 st May
53.			AICTE	IIT Kharagpur	IIT Kharagpur	10 th -16 th December, 2018
54.	Dr. Sounak Paul	Network Security	MHRD	BIT Mesra Off Campus Deoghar	BIT Mesra Off Campus Deoghar	20 th May 2019 - 24 th May, 2019

SECTION 3 RESEARCH PUBLICATIONS

4. Publications in Journals: (International/National)

- Chinmay C. (2019). Performance Analysis of Compression Techniques for Chronic Wound Image Transmission under Smartphone-Enabled Tele-wound Network, Int. Journal of E-Health and Medical Communications (IJEHMC), 10(2), 1-15,
- Kumar, NK, & Banerjee, S. (2019). Exploring Visual Analytics to measure reliability for IoT oriented pollution detection software perspectives. International Journal of Distributed Systems and Technologies, 10(2), 19.
- 3. Das, B.K., Kumar, B., Kuttippurath, J., & Chakraborty, A. (2018). Analyses of the oceanic heat content during 1980–2014 and satellite-era cyclones over Bay of Bengal. International Journal of Climatology, 38(15), 5619-5632.
- 4. Chakraborty, C. (2019). Computational approach for chronic wound tissue characterization. Informatics in Medicine Unlocked, 100162.

- Singh, M., & Jha, R. C. (2019). Object-Oriented Usability Indices for Multi-Objective Demand Side Management Using Teaching-Learning Based Optimization. Energies, 12(3), 370.
- 6. Thangaiah, I.S.S., Sharma, V, & Sundharam, V.N. (2018) Internet of Things (IoT) Integration with Enterprise Resource Planning Application in Manufacturing Industries. International Journal of Mechanical Engineering and Technology 9(7), 877–884.
- 7. Oraon, M, & Sharma, V. (2018) Predicting Force in Single Point Incremental Forming by Using Artificial Neural Network, International Journal of Engineering Transaction A Basic, 31(1), 88-95.
- 8. Thangaiah, I.S., Sharma, V., & Sundharam, V. N. (2018). Analysing of customer feedback on critical quality parameters to improve productivity in manufacturing—a case study. International Journal of Productivity and Quality Management, 23(3), 349-368.

- 9. Oraon, M., & Sharma, V. (2018). Investigation of Electromagnetic Radiation Emission during Sheet Metal Incremental Micro Forming. Materials Research, 21(1).
- 10. Oraon, M., & Sharma, V. (2018). Prediction of surface roughness in single point incremental forming of AA3003-O alloy using artificial neural network. International Journal of Materials Engineering Innovation, 9(1), 1-19.
- Rahman, M., Das, A.K., Chattopadhyaya, S., Bajpai, V., & Sharma, V. (2018). Investigation and Optimization of Micro-End-Milling of C-103 Nb-Alloy via Taguchi Design Method. Advanced Science, Engineering and Medicine, 10(3-4), 362-368.

5. Publications in Proceedings (International/National)

- Sravanth K.R., Anudeep P., Sudha S. and Chinmay C., Comparison of Attention and Meditation based Mobile Applications by using EEG signals, IEEE: Global Wireless Summit (GWS-SS), 260-265, 25-28 Nov. 2018. DOI: 10.1109/GWS.2018.8686634.
- 2. M.K.Dutta, "A Comparative Study among Different Signaling Schemes of Optical Burst Switching (OBS) Network for Real Time Multimedia Applications", Advances in Computational Intelligence. Advances in Intelligent Systems and Computing, vol 988. Springer, Singapore. Print ISBN: 978-981-13-8221-5 Online ISBN: 978-981-13-8222-2
- 3. M.K. Dutta, "Performance Analysis of Deflection Routing & Segmentation Dropping Scheme in Optical Burst Switching (OBS) Network: A Simulation Study", Advances in Computational Intelligence. Advances in Intelligent Systems and Computing, vol 988. Springer, Singapore. Print ISBN: 978-981-13-8221-5, Online ISBN: 978-981-13-8222-2.
- 4. Kamta Nath Mishra, "An Efficient Palatal Patterns Based Methodology for Identity

- Verification of Identical Twins", Proc. of the Eighth International Conference on Advances in Bio-Informatics, Bio-Technology and Environmental Engineering ABBE, Birmingham City University, UK, pp. 38–44, 2019. ISBN: 978-1-63248-167-2
- 5. Kamta Nath Mishra, "Verifying Identical Twins Identity Using Curves of Their Palatal Patterns", IEEE Sponsored International Conference on Recent Innovations in Electrical Electronics and Communication Engineering (IEEE-ICRIEECE), Bhubaneshwar, pp. 1-5, 2018. ISBN: 978-1-5386-0374-1
- Mitra, Suman., Mahapatra, Gautam., Valentina E Balas, & Chattaraj, R., Public key cryptography using harmony search algorithm., Innovations in infrastructure; Proceedings of ICIIF 2018 (Springer); ISBN 978-981-13-1966-2.
- 7. Singh, M., Jha, R. C., & Hasan, M. A. (2019). Prediction of Energy Availability from Solar and Wind for Demand Side Management. In Applications of Artificial Intelligence Techniques in Engineering (pp. 303-311). Springer, Singapore. ISBN: 978-981-13-1819-1
- Sahu, S.K., Khalkho, A.M., Mohanta, D.K., Reddy, M.J.B., Jha, R.C., & Ghosh, D. (2018, December). Fuzzy Reliability Analysis of Unit Commitment Problem Considering Uncertain Outage Replacement Rate and Load Representation. In 2018 20th National Power Systems Conference (NPSC) (pp. 1-6). IEEE.
- 9. Rajalwal, N. K. and Ghosh D., Adaptive Zone-III Relay Characteristic using System Integrity Protection Scheme. In IEEE International Conference on Intelligent System and Green Technology, IEEE Vizag Bay Sub-Section, Andhra University Campus, Visakhapatnam, A.P., 29th-30th June 2019,
- 10. Acharya, D.S., Mishra, S.K., Ranjan, P.K., Misra, S., & Pallavi, S., "Design



- of Optimally Tuned Two Degree of Freedom Fractional Order PID Controller for Magnetic Levitation Plant", In 2018 5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON) (pp. 1-6), November 2018
- 11. D.S. Acharya, S.K. Mishra (2019, April), "Parameter Optimization of a modified PIDControllerusing Symbiotic Organisms Search for Magnetic Levitation Plant", International Conference on Intelligent Computing and Smart Communication (ICSC-2019), THDC-IHET, Tehri, April 2019.
- 12. Ojha, Piyush Kumar, and P.R. Thakura. "Analysis of Voltage Source Boost Inverter." In Proceeding of the Second International Conference on Microelectronics, Computing & Communication Systems, pp. 9-16. Springer, Singapore, 2019.
- 13. Ojha, P.K., Barwar, M.K., Tripathi, P.R., & Thakura, P.R. "Hardware Implementation of Three-Phase Single Stage Boost Inverter for Higher Frequency". In 2018 Second International Conference on Electronics, Communication and Aerospace Technology (ICECA) (pp. 1934-1938). IEEE. 2018.
- 14. Ranjan, Prabhat Kumar & Thakura, P.R. (2019). "Analysis of Single-Stage Three-Phase DC-AC Boost Inverter For Distributed Generation System." In Proceeding of the Third International Conference on Nanoelectronics, Circuits and Communication Systems, Lectures notes in Electrical Engineering, vol 511, (pp. 245-254). Springer, Singapore, 2019.
- 15. Bhardwaj, P. & Badhai, R.K. Design of Planar Triple-Band Electrically Small Asymmetrical Antenna for ISM, WLAN, and X-Band Applications, Optical and Wireless Technologies-2020, Proceedings of OWT 2018, DOI: 10.1007/978-981-13-6159-3_57, Print ISBN 978-981-13-6158-6 Manish Oraon, Vinay Sharma,

- Soumen Mandal, "Statistical analysis of Single Point Incremental Forming for the Optimization of Force and Surface Roughness", 1st International Conference on Advances in Materials and Manufacturing Engineering's, ICAMME-2019 Organized by Department of Metallurgy and Materials Engineering., NIT Rourkela, 15-17 March. 2019.
- 16. Manish Oraon, Soumen Vinay Sharma, "Statistical analysis of Single Point Incremental Forming for the Optimization of and Surface Roughness", International Conference Processing and Characterization of ICPCM-2018 Materials, Organized by Department of Metallurgy and Materials Engineering., NIT Rourkela, 06-08 Dec. 2018.
- 17. Sah, R.D., Dutta, R.R., Mohapatra, A.K., & Padhy, N. (2019, March). A Hybrid Mining Approach: Gender Prediction from Handwriting. In International Conference on E-Business and Telecommunications (pp. 772-784). Springer, Cham.

6. Book:

Edited Books

- Chinmay C. (Ed.) (2019), Advanced Classification Techniques for Healthcare Analysis, IGI Global Book Series-Advances in Medical Technologies and Clinical Practice (AMTCP). 1-405.
- 2. Chinmay C. (Ed.) (2019). Smart Medical Data Sensing and IoT Systems Design in Healthcare, IGI Global Book Series-Advances in Healthcare Information Systems and Administration (AHISA), 1-300. 10.4018/978-1-7998-0261-7.

Chapter(s) in Edited Book

1. Sourav B., Chinmay C., Sumit C. (2018), A Survey on IoT based Traffic Control and Prediction Mechanism, Springer: Internet of Things and Big data Analytics for Smart Generation, Intelligent Systems Reference Library, Ch. 4, 154, (pp. 53-75), ISBN: 978-3-030-04203-5.

- 2. Chinmay C. (2019), Mobile Health (m-Health) for Tele-wound Monitoring, IGI: Mobile Health Applications for Quality Healthcare Delivery, Ch. 5, (pp. 98-116), ISBN: 9781522580218 DOI: 10.4018/978-1-5225-8021-8. ch005.
- Sourav B., Chinmay C., Paul S. (2019), Programming Paradigm and Internet of Things, CRC: A Handbook of Internet of Things & Big Data, pp. (148-164), ISBN 9781138584204.
- Sravanth, Chinmay C., Anudeep, Bharat G. (2019), Classification Algorithms for EEG-based Brain-Computer Interface: A Review, IGI, Ch. 3, (pp. 52-73), ISBN: 9781522577966, DOI: 10.4018/978-1-5225-7796-6.ch003.
- Akash G., Chinmay C., Bharat G. (2019), Medical Information Processing Using Smartphone Under IoT Framework, Springer: Energy Conservation for IoT Devices, Studies in Systems, Decision and Control, 206, (pp. 283-308), 2019, ISBN 978-981-13-7398-5,
- 6. Mishra, K.N., & Chinmay C. (2019), A Novel Approach Toward Enhancing the

- Quality of Life in Smart Cities using Clouds and IoT-Based Technologies, Springer: Digital Twin Technologies and Smart Cities, Internet of Things (Technology, Communications and Computing), (pp. 19-35),
- 7. Oraon, M., & Sharma, V. (2019). Tool Wear Measurement in Single Point Incremental Forming. In Advances in Manufacturing Engineering and Materials (pp. 362-371). Springer, Cham. (Hloch S., Klichová D., Krolczyk G., Chattopadhyaya S., Ruppenthalová L. (Eds))
- 8. Neha Verma, Vinay Sharma "chapter 7: Energy Value Stream Mapping: A Tool to Develop Green Manufacturing Energy" book chapter of Manufacturing Techniques for Materials in CRC Press (pp-189-206)
- Ananya Upadhyaya, Ved Prakash, Vinay Sharma, "Optimizing Material Removal Rate Using Artificial Neural Network for Micro-EDM," Accepted to be published as a book chapter of "Design and Optimization of Engineering Products" in IGI Global (pp-209-233)

SECTION 4

AWARD / PATENT / COLLABORATIONS

7. Award / Recognition Bestowed on Faculties (State / National / International)

SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State/National / International Level	Year / Duration
1.	Dr. Chinmay Chakraborty	Global Peer Review Award	Publons	International	2018

SECTION 5

ACTIVITIES/ FACULTY MEMBERS / DOS /DAS

8. Departmental Students' Activities

	SI. No.	Name of the Activity	Students' Co-Ordinator (If any)	Faculty Co- ordinator (if any)	Date / Duration
/	1.	Coding Activity	Mr. Arun Jugran, Mr. Vedant Tibrewal, Ms. Chandrika Deb, Mr. Shivam Goel	Dr. Sounak Paul, Mr. Balaram Mandal	1.07.2018 to 30.06.2019

9. List of Faculties

SI. No.	Name	Designation	TEQIP
1.	Prof. Rakesh Chandra Jha	Professor & Director	No
2.	Prof. Vinay Sharma	Professor, & I/C, Prod. Eng.	No
3.	Dr. Abhishek Kumar Singh	Assistant Professor	No
4.	Dr. Anil Sharma	Assistant Professor	No
5.	Dr. Randhir Kumar	Assistant Professor	No
6.	Mr. Prafulla Kumar Manoharan	Assistant Professor	No
7.	Dr. Sanjiv Kumar Tiwari	Assistant Professor	No
8.	Mr. Vijay Kumar Mandal	Associate Lecturer	No
9.	Dr. Mainak Mukhopadhyay	Assistant Professor & I/C, ECE	No
10.	Dr. Chinmay Chakraborty	Assistant Professor	No
11.	Dr. Babu Lal Sahu	Assistant Professor	No
12.	Mr. Sridhar Chintala	Assistant Professor	No
13.	Mrs. Sutapa Mondal	Assistant Professor	No
14.	Mr. Akash Kumar Gupta	Assistant Professor	No
15.	Mrs. Payal Bhardwaj	Assistant Professor	No
16.	Mr. Mahendra Kumar Das	Associate Lecturer	No
17.	Prof. Arbind Kumar	Professor & I/C, Mech. Eng.	No
18.	Dr. Ashis Chakarborty	Associate Professor & ADSW	No
19.	Mr. B. S. Choudhary	Assistant Professor	No
20.	Dr. Ritesh Upadhayay	Assistant Professor	No
21.	Mr. G. S. Rao	Assistant Professor	No
22.	Mr. Ashutosh Kumar	Assistant Professor	No
23.	Dr. Ram Krishna Sarkar	Assistant Professor & I/C, Physics	No
24.	Dr. Soumen Karmakar	Assistant Professor	No
25.	Dr. Manoj Kumar Dutta	Assistant Professor	No
26.	Dr. Sandip Ghosh Hazra	Assistant Professor I/C, Department of Humanities & Management.	No
27.	Dr. Pankaj Mishra	Assistant Professor & I/C, EEE	No
28.	Mr. Piyush Kumar Ojha	Assistant Professor	No
29.	Mr. Deep Shekhar Acharya	Assistant Professor	No
30.	Mr. Srihari Gude	Assistant Professor	No
31.	Mr. Prabhat Kumar Ranjan	Assistant Professor	No
32.	Mr. Nilesh Kumar Rajalwal	Assistant Professor	No
33.	Mr. Surendra Kumar Mahto	Associate Lecturer	No
34.	Dr. Kamta Nath Mishra	Assistant Professor & I/C, CSE	No

SI. No.	Name	Designation	TEQIP
35.	Dr. Sounak Paul	Assistant Professor	
36.	Mrs. Anita Khushwaha	Assistant Professor	No
37.	Mr. Rayees Ahmed	Assistant Professor	No
38.	Mr. Balaram Mondal	Assistant Professor	No
39.	Mr. Raja Ram Dutta	Assistant Professor	No
40.	Mr. Soumya Ray	Assistant Professor	No
41.	Mr. Swapan Kumar Borat	Associate Lecturer	No
42.	Dr. Nishi Kant Kumar	Associate Lecturer	No
43.	Mr. Saswata Mukherjee	Associate Lecturer	No
44.	Mrs. Neena Jha	Associate Lecturer	No
45.	Dr. S. S. Majhi	Assistant Professor & I/C, Chemistry	No
46.	Dr. A. C. Singh	Assistant Professor	No
47.	Dr. Ranjan Chattaraj	Assistant Professor & I/C, Mathematics	No
48.	Dr. Amit Kumar	Assistant Professor	No
49.	Dr. Bishnu Kumar	Assistant Professor	No
50.	Mr. Vikash Sharma	Assistant Professor	No
51.	Mr. Akhilesh Kumar Roy	Assistant Professor	No
52.	Mr. Arbind Kumar Choudhary	Assistant Professor	No

SECTION 6 OTHER INFORMATION

10. Student Entrepreneurship activities/Start-ups if any

Sr. No	Name of Student	Source of Funding	Title of Start up	Short Description
1.	Pragya Gyani 2015 Batch Vamika Parmar 2015 Batch	ABVIL Ranchi Jharkhand	The Dump	Start-up for garbage management
2.	Vibhor Singh Divya Bharti Baishali Sarkar	Received incubation offer at Startup India Jharkhand Yatra	Advanced Railway Accident Prevention System	Was called at Delhi for establishing the start-up office, with some financial support from the BIMTECH

11. Achievements of Students

Sr. No	Name of Student	Achievement/Position/Award etc	Organised by	Date and Venue
1.	Aman Sharma and Vedant Tibrewal	Start up India 2 nd position in State level Entrepreneur Development Start-up programme	Govt. of India & Govt. of Jharkhand	Ranchi

2.	Pragya Kumari	Received 1 st position in State level Women Entrepreneur Development Start-up programme	Govt. of India & Govt. of Jharkhand	Ranchi
3.	Aman Sharma and Vedant Tibrewal	Start up India 2 nd position in State level Entrepreneur Development Start-up programme	Govt. of India & Govt. of Jharkhand	Ranchi

12. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
1.	Mr. Ravi Tiwari, CEO,	14.02.2019	LAUGMENTOR GLO ERVICES
	Bizaugmenter, Global Services Private Ltd. SF-27, Eros Metro Complex, Sector-14, Dwarka, New Delhi-110078		
2.	Dr. N. C. Murmu, Senior Principal Scientist, Department Head, Project Monitoring and Evaluation Surface Engineering and Tribology, CSIR - CMERI, Durgapur	14.02.2019	
3.	Dr. Sanjoy Kr. Parida, Associate Professor, Dept. of Electrical Engineering, IIT Patna	15.02.2019	

13. List of Distinguished Alumni

SI. No.	Name, Batch and Affiliation	Short Description
1.	Abhishek Sharma, Dept of EEE BIT Deoghar	Indian Judicial Services, Uttar Pradesh
2.	Nupur Tiwary, Dept of EEE BIT Deoghar	Manager, Morgan Stanley
3.	Kusum Kumari, Dept of EEE BIT Deoghar	Asst. Director at Bihar Renewable Energy Development Agency
4.	Insia Zehra, Dept of EEE BIT Deoghar	Indian Army
5.	Rashmi Kumari, Dept of EEE BIT Deoghar	Department of Revenue and Land Reform, Govt of Bihar.

14. Any other relevant information

1. Achievements by Dr. Chinmay Chakraborty, Asst.Prof. in ECE

- Member, Editorial Review Board, Int. Journal of Strategic Engineering (IJoSE)
- Nominated as Global Goodwill Ambassadors, India, 2019
- Guest Editor, Journal Special Issue, Future Internet, 2019
- Advisory Committee Member, ICMPET, Andhra Pradesh, India, 2019.
- Member, Technical Committee, ICAESMT, Dehradun, India, 2019.

- TPC Member of ICICV, Jaipur, India- 2020
- Outreach Committee Member, ICCS, BKBIET, Pilani, Rajasthan, India, 2019.
- Advisory Committee Member, ICRTEMS, Faridabad, Haryana, India, 2019.
- Editor, Book Smart Medical Data Sensing and IoT Systems Design in Healthcare, 2019.
- Member, Organizing Committee, WCASET, Conference at Kyriad Hotel, Goa, 2018.
- Editor, Book IET: Advances in Telemedicine for Health Monitoring, 2019.
- Guest Editor Special Session "Next Generation Networks for Smart Healthcare" ICICC-2019.
- Member, National Advisory Committee, ICSTETM 2018
- Editor, ICCPHPC, India, 2019
- Session Chair, Int. Conf. on CICBA, Kalyani Govt. Engg. College, India, 2018.
- Member, Int. Technical Programme Committee, CICBA, India, 2018.
- National Advisory Member of ICASET, Pondichery, India, 2018.
- Editor, Book Advanced Classification Techniques for Healthcare Analysis, 2018.
- Member, Editorial Board, IOSRD, Int. Journal of Telecomm. Engg., 2018.
- Member, Advisory Committee, 5th Nat. Conf. on Comm. Information & Control Syst., Tamilnadu, 2018.
- Speaker for IIT Patna sponsored Teacher's Training Programme on "Internet of Medical Things" at ITM University, Gwalior, June 25, 2019.
- Speaker for DST sponsored FDP on "Advanced Healthcare Technology: IoT Perspective" at BIT Mesra, Patna, May 10, 2019.
- Speaker for workshop on "IoT, Networking, & Wireless Sensor Networks", at BIT Mesra, Deoghar, Feb., 2019.
- Speaker for CEP Short Term Course on "Applications of Biomedical Signal Processing Techniques in Healthcare", at IIT Patna, Sept., 2018.
- Delivered Guest Lecture on "Recent Advances in Communications and Networking" at ECE Department, JIS College of Engineering, Kalyani, 2018.
- Speaker for AICTE sponsored FDP on "Recent Developments in Artificial Intelligence & Robotics" at ECE Department, NiT, JIS University, Kolkata, 2018.
- 2. Dr. Ram Krishna Sarkar worked as an advisory member at National workshop on "Recent Advancement in Engineering-Industry 4.0 Ready" organized by EEE dept. at BIT Mesra, Deoghar Campus form Feb 14-16, 2019.
- 3. Dr. Soumen Karmakar & Dr. Manoj Kumar Dutta worked as an organizing committee member at National workshop on "Recent Advancement in Engineering-Industry 4.0 Ready" organized by EEE dept. at BIT Mesra, Deoghar Campus form Feb 14-16, 2019.
- Dr. Nishi Kant Kumar (Associate Lecturer, CSE Department) completed his Ph.D. (Engg.) degree on the topic "Software Reliability Using Machine Learning" in the Month of February 2019
- 5. List of Techno-Cultural events organized during the period:

SI. No.	Name of the Event	Date	Club/Society	Description
1.	Independence Day	15 th August, 2018	All Clubs/Societies	Dance, Drama Music performance by students
2.	Exuberance'18	13 th August, 2018	Literary Society	A one day fest of debate and extempore competition.
3.	Spiritual Talk by ISKCON, Mayapur	28 th August, 2018	Literary Society	Talk by delegates from ISKCON, Mayapur focusing the importance of meditation.
4.	JAM (Just A Minute)	1 st September 2018	Literary Society	Express your views on given topic within One Minute
5.	Antaragini '18	29 th September, 2018	Dramatic Society	One day fest, comprising of various acting/drama related activities and competitions for students.
6.	Band Night	29 th September, 2018	Music Club	A musical show comprising of solo, duet, band performance by students.
7.	Dandiya Night	30 th September, 2018	Dance Club	Dance event, comprising of performance by students.
8.	Pareidolia	30 th September, 2018	Photographic Society	An activity event held at Trikut Pahar, Deoghar.
9.	Aurora'18	27-28 October, 2018	Literary Society	Two day fest comprising of debate, extempore, just-a-minute, and other competitions.
10.	Lecture by Mr. Nishant Kumar, Sr. Faculty of the Art of Living, Bengaluru	17 th January, 2019	Literary Society	A talk addressing the various aspects of life and some tricks of Pranayama.
11.	NIKON Workshop	09 th February, 2019	Photographic Society	A workshop by NIKON providing photographic tips/training.
12.	Automobile Prototyping	12 th to 13 th March 2019	Automobile Society	Workshop to enhance the skill and knowledge in the field automobile engineering
13.	Utthaan `19	16 March 2019 to 18 march 2019	All Clubs/Societies	3 Days Annual Techno-Cultural Fest

15. Placement data:

Placement Details (Total Job Offers = 96):

- ⇒ Highest Packages: Rs. 10 LPA from Byju's Company & 9 LPA from Oracle Company.
- ⇒ Average Package: Rs. 5.22 LPA.
- Students with single job offer: 39 & Students with multiple job offers: 22.
- ⇒ Internship (8th Semester):
- ⇒ Highest Stipend: Rs. 30, 000/- per month from Here Technology.
- Average Stipend: Rs. 18, 977/-

	Placement Data for 2k15 batch								
Branch	Total Number of students registered at T & P Portal	Total Number of Students Eligible for Placement	Total Number of Students NOT Eligible for Placement	Placed	Placed (%)	Not placed			
CSE	42	36	06	30	83.33	06			
ECE	19	09	10	80	88.88	01			
EEE	16	12	04	09	75.00	03			
ME	29	18	11	14	77.77	04			
Total	106	75	31	61	81.245	14			

16. Development in the Institute Library:

(Library operations have been automated with the help of an integrated library software package, LIBSYS. The book database is accessible through OPAC (Online Public Access Catalogue). Circulation Services are executed through Barcode System.)

- 1. Added 1402 new books.
- 2. Setup student feedback mechanism (feedback/suggestion box) within the library.
- 3. Entire library had been come in the CCTV surveillance.
- 4. Started colour print out facility on payment of a nominal charge.
- 5. Renewal of subscription of on-line journals like IEEE, Science Direct etc.
- 6. Renewal of TURNITIN for plagiarism check.
- 7. Renewal of 30 print journals.

17. Achievements in sports and games:

SI. No.	Name of the Student	Name of the Game	Position	Period	Place	Tournament & Organiser
1	Ankur Raj (3 rd year)	Chess	3 rd Position	8-11 th November, 2018	Deoghar	Chess Tournament by Deoghar Foundation (Delhi)
2	Mayank Raj (4 th year) & Sanju (1 st year)	Badminton Mix Double	Runners up	15-1 ^{7th} February, 2019	Patna	PRAKRIDA-19 by BIT, Patna
3	Ankur Raj (3 rd year)	Chess	Winner	15-17 th February, 2019	Patna	PRAKRIDA-19 by BIT, Patna



Jaipur Off Campus

SECTION 1 CAMPUS PROFILE





The institute is built up in about 5 acre land (20000 Sq M). The built up area is about 6000 Sq M consisting of 12 Class Rooms, 15 Lab Halls, Mechanical WorkShop, Seminar Hall (175 Capacity), Common Computer/Internet Access Centre (30 Computers), Library Hall, T & P Cell, Indoor Sports & Gymnasium Hall, Student Activity Room, Music Room, Canteen Hall and Administrative Block.

Equipment: All required lab equipment are available in the Institute to conduct B. Tech. Course in ECE, EEE & CSE discipline along with equipment required for Mechanical Workshop and Animation courses. The Institute has three Dell Power Edge servers and 430 Computers for lab, internet and administrative requirement.

Academic Programmes:

Doctoral:

Ph.D Programme in Computer Science Engineering, Management and in Basic Sciences (Physics, Chemistry & Mathematics)

Undergraduate:

B.Tech in following branches of Engineering:

- i) Computer Science & Engineering (CSE)
- ii) Electronics and Communication Engineering (ECE)
- iii) Electrical & Electronics Engineering (EEE)

BBA, BCA & B.Sc. (Animation & Multimedia)

Postgraduate:

Master of Computer Application (MCA), Master of Business Administration (MBA) and Master in Animation Design (MAD).

Software/Simulation Tools:

For Electronics & Electrical Labs: CADENCE VLSI simulation tool, ANSYS - HFSS RF Design Software, MATLAB, Xilinx ISE Foundation Tool, ComSim, MultiSim, Code Composer Studio, PCB Design Util Board, System View, Open IT Guru, SUSE-V10, Ethernal Network Analyzer, Network Simulator, Lab View with ELVIS Hardware kit, ETAP Software, MAGNET 2D v7.7, ANSYS Acadamic Reasearch EM 1 Task

For Computer Science Labs: AutoCAD, Rational Rose, Oracle and Visual Prolog

For Animation Lab : Coral Graphics, Maya, Adobe suit, Sound Forge, Toon Boom, Macro Media Flash and 3D Studio

For Management Studies : SYSTAT and Tally Data Analysis Software

For English Communication: Language lab, 30 User

Online e-Journals & e-books : IEEE, Science Direct, PROQUEST, ASTM Digital Library

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

f) Ongoing Projects

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
1.	Studies of High Z impurity behavior using VUV spectral emissions from the tokamaks in IPR	Dr. Anand Kumar Srivastava (P.I.) Dr. M. B. Chowdhuri & Mrs. Ranjana Manchanda (Collaborator, IPR, Gandhinagar)	BRNS, DAE, Govt. of India	23.01.2017	20.3 Lakh	2 Years (Applied for 1 year extension)
2.	Lightning Impact on ozone precursors over Indian region and its implication on tropospheric ozone	Dr. Swagat Payra (P.I.)	MoES, Govt. of India	13.10.2017	34.64 Lakh	3 Years
3.	AERONET campaign	Dr. Swagat Payra (Collaborator)	GSFC, NASA	09.11.2009	Test Equipment shared by NASA	10 Years
4.	Rapid multiplex PCR based detection of water borne human bacterial pathogens	Dr. P.S. Solanki (P.I.), Dr. R. K. Ghotwal (Co-P.I.)	DST, Govt. of Rajasthan	27.03.2017	12.12 Lakh	3 Years
5.	Bacterial profiling of Bisalpur drinking water distribution system: A comparative study from the source to the tap.	Dr. R. K. Ghotwal (P.I.)	DST, Govt. of Rajasthan	10.08.2016	5.632 Lakh	3 Years
6.	Increased guar gum production, disease suppression and plant development by treatment of rhizobacteria in cluster bean to enhance the economy of Rajasthan	Dr. R. K. Ghotwal (Co-PI)	DST, Govt. of Rajasthan	10.08.2016	9.132 Lakh	3 Years

g) Projects Completed

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Date of completion of the Project
1.	Characterization of	Mr. Binay Kumar	Space	07.06.2017	10.925 Lakh	April 2019
	Land Cover using	Singh (P.I.)	Application			
	Ku with C band data		Centre-			
	and its applications	Mr. Prateek	ISRO,			
	- (SCATSAT-UP)	Sharma (Co-P.I.)	Ahmedabad			

SECTION 3 SEMINAR / CONFERENCE

3. Seminar / Conferences / Short – Term Courses Conducted by the Department/Campus

SI. No.	Title of Seminar/ Conference/ Short Term Courses/ Workshop	Coordinator	Funding / Sponsoring Agency	Date of Event
1.	Workshop on Bioinformatics and Systems Biology	Dr P.S. Solanki	DBT, Govt of India	6-8 March, 2019
2.	Short Term Course on "Designing, Fabrication & Control of Power Electronic Circuits"	Dr. Deepak Verma, Mr. P S Rathore, Dr. Aparajita Pandey	An Institute Event	19 February - 11 April, 2019
3.	Seminar on Documentary Film Making and Screening of International Animation Films under Jaipur International Film Festival. Invited Session from internationally acclaimed Film Makers. Harikrishna Anandan, from Switzerland, Hussain Nuri, from Iran, Arzu Qaderi, from U.K., Amr Gamal, from Yeman	And Mr. Gaurav Chaudhary	Jaipur International Film Festival	21st January, 2019
4.	Entrepreneurship Awareness Camp	Dr. Abinash Pankaj	Dept. of Science & Technology, Govt of India	9-11 January, 2019
5.	Systems Genomics in the age of Next Generation Sequencing	Dr. P. S. Solanki	DBT, Govt of India	25-28 November, 2018
6.	Entrepreneurship Awareness Camp	Dr. Abinash Pankaj	Dept. of Science & Technology, Govt of India	3-5 October, 2018

4. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	,	Advanced School of Antennas 2019		IEEE AP-MTTs Kolkata Chapter	KIIT, Bhubaneshwar	20-24 June, 2019
2	Bhardwaj, Santosh Kumar	for AICTE approved	Delhi	AICTE & Graphic Era Hill University, Bhimtal	Graphic Era Hill University, Bhimtal	17-19 June, 2019

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
3	Ankur Agarwal & Puneet Sharma	Wireless Communication and Signal Processing Techniques	MNIT, Jaipur	Deptt. Of ECE, MNIT, Jaipur	MNIT, Jaipur	20-24 May, 2019
4	Dr. Alok Pandey	FDP On Network Security (1 Week)	MEITY	Electronics & ICT Academies at MNIT Jaipur, NIT Warangal, IIT Guwhati, IITD Jabalpur, NIT Patna	MNIT Jaipur	20-24 May, 2019
5	Dr. Ritu Pareek	Technical Writing with Advanced Computer Tools: Hands-on Training (Workshop)	MNIT, Jaipur	MNIT-Jaipur	MNIT-Jaipur	14-18 May, 2019
6	Mrs. Nidhi Singh & Dr. Ranjana Agrawal	National Workshop on Technical Writing with Advances Computer Tools: Hands-on Training and Life Sciences RAIPLS- 2018	TEQIP-III	MNIT, Deptt. of Computer Science and Engg and Deptt. of Humanities and Social Sciences	MNIT, Jaipur	14-18 May, 2019
7	Dr. Abinash Pankaj	Orientation Programme on Education Administration (Phase-B)	-	Birla Institute of Technology, Mesra Ranchi	BIT Jaipur Campus	02 April- 16 May, 2019
8	Dr. Vibhuti Pandya & Gautam Kumar Goswami	Panel Discussion on Art & Expression	Spaces for Good	Media	Spaces for Good, 8 th Floor, SDC Vinay II, Calgary Road, Jaipur	17 th March, 2019
9	Mrs. Pankaj Sharma & Dr. Priyanshu Sharma &	Workshop on Lets Make More Money	-		The Fern-An Ecotel Hotel Jaipur	22 February, 2019
10	Vishwambhar Pathak	Indo-German Spring School on Algorithms for Big Data		'	IIT-, Mumbai	18-22 February, 2019
11	Dr. R. K. Gothwal	Regional Workshop on Biological Diversity Laws in Rajasthan	-	NLU Jodhpur and National Law School of India, Bengaluru	NLU, Jodhpur	13-14 February, 2019
12	Dr. Swagata Payra	5th International Skynet workshop. Topic:- Aerosol properties and their influences over a semi arid zone over India		Ministry of Earth Sciences, Lodhi Road New Delhi	Prithvi Bhawan, Lodhi Road New Delhi	13-15 February, 2019

SI.	Name of the	Title of the	Funding			
No.	Faculty	Conference/ Seminar	Agency	Organizers	Venue	Date
13	Dr. Swagata Payra (Invited talk)	Numerical Modelling and Forecasting of Desert Storms and Cloud Burst (NUMCLOUDS)	SERB, DST	SERB, DST and CURAJ	Central University Rajasthan, Rajasthan	11 to 23 February, 2019
14	Dr.Abinash Pankaj	Orientation Programme on Education Administration (Phase–A)	-	Birla Institute of Technology, Mesra Ranchi	BIT Jaipur Campus	11 February - 01 April, 2019
15	Puneet Sharma	Advances in Optical Communication	MNIT, Jaipur	Electronics and ICT Academics, MNIT Jaipur	MNIT and SKIT, Jaipur	9-14 February, 2019
16	Gautam Kumar Goswami, Mr. Gaurav Chaudhary, Mr. Manish Kumar & Dr. Rishika Sharma	Jaipur International Film Festival 2019	JIFF	JIFF	Birla Institute of Technology, Jaipur Campus	21 st January, 2019
17	Dr. Vibhuti Pandya	Jaipur International Film Festival 2019	JIFF	JIFF	Gem Cinema, Golcha Theatre And. Birla Institute of Technology, Jaipur Campus	20-22 January, 2019
18	Dr. Vibhuti Pandya & Mr. Gaurav Chaudhary	National Exhibition, Live Demo, Art Discussion during Jaipur Kala Mahotsav 2019. Topic of Panel Discussion:. Decoding the Domestic and Foreign Markets	Jaipur Kala Mahotsav	Pratibha Research Society	Jawahar Kala Kendra, Jaipur	17-19 January, 2019
19	Dr. R. K. Gothwal	Introductory Astronomy and Astrophysics	DST, Rajasthan	Amateur Astronomer's Society	BISR, Jaipur	8-10 January, 2019
20	Dr. Anand Kumar Srivastava	106th Indian Science Congress	BIT Mesra	ISCA & LPU, Jalandhar	LPU, Jalandhar	3-7 January, 2019
21	Dr. Aparajita Pandey	Blockchain Architecture Design & Use Cases	MHRD	NPTEL	Online Jaipur	January- April, 2019
22	Dr. Alok Pandey	Introduction To Internet of Things. (12 Weeks)	MHRD	NPTEL	Online	Jan to April, 2019

		Title of the	Fitle of the			
SI. No.	Name of the Faculty	Conference/ Seminar	Funding Agency	Organizers	Venue	Date
23	Ankur Agarwal & Puneet Sharma	Scientific Techniques & Computational Approaches	Self	Deptt. Of ECE, MNIT Jaipur	MNIT, Jaipur	24-28 December, 2018
24	Dr. Ravindra Kumar	63 rd DAE Symposium on Solid State Physics	BRNS & DAE Govt. of India	BARC	Guru Jamb. Uni. of Sci. & Tech., Haryana	18-22 December, 2018
25	Ankur Agarwal	5G and IoT-The New Internt Perspective		LNM Institute of Information Technology, Jaipur	LNMIIT, Jaipur	8-9 December, 2018
26	Dr. Anand Kumar Srivastava	33 rd National Symposium on Plasma Science and Technology (PLASMA-2018)	BRNS, DAE	PSSI & University of Delhi	University of Delhi	4-7 December, 2018
27	Dr. Alok Pandey	All India Security Summit	NASSCOM & DSCI	NASSCOM & DSCI	Gurogram	4-6 December, 2018
28	Ankur Agarwal	Wireless and Mobile Communication	-	Electronics and ICT Academics, MNIT Jaipur	MNIT, Jaipur	3-7 December, 2018
29	Dr. Rishika sharma	Painting workshop on Voting awareness Jaipur.	Rajasthan Lalit Kala Academy	Rajasthan election commission in association with Rajasthan Lalit Kala Academy, Jaipur.	Statue circle Park, Jaipur	2 nd December, 2018
30	Dr. Deepak Verma	Modelling and Simulation of Custom Power Devices for Power Quality Improvement		Malviya National Institute of Technology Jaipur	Malviya National Institute of Technology Jaipur	19-23 November, 2018
31	Dr. Swagata Payra (Lead Talk)	TROPMET 2018. Topic: WRF-Chem model simulation during typical dust storm event over North West India	(MoES), Govt	Indian Meteorological Society	Banaras Hindu University (BHU), Varanasi	24–27 October, 2018
32	Dr. Anand Kumar Srivastava	27th IAEA Fusion Energy Conference (FEC-2018).	BRNS, DAE	IPR, Gandhinagar	IPR, Gandhinagar, India	22-27 October, 2018
33	Dr. Swagata Payra (Invited Talk)	6 th Rajasthan Science Congress. Topic: Aerosol properties and their influences over Jaipur, Rajasthan with a special emphasis on dust storm.	Rajasthan Science Congress	Central University Rajasthan, Rajasthan	Central University Rajasthan, Rajasthan	13-15 October, 2018



SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
34	Dr. P.S. Solanki & Dr. R.K. Gothwal	Nextgen Genomics, Biology, Bioinformatics and Technologies Conference (NGBT2018)	DBT, New Delhi, GOI	Sci Genome Research Foundation (SGRF)	Fairmont Hotel, Jaipur	30 September -2 October, 2018
35	Dr. P.S. Solanki	17th annual International Conference on Bioinformatics (InCoB 2018)	DBT, New Delhi, GOI	SCIS, JNU, New Delhi	JNU, New Delhi	26-28 September - 2018
36	Dr.Abinash Pankaj	HCFC Phase-out Management Plan (HPMP) on Refrigeration & Air-Conditioning (RAC) servicing Sector	GIZProklima International. Deutsche Gesellschaft für. Internationale Zusammenarbeit (GIZ) GmbH	J K Laxmipat University, Jaipur	J K Laxmipat University, Jaipur	24-28 September - 2018
37	Gautam Kumar Goswami	8th International Terracotta Wood fire Workshop.	West Zone Cultural Centre, Udaipur	West Zone Cultural Centre, Udaipur	Studio 25, Molela, Udaipur, Rajasthan	23-27 September - 2018
38	Dr. Anand Kumar Srivastava	STEM Teacher Training Workshop on Research Based Pedagogical Tools (RBPT), Level-1.	IISER, Pune	IISER, Pune	Fern Resort, Kolkata	23-26 September - 2018
39	Dr. Vibhuti Pandya	National Symposium, Exhibition, and Live Demo on Folk and Tribal Art Traditions Revival and Sustenance	-	Rajasthan Lalit Kala Academy and Indian Institute of Craft & Design	Rajasthan Lalit Kala Academy, Jaipur	29-31 August, 2018
40	Mr. Gaurav Chaudhary	National Symposium, Exhibition, and Live Demo on Folk and Tribal Art Traditions Revival and Sustenance	-	Rajasthan Lalit Kala Academy and Indian Institute of Craft & Design	Rajasthan Lalit Kala Academy, Jaipur	29-31 August, 2018
41	Puneet Sharma	Computational Techniques in Optica and Photonics	-	Electronics and ICT Academics, MNIT Jaipur	MNIT, Jaipur	20-25 August, 2018
42	Dr. Ranjana Agrawal	National Conference on Recent Advances at Interface of Physical and Life Sciences RAIPLS- 2018		Department of Chemistry, University of Rajasthan, Jaipur	Department of Chemistry, University of Rajasthan, Jaipur	6-7 July, 2018
43	Dr. Alok Pandey	Skill Development Course On IoT. (225 Hours)	CSIR – CEERI Pilani	CEERI	Jaipur	4 June – 12 July, 2018

SECTION 4 RESEARCH PUBLICATIONS

5. Publications in Journals : (International/National)

- Patel, S., Srivastava, A.K., Chowdhuri, M.B., Manchanda, R., Ghosh, J., Bhattacharya, A., Raval, J.V., Nagora, U., Atrey, P.K., Tanna R.L. & Aditya Team (2019). Study of Iron impurity behaviour using VUV spectroscopy in ADITYA Tokamak. NUCLEAR FUSION, 59, 086019, 1-8.
- Srivastava, Anand Kumar (2019). Selection of Dielectric Material for Producing Diffuse Dielectric Barrier Discharge Plasma at Atmospheric Pressure. Materials Today: Proceedings, Elsevier, 18, 1033-1038.
- Sharma, Y.C., Ravindra Kumar, Vidyasagar, V., & Dheeraj Bhardwaj (2018). Low temperature plasma ion nitriding (PIN) of Inconel 690 alloy. Mater. Res. Express 6, 026559.
- 4. Kumawat Dharmendra & Sharma Roopali (2019) An empirical study for sustainable policy intervention in urban drinking water supply management using performance indicators. International Journal Business Continuity and Risk Management, Vol. 9, No. 4, (362-384).
- 5. Kumar Santosh & Sharma Roopali (2018) Key barriers in the growth of rural health care: an ISM-MICMAC approach. Benchmarking: An International Journal 25 (7), 2169-2183.
- Mishra, G.P., Mishra, K. L. & Mishra, Rishabh (2019). Organizational change and effectiveness – A study of an overview of different authors, International Journal of Recent Advances in Multidisciplinary Research, Vol. 6, issue-1, 4366-4368.
- 7. Mishra, G.P. & Mishra, Kusum Lata (2018). "Role of cultural and status factors in Leadership style and organizational effectiveness- An overview", International Journal of Business and Management Invention, Volume 7 Issue 5 Ver. IV.

- 8. Singhal, M., Chaturvedi, P., Gothwal, R. K., Mohan, M. K. & Solanki, P.S. (2019) Comparative study of synonymous codon usage in bacteria growing at extreme temperatures. Int JBioinformatics ResAppl, ISSN Print: 1744-5485 (Accepted and In Press). DOI: 10.1504/IJBRA.2021.10022014.
- Pradhan, S., Gothwal, R. K., Mohan, M. K. & Ghosh, P. (2019). Evaluating bacterial cell immobilization of Brevibacillus formosus BISR-1 and Paenibacillus sp. BISR-047 with different matrices. Int J Engg Res Technol, 8 (6): 13581363.
- 10. Gupta, P., Verma, S., Bhatla, R., Payra, S., & Yadava P. K. (2018). Long term (1984-2013) winter temperature variability and cold wave analysis over Varanasi City, Journal of Indian Geophysical Union, pp. 343-351 (23), Issue 4, accepted on: 8.5.19 (UGC approved journal).
- 11. Gupta, P., Bhatla, R., Payra, S., Yadava P. K., & Verma, S., (2018) Cold Wave and Severe Cold Wave Events over Indo-Gangetic Plain: Analysis and Comparison for Decadal Variability, International Journal of Earth and Atmospheric Science; Volume 05(02), pp 101-109.
- 12. Jain, P. & Saini, J. K. (2019). Utilization of CNFET Technology for Low-Power High-Speed 12 Transistor Full Adder Circuit. Journal of Advance Research in Dynamical & Control Systems, 11(07), 161-168.
- 13. Bhargav, A. & Saini, J. K. (2019). A Review Article on Integrator Circuits Using Various Active Devices. Journal of Advance Research in Dynamical & Control Systems, 11(07), 26-32.



- 14. Bhargav, A., & Saini, J. K. (2019). A Novel Simple Differentiator Circuit Based on Carbon Nano Tube Field Effect Transistors Voltage Difference Transconductance Amplifier. Micro and Nanosystems, 11, 1-10.
- 15. Bhargav, A., & Saini, J. K. (2019). Simulation of optical ISL with 48 transponders and performance analysis using BER and Q-Factor. Journal of Optical Communications, 1-12.
- Bhargav, A., & Saini, J. K. (2019). Analyzation of Q-factor and BER of OISL with 36 Transponders. Journal of Advanced Research in Dynamical and Control Systems, 10, 1453-1461.
- 17. Batra, Mona, & Bhatnagar, Archana (2019). A Research Study on Critical Challenges in Agile Requirements Engineering, International Research Journal of Engineering and Technology (IRJET), 6(6), 1214.
- 18. Rinkey, Gupta, Piyush, & Bhatnagar, Archana (2018). Implementation of Cloud based E-learning Architecture, Jour of Adv Research in Dynamical & Control Systems, 10(14), 1886.
- 19. Sharma, Anju, & Sinha, Madhavi (2018). Enhanced Discrete Differential Evolution For Optimized Routing In Mobile Ad-hoc Network, ciencia e tecnicavitivinicola, 33(9), 16.
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- 21. Gaur, Seema, Dhyani, Praveen, & Pathak, Vishwambhar, (2018), Reformation of Co-Author Communities with Metagraph, International Journal of Engineering Science Invention (IJESI), 7(3), 47.
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23. Agarwal, M. M., Govil, M. C., & Saini H. (2019). Probabilistic and Fuzzy based Efficient Routing Protocol for Mobile Ad Hoc Networks. Recent Patents on Computer Science, 12 (E-pub Ahead of Print in 12 Volume).

6. Publications in Proceedings (International/National)

- Patel, S., Srivastava, A. K., Chowdhuri, M.B., Manchanda, R., Ghosh, J., Bhattacharya, A., Raval, J. V., Nagora, U., Atrey, P.K. and Tanna R. L., Study of Iron impurity behaviour using VUV spectroscopy in ADITYA and ADITYA-U Tokamak (EX-P4-3 (1-7)). In Proceedings of 27th IAEA Fusion Energy Conference, Ahmedabad, India, 2018. (ID-54171, CN-258).
- Soni., M., Payra. S. and Verma., S.,
 Radiative forcing estimation of aerosols at four locations in India and Pakistan using ground based remote sensing instruments, IASTA -2018, Center for Atmospheric Sciences. IIT Delhi, 26 28th November, 2018, ISSN 0971 45102.

7. Book:

Single Authored

NIL

- Co-Authored
 - Bhargav, A. and Saini, J. K. (2019). Inter-Satellite Optical Wireless Communication System. LAP Lambert Academic Publishing. ISBN: 978-620-0-23018-8.
- Edited Books

NIL

Chapter(s) in Edited Book

NIL

SECTION 5

AWARD/ PATENT/ COLLABORATIONS

8. Award / Recognition Bestowed on Faculties (State / National / International)

	SI. Io.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
1		Dr. Anand Kumar Srivastava, Assistant Prof. Physics	Received Outstanding Reviewer Award 2018 (Journal of Physics D: Applied Physics)	IOP Science Publishing, UK	International	2018
2		Jyoti Sharma, Assistant Prof. ECE	Designated as Member, Executive Committee	IEEE, APS Delhi Section	State Level	2019
3	3.	Dr. Alok Pandey, Assistant Prof. CSE	Gold Certificate For Achieving 99% Marks	NPTEL	National Level	2019
4		Vibhuti Pandya, Assistant Prof. Animation	Designated as Jury Member of Jaipur International Film Festival 2019	Jaipur International Film Festival	International	18-22 January, 2019

SECTION 6

ACTIVITIES/ FACULTY MEMBERS / DOS/DAS

9. Departmental Students' Activities

SI. No.	Name of the Activity	Students' Co-Ordinator (If any)	Faculty Co- ordinator (if any)	Date / Duration
1	An Invited Talk and interactive session by Mr. Sumit Srivastava, Founder of Gensus Design & Edutainers "On Development of Entrepreneurship Aptitude & Vision"	-	Dr. Roopali Sharma	April 12, 2019
2	Art Exhibition on theme of Spaces for Good	Jyestha Arora & Ashi Jain	Dr. Vibhuti Pandya	March 10- 20, 2019
3.	Cultural Fest (Vibrations)	Ms. Aakansha Pancholi, BE-EEE, IV Sem Mr. Sourabh Nagpal, BE-EEE, IV Sem Mr. Priyansh Jain, BE-ECE, IV Sem Ms. Unnati Shrivastav, BE-CSE, IV Sem Mr. Naman Jain, BCA, III Semester		13-15 February, 2019
4	An Invited Talk and interactive session by Mrs. Nupur Sandhu, An eminent Psychological Therapist on "Creativity & Psychological aspects in strengthening Emotional Quotient"	-	Dr. Ritu Pareek	January 22, 2019

SI. No.	Name of the Activity	of the Activity Students' Co-Ordinator (If any)		Date / Duration
5	Art Exhibition During Jaipur Kala Mahotsav at Jawahar Kala Kendra, Jaipur	Sunil Chirania & Bhaskar Tripathi (B.Sc. Animation students)	Dr. Vibhuti Pandya & Mr. Gautam Goswami	January 17-20, 2019
6	Sports Fest (Cavorts)	Mr. Rahul Jangir, BE-EEE, IV Sem Mr. Kumar Eklavya, BE-ECE, IV Sem Mr. Apoorv Jain, BE-CSE, IV Sem Mr. Sanjay Singh Chouhan, MCA, III Sem Mr. Arun Brijwasi, MCA, I Sem	Mr. Vikas Sanwan	November 17-18, 2018
7	Institute under collaboration	Utkarsh Mishra (B.Tech V Sem), Charu Agarwal (B.Tech III Sem), Jagriti Basa (B.Tech I Sem), Shivani Porwal (BCA I)	Dr. Anand Kumar Srivastava	November 15, 2018
8	Technical Fest (TechVibes)	Mr. Raghav Pareek, BE-EEE, VII Sem Ms. Daksha Govil, BE-ECE, VII Semester Mr. Abhijeet Mohapatra, BE-CSE, VII Sem Ms. Riddhi Johri, BE-CSE, VII Semester Mr. Hitik, BCA, V Semester	Dr Vishwambhar Pathak	October 25- 26, 2018
9	Vibhor Gandhi Memorial Creative Contest & Awards	Prerna Mittal & Dharmendra Singh (B.Sc Animation Students)	Dr. Vibhuti Pandya	October 25, 2018
10	Two Day Hands On Workshop on IoT	-	Dr. Alok Pandey	October 5 – 6 2018

10. List of Faculties

SI. No.		Designation	TEQIP Sponsored (Yes / No)
1.	Dr. Abhinav Dinesh	Director	No
	Department of Compu		
1	Dr. Madhavi Sinha	Associate professor	No
2	Dr. Shripal Vijayvargiya	Associate professor	No
3	Mr. P.K. Sharma	Assistant Professor	No
4	Dr. Bimalendu Pathak	Assistant Professor	No
5	Dr. Vishwambhar Pathak	Assistant Professor	No
6	Dr. Piyush Gupta	Assistant Professor	No
7	Dr. Madan Mohan Agarwal	Assistant Professor	No
8	Dr. Vivek Gaur	Assistant Professor	No
9	Mr. Subhash Chand Gupta	Assistant Professor	No
10	Dr. (Mrs.) Archana Bhatnagar	Assistant Professor	No
11	Mrs. Seema Gaur	Assistant Professor	No
12	Mrs. Anju Sharma	Assistant Professor	No
13	Mr. Santosh Kumar Sharma	Assistant Professor	No
14	Dr. Alok Pandey	Assistant Professor	No

15 Mr. Santhosh Kumar Agarwal 16 Mr. Khalid Ashraf Associate Lecturer No Department of Electronics & Communication Engineering 1 Mr. Ankur Agarwal Assistant Professor No Mr. Deepak Chaturvedi Assistant Professor No Mr. Syoti Sharma Assistant Professor No Mr. Syoti Sharma Assistant Professor No Mr. Puneet Sharma Assistant Professor No Mr. Plitendra Kumar Saini Associate Lecturer No Department of Electrical & Electronics Engineering Mr. Prashant Singh Rathore Assistant Professor No Department of Management Dr. Roopali Sharma Professor No Department of Management Dr. Roopali Sharma Professor No Mr. S C Mishra Associate Professor No Dr. Ritu Arora Assistant Professor No Assistant Professor No Dr. Ritu Arora Assistant Professor No Dr. Sandip Kumar Sengupta Assistant Professor No Dr. Jyoti Kumar Chandel Assistant Professor No Mr. Priyanshu Sharma Associate Lecturer No Mr. Priyanshu Sharma Associate Lecturer No Mrs. PurviMathur Associate Lecturer No Mrs. PurviMathur Associate Lecturer No Mrs. Round Sharma Assistant Professor No Mr. Gautam Kumar Goswami Assistant Professor No Mr. Gautam Kumar Goswami Assistant Professor No Department of Animation & Multimedia Dir. (Mrs. Nanish Kumar Associate Lecturer No Department of Chemistry Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry Dr. On Department of Physics Department of Chemistry Dr. On Department of Chemistry Department of Chemistry Dr. On Department of Chemistry Department of Chemistry Department of Chemistry Department of Chemistry Department of M	SI. No.	Name	Designation	TEQIP Sponsored (Yes / No)
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1 Mr. Ankur Agarwal Assistant Professor No 2 Mr. Deepak Chaturvedi Assistant Professor No 3 Mrs. Jyoti Sharma Assistant Professor No 4 Mr. Gaurav Jain Assistant Professor No 5 Mr. Snehanshu Shekhar Assistant Professor No 6 Mr. Puneet Sharma Assistant Professor No 7 Mr. Jitendra Kumar Saini Associate Lecturer No Department of Electrical & Electronics Engineering 1 Mr. Prashant Singh Rathore Assistant Professor No 3 Dr. Deepartment of Management 1 Dr. Roopali Sharma Professor No Department of Management 1 Dr. Roopali Sharma Professor No 3 Dr. G. P Mishra Professor No 3 Mr. S C Mishra Associate Professor No 5 Mrs. Pankaj Sharma Assistant Professor No 6 Dr. Sandip Kumar Sengupta Assistant Professor No 6 Dr. Sandip Kumar Sengupta Assistant Professor No 8 Mrs. PurviMathur Associate Lecturer No 9 Mrs. PurviMathur Associate Lecturer No 10 Mrs Kusum Lata Mishra Associate Lecturer No Department of Animation & Multimedia 1 Dr. Vibhuti Pandya Assistant Professor No 3 Mr. Gaurav Choudhary Assistant Professor No 1 Dr. Wishika Sharma Associate Lecturer No Department of Animation & Multimedia 1 Dr. Vibhuti Pandya Assistant Professor No 1 Dr. Johera Mishra Associate Lecturer No Department of Chemistry 1 Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry 1 Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry 1 Dr. Dheeraj Bhardwaj Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No Department of Chemistry 1 Dr. Dheeraj Bhardwaj Assistant Professor No Department of Chemistry 1 Dr. Dheeraj Bhardwaj Assistant Professor No 1 Dr. Anand Kumar Srivastava Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No	16	Mr. Khalid Ashraf	Associate Lecturer	No
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7 Dr. Jyoti Kumar Chandel Assistant Professor No 8 Mr. Priyanshu Sharma Associate Lecturer No 9 Mrs. PurviMathur Associate Lecturer No 10 Mrs Kusum Lata Mishra Associate Lecturer No Department of Animation & Multimedia 1 Dr. Vibhuti Pandya Assistant Professor No 2 Mr. Gautam Kumar Goswami Assistant Professor No 3 Mr. Gaurav Choudhary Assistant Professor No 4 Mr. Manish Kumar Associate Lecturer No 5 Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry 1 Dr. (Mrs) Ranjana Agarwal Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No 4 Mr.Ravindra Kumar Associate Lecturer No 5 Dr. Anand Kumar Srivastava Assistant Professor No 6 Dr. Swagat Payra Assistant Professor No 7 Associate Lecturer No 8 Associate Lecturer No 8 Associate Lecturer No 9 Arr.Ravindra Kumar Associate Lecturer No	5	Mrs. Pankaj Sharma	Assistant Professor	No
8 Mr. Priyanshu Sharma Associate Lecturer No 9 Mrs. PurviMathur Associate Lecturer No 10 Mrs Kusum Lata Mishra Associate Lecturer No Department of Animation & Multimedia 1 Dr. Vibhuti Pandya Assistant Professor No 2 Mr. Gautam Kumar Goswami Assistant Professor No 3 Mr. Gaurav Choudhary Assistant Professor No 4 Mr. Manish Kumar Assistant Professor No 5 Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry 1 Dr. (Mrs) Ranjana Agarwal Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No 4 Mr.Ravindra Kumar Associate Lecturer No Department of Physics No 3 Dr. Swagat Payra Assistant Professor No 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics	6	Dr. Sandip Kumar Sengupta	Assistant Professor	No
9 Mrs. PurviMathur Associate Lecturer No 10 Mrs Kusum Lata Mishra Associate Lecturer No Department of Animation & Multimedia 1 Dr. Vibhuti Pandya Assistant Professor No 2 Mr. Gautam Kumar Goswami Assistant Professor No 3 Mr. Gaurav Choudhary Assistant Professor No 4 Mr. Manish Kumar Assistant Professor No 5 Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry 1 Dr. (Mrs) Ranjana Agarwal Assistant Professor No Department of Physics 1 Dr. Dheeraj Bhardwaj Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No 4 Mr.Ravindra Kumar Associate Lecturer No	7	Dr. Jyoti Kumar Chandel	Assistant Professor	No
10 Mrs Kusum Lata Mishra Associate Lecturer No Department of Animation & Multimedia 1 Dr. Vibhuti Pandya Assistant Professor No 2 Mr. Gautam Kumar Goswami Assistant Professor No 3 Mr. Gaurav Choudhary Assistant Professor No 4 Mr. Manish Kumar Associate Professor No 5 Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry 1 Dr. (Mrs) Ranjana Agarwal Assistant Professor No Department of Physics 1 Dr. Dheeraj Bhardwaj Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No (Presently deputed at Jaipur Campus) 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics	8	Mr. Priyanshu Sharma	Associate Lecturer	No
Department of Animation & Multimedia 1 Dr. Vibhuti Pandya Assistant Professor No 2 Mr. Gautam Kumar Goswami Assistant Professor No 3 Mr. Gaurav Choudhary Assistant Professor No 4 Mr. Manish Kumar Assistant Professor No 5 Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry 1 Dr. (Mrs) Ranjana Agarwal Assistant Professor No Department of Physics 1 Dr. Dheeraj Bhardwaj Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No (Presently deputed at Jaipur Campus) 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics	9	Mrs. PurviMathur	Associate Lecturer	No
1 Dr. Vibhuti Pandya Assistant Professor No 2 Mr. Gautam Kumar Goswami Assistant Professor No 3 Mr. Gaurav Choudhary Assistant Professor No 4 Mr. Manish Kumar Assistant Professor No 5 Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry 1 Dr. (Mrs) Ranjana Agarwal Assistant Professor No Department of Physics 1 Dr. Dheeraj Bhardwaj Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No (Presently deputed at Jaipur Campus) 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics	10	Mrs Kusum Lata Mishra	Associate Lecturer	No
2 Mr. Gautam Kumar Goswami Assistant Professor No 3 Mr. Gaurav Choudhary Assistant Professor No 4 Mr. Manish Kumar Assistant Professor No 5 Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry 1 Dr. (Mrs) Ranjana Agarwal Assistant Professor No Department of Physics 1 Dr. Dheeraj Bhardwaj Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No (Presently deputed at Jaipur Campus) 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics		Department of Ar	nimation & Multimedia	
3 Mr. Gaurav Choudhary Assistant Professor No 4 Mr. Manish Kumar Assistant Professor No 5 Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry 1 Dr. (Mrs) Ranjana Agarwal Assistant Professor No Department of Physics 1 Dr. Dheeraj Bhardwaj Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No (Presently deputed at Jaipur Campus) 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics	1	Dr. Vibhuti Pandya	Assistant Professor	No
4 Mr. Manish Kumar Assistant Professor No 5 Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry 1 Dr. (Mrs) Ranjana Agarwal Assistant Professor No Department of Physics 1 Dr. Dheeraj Bhardwaj Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No (Presently deputed at Jaipur Campus) 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics	2	Mr. Gautam Kumar Goswami	Assistant Professor	No
5 Dr. (Mrs.) Rishika Sharma Associate Lecturer No Department of Chemistry 1 Dr. (Mrs) Ranjana Agarwal Assistant Professor No Department of Physics 1 Dr. Dheeraj Bhardwaj Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No (Presently deputed at Jaipur Campus) 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics	3	Mr. Gaurav Choudhary	Assistant Professor	No
Department of Chemistry 1 Dr. (Mrs) Ranjana Agarwal Assistant Professor No Department of Physics 1 Dr. Dheeraj Bhardwaj Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No (Presently deputed at Jaipur Campus) 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics	4	Mr. Manish Kumar	Assistant Professor	No
1 Dr. (Mrs) Ranjana Agarwal Assistant Professor No Department of Physics 1 Dr. Dheeraj Bhardwaj Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No (Presently deputed at Jaipur Campus) 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics	5	Dr. (Mrs.) Rishika Sharma	Associate Lecturer	No
Department of Physics 1 Dr. Dheeraj Bhardwaj Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No (Presently deputed at Jaipur Campus) 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics		Departme	nt of Chemistry	
1 Dr. Dheeraj Bhardwaj Assistant Professor No 2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No (Presently deputed at Jaipur Campus) 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics	1	Dr. (Mrs) Ranjana Agarwal	Assistant Professor	No
2 Dr. Anand Kumar Srivastava Assistant Professor No 3 Dr. Swagat Payra Assistant Professor No (Presently deputed at Jaipur Campus) 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics		Department of Physics		
3 Dr. Swagat Payra Assistant Professor (Presently deputed at Jaipur Campus) 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics	1	Dr. Dheeraj Bhardwaj	Assistant Professor	No
(Presently deputed at Jaipur Campus) 4 Mr.Ravindra Kumar Associate Lecturer No Department of Mathematics	2	Dr. Anand Kumar Srivastava	Assistant Professor	No
Department of Mathematics	3	Dr. Swagat Payra		No
	4	Mr.Ravindra Kumar	Associate Lecturer	No
1 Dr.Gurminder Singh Malhotra Associate Professor No		Departmen		
	1	Dr.Gurminder Singh Malhotra	Associate Professor	No

SI. No.	Name	Name Designation	
2	Dr. Indra Kumar Dadheech	Assistant Professor	No
3	Dr. (Mrs.) Bhawna Agarwal	Assistant Professor	No
	Department of Mo	echanical Engineering	
1	Mr. Vikas Sangwan	Assistant Professor	No
	Department		
1	Dr. (Mrs.) Ritu Pareek Assistant Professor (English Language)		No
	Department of		
1	Dr. M. Krishna Mohan	Professor (Presently Deputed to BISR, Jaipur)	No
2	Mr. P.S. Solanki	Asst. Professor (Presently Deputed to BISR, Jaipur)	No
3	Dr. R.K. Gothwal	Asst. Professor (Presently Deputed to BISR, Jaipur)	No
Department of Er		nvironmental Science	
	Mrs. Nidhi Singh	Associate Lecturer	No

11. Board of Studies

SI. No.	Name of the Member	Designation	Role	
1.	Dr. Vibhuti Pandya	Assistant Professor – Animation & Multimedia	BOS- External Member at IIS University, Jaipur	
2.	Dr P S Solanki	Assistant Professor – Bio-Engineering	External Member, (Amity Institute of Biotechnology (AIB) – Bioinformatics)	
3.	Dr P S Solanki	Assistant Professor – Bio-Engineering	External Member (Jaipur National University (JNU) Jaipur)	

SECTION 7 OTHER INFORMATION

12. Student Entrepreneurship activities/Start-ups if any

SI. No.	Name of Student	Source of Funding	Title of Startup	Short Description
1.	Anubhav Deep (Founder) (BE-EEE Student)	Y Combinator	ServX, Carbiqi	Founded by Akansh Sinha and Anubhav Deep, Carbiqi has four stores in Delhi-NCR. The Carbiqi team previously worked in the automotive services space under the brand name of ServX. https://www.vccircle.com/cardekho-acqui-hires-auction-portal-carbiqi/
2.	Aish Khamesra, (Co- Founder) (BE-ECE Students)	Self	SKILLOVATE LEARNING	Skillovate Learning Pvt. Ltd. is on a mission to skill kids through Computer Science. http://www.skillovate.com

SI. No.	Name of Student	Source of Funding	Title of Startup	Short Description
3.	Abhijeet Vijaivargia (Founder) & Arushi Jain (Co-founder) (BE-ECE Students	Self	Global Lancers	Global Lancers, combine proven methodologies, business domain knowledge and expertise of skilled professionals to deliver high quality solutions to run, manage and grow your business. https://lancersglobal.com/
4.	Anmol Deep, (Founder) (B.Sc. Animation & Multimedia Student)	Self	Unfold Craft	This start-up deals with animation content, Infographics, short films, documentary, biography, short videos etc. www.unfoldcraft.com

13. Publication by students, if any

- Jain, P. & Saini, J. K. (2019). Utilization of CNFET Technology for Low-Power High-Speed 12 Transistor Full Adder Circuit. Journal of Advance Research in Dynamical & Control Systems, 11(07), 161-168.
- Bhargav, A. & Saini, J. K. (2019). A
 Review Article on Integrator Circuits
 Using Various Active Devices. Journal
 of Advance Research in Dynamical &
 Control Systems, 11(07), 26-32.
- Bhargav, A., & Saini, J. K. (2019). A Novel Simple Differentiator Circuit Based on Carbon Nano Tube Field Effect Transistors Voltage Difference Transconductance Amplifier. Micro and Nanosystems, 11, 1-10.
- Bhargav, A., & Saini, J. K. (2019). A Novel Simple Differentiator Circuit Based on Carbon Nano Tube Field Effect Transistors Voltage Difference Transconductance Amplifier. Micro and Nanosystems, 11, 1-10.
- Bhargav, A., & Saini, J. K. (2019).
 Simulation of optical ISL with 48 transponders and performance

- analysis using BER and Q-Factor. Journal of Optical Communications, 1-12.
- Bhargav, A., & Saini, J. K. (2019).
 Analyzation of Q-factor and BER of OISL with 36 Transponders. Journal of Advanced Research in Dynamical and Control Systems, 10, 1453-1461.
- Ahir, A., Saini, J.K &A. Srinivasulu (2019). A Low Voltage Distinctive Source Based Sense Amplifier For Memory Circuits Using FinFETs. Advances in Intelligent Systems and Computing (Springer), 670, 225-232.
- Sunita Verma, Divya Prakash, Manish Soni and Kirpa Ram: Chapter :-Atmospheric Aerosols Monitoring: Ground and Satellite-based Instruments in book Environmental Monitoring and Assessment IntechOpen, Published: April 30th2019. Doi:10.5772/ intechopen.80489, https://www. intechopen.com/online-first /atmospheric-aerosols-monitoringground-and-satellite-basedinstruments.

14. Achievements of Students

SI. No.	Name of Student	Achievement/ Position/ Award etc	Organised by	Date and Venue
1.	Pravar Jain, Nirmit Parnami, Harsh Khatod, Aditya Roshan (BE-ECE Students)	Winners of New Idea Factory Contest 2019 Cash Amount of 1 Lakh rupees and internship offer of 2 months	National Engineering Industries Ltd. (A C K Birla Group Company)	18/04/2019, NEI, Khatipura Jaipur
2.	Priyansh Jain (BE-ECE Student)	2 nd runner up and prize of Rs. 25000/-	National Engineering Industries Ltd. (A C K Birla Group Company)	18/04/2019, NEI, Khatipura Jaipur
3.	Elvira Mishra (B.Sc Animation & Multimedia student)	First Position in Inter College Art Contest & Exhibition	Spaces for Good	10 th to 20 th March 2019, At Coffee Bean Media, Calgary Road, Jaipur
4.	Shubhojit Das Gupta Shweta Kabra Archie Vijjayvargia Parkhi Sinha Anchal Khandelwal Devansh Saxena (B.Sc Animation & Multimedia student)	Jury Mention Prize in Inter Collage Art Contest & Exhibition	Spaces for Good	10 th to 20 th March 2019, At Coffee Bean Media, Calgary Road, Jaipur
5.	Hemant Sharma (BE-ECE Student)	Japan Special Tour as a reword of the prize.	Japanese Ministry of Economy, Trade and Industry, Japanese Government	22-23/01/2019, Christ University, Bangalore

15. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of Visitor with Affiliation	Date of Visit & Purpose	Picture
1.	Professor Kusum Jain Internationally renowned scholar of Philosophy. Member, Governing body of Indian Council of Philosophical Research. Brought pride to the country with invited talk in Prestigious International Conference held in Geneva in 2015 on "The Big bang theory and experimentation on discovery of god particle to understand origin of Universe"	Invited session in Induction Programme for new students July 26, 2018	
2.	Mr. V K Surendra Deputy Director General, DoT, Govt. of India	Invited session in Induction Programme for new students July 26, 2018	



SI. No.	Name of Visitor with Affiliation	Date of Visit & Purpose	Picture
3.	Mr. Somesh Gupta COO, Infosys Jaipur Unit	Invited session in Induction Programme for new students July 26, 2018	
4.	Mr. Kaushlesh Mahehswari President (Sales & Marketing), Mangalam Cement Limited, a leading CK Birla Company.	Invited session in Induction Programme for new students July 26, 2018	
5.	Dr Deepak Saxena Director, Student Advisory Bureau, University of Rajasthan	Invited session in Induction Programme for new students July 26, 2018	
6.	Professor Chinmay Mehta a Learned Scholar and Renowned Artist in the area of fine arts. Chairman, Rajasthan Lalit Kala Academy, Formerly, Professor and Dean, Faculty of Fine Arts University of Rajasthan	Invited session in Induction Programme for new students July 26, 2018	
7.	Manisha Gulyani An internationally acclaimed Kathak classical dance Artist. Empanelled in ICCR to represent Kathak in India & abroad. Recipient of Natya Sri & Woman Achiever award from Govt of India	Invited session in Induction Programme for new students July 26, 2018	
8.	Mr. Gunjan Saxena, ITS Principal General Manager, BSNL	Chief Guest in Inaugural Function of Technical Fest TechVibes October 25, 2018	
9.	Harikrishna Anandan, from Switzerland Specialized in Documentary Film Making	Invited Speaker in a Session on Animation films held at BIT Jaipur Campus under Jaipur International Film Festival 21st Jan. 2019	

Sl. No.	Name of Visitor with Affiliation	Date of Visit & Purpose	Picture
10.	Hussain Nuri, from Iran Specialized in Script Writing & Painting	Invited Speaker in a Session on Animation films held at BIT Jaipur Campus under Jaipur International Film Festival 21st Jan. 2019	
11.	Arzu Qaderi, from U.K. Specialized in Social Film Making & Acting	Invited Speaker in a Session on Animation films held at BIT Jaipur Campus under Jaipur International Film Festival 21st Jan. 2019	
12.	Amr Gamal, from Yeman Specialized in Documentary Film Making	Invited Speaker in a Session on Animation films held at BIT Jaipur Campus under Jaipur International Film Festival 21st Jan. 2019	
13.	Mr. Nishant Goel Founder and CEO, BOT Mantra	Delivered Invited talk and conducted workshop on Robotic Process Automation 24th January 2019	
14.	Mr. Sumit J. Darak DST INSPIRE Faculty, IIIT Delhi	Delivered Invited talk and had interactive session on Emerging areas of research in wireless communication 28th January 2019	
15.	Dr. Surendra Pal Dr. D. S. Kothari chair and advisor to Defence Research Development Organization (DRDO), Bangalore Formerly, Vice Chancellor, Defence Institute of Advance Technology, Pune and Deputy Director, ISAC, ISRO Banagalore	Invited Lecture and interactive session on Emerging areas of Research in Space Technology 1st April 2019	

16. List of Distinguished Alumni

ı					
	SI. No.	Name, Batch and Affiliation	Short Description		
	1.	Mr. Amrit Supriya (BE -CSE 2004-2008) Working at CUMMINS, Minnesota, USA	Best Capstone Award for TLI's MS in Management of Technology, at University of Minnesota.		
	2.	Mr. Ankur Gupta (BE -ECE, 2005-2009) Assistant Director General at Indian Telecommunication Service	An ITS Officer, Selected in Prestigious IES		
	3.	Mrs. Shivaranjani Popli (BE-ECE, 2005-2009) Working in Indian Railways	Gold Medallist of BIT in ECE 2009 batch M.Tech from IIT Kanpur (2011), Gold Medallist in the batch, Dr Shankar Dayal Sharma award for overall best performance Selected in IES and joined Indian railway services. Presently working on prestigious Bullet Train Project in collaboration of Japan		
	4.	Mr. Kapil Sharma (BE-ECE, 2005-2009) working with DigitasLBi_US as Sr. Data Scientist	Gold Medallist of BIT in ECE 2012 batch (Also had highest CGPA in all Engineering Branches at BIT) Selected in Fellow Programme at IIM Ahmedabad but went for MS from University of Texas at Austin. Worked with prestigious NXP Semiconductors before joining DigitasLBi_US as Sr. Data Scientist.		
	5	Mr. Nitin Jain (B. Sc. Animation in year 2009 & Master in Animation Design, Year 2011) Founder & CEO of his Start-up- Indibni, one of the leading Indian Indigenous Content Production company	An outstanding Entrepreneur Felicitated with the prestigious Rajasthan Brand Leadership Award 2019 powered by ABP News and organized by World HRD Congress. Contributed immensely in promoting Alumni interaction as Secretary, BITOSA Jaipur Chapter.		

17. Any other relevant information

- Dr. Anand Kumar Srivastava delivered Invited talk entitled, "Stationary and Moving Pattern formation in Surface Dielectric Barrier Discharge Plasma" at 106th Indian Science Congress, LPU Jalandhar, 5th January 2019.
- Snehanshu Shekhar, Designated as member, Technical Program Committee, ICCT 2018 & 2019.
- Dr. Swagat Payra, Session Chair, in the National Conference on "Emerging Trends in Water Quantity and Quality Management-II" (ETWQQM-2019), Poornima University, 30th March, 2019.
- Dr. R. K. Gothwal, Chaired poster session rapporteur at HRMMV, Jalandhar during February 22-23, 2019



Lalpur Off Campus

SECTION 1 CAMPUS PROFILE

1. About the Campus

BIT Lalpur Off Campus started operations with part-time postgraduate M.E. courses in the disciplines of Mechanical, Civil, Electrical and Electronics Engineering. The city being an important industrial and commercial hub, the primary objective of the centre was to serve the needs of executives working in various Ranchi based Public Sector Undertakings, Private

industries, Banks, etc, who wished to upgrade their educational qualifications.

The MBA, MCA, BCA and BBA courses were started subsequently with laboratory classes being conducted on Sundays and holidays at the Mesra campus. Currently the Lalpur Extension Centre has over 1700 students on its rolls of which almost 500 are postgraduate students.

SECTION 2 SEMINAR / CONFERENCE

2. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	Dr. T.K. Banerjee	Digital Success Summit - 2018	Indus Net Technologies	Indus Net Technologies	Hyatt Regency, Kolkata	10 th August 2018
2.	Dr Mili Dutta	60 th Annual Conference, ISLE	Indian Society of Labour Economics (ISLE)	Institute for Human Development	Indira Gandhi Institute of Development Research (IGIDR) Mumbai	19-21 December 2018
3.	Dr. (Mrs.) Swati Priyadarshani	60 th Annual Conference, ISLE	The Indian Society of Labour Economics	IGIDR, Mumbai	Indira Gandhi Institute of Development Research (IGIDR) Mumbai	19-21 December 2018
4.	Srabani Mukhopadhyaya	13 th International Conference and Workshops on Algorithms and Computation (WALCOM 2019)	Self-funded. Partially funded by IIT, Guwahati, Sc. & Engg. Research Board, DST, etc.	Indian Institute of Technology, Guwahati	IIT, Guwahati	Feb. 27-March 2, 2019
5.	Kuntal Mukherjee	IEEE International Conference On Recent Innovations In Electrical, Electronics & amp; Communication Engineering - (Conference ID: 44171XP		Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar	KIIT, Bhubaneswar, India	27 Jul - 28 Jul 2018

SI		Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
6	Kuntal Mukherjee	Proceedings of the International Conference on Science, Technology, Engineering and Mathematics (STEM), Vibrant Gujarat Global Submit	Gujarat Government	Education Department Gujarat and Department of Science and Technology Gujarat Government	Gujarat, India	18-20 January, 2019

SECTION 3 RESEARCH PUBLICATIONS

3. Publications in Journals

- Soumitro Chakravarty, Umesh Prasad, Amar Nath Jha (2018) Corporate Citizenship: Contextual Issues, Trends and the Road Ahead, in ICFAI University Jharkhand(IUJ) Journal of Management, 6(1), 2347
- 2. Soumitro Chakravarty, Umesh Prasad, (2018) Attrition, Retention and the Indian Knowledge Worker's Experiences A qualitative enquiry, in International Journal for Research in Engineering Application & Management (IJREAM), 4(7)111
- 3. Soumitro Chakravarty, Umesh Prasad, (2018) Exploring the Underlying Issues In Employing Likert Scale For Social Sciences Research- A Primer For New Researchers, Journal of Emerging Technologies and Innovative Research (JETIR), 5(10), 624-626,
- Mukherjee S. & Sahay E., (2019), A review on organic consumption in young India: A Push by leveraging subjective norms through effective communication in the age of social media; International Journal of Research Culture Society, Vol. 3(1).
- Kumar, P & Mishra, A. (2019). Implication of tourism traits on Jharkhand tourism with special reference to perception of residents. Purusartha A Journal of Management, Ethics and Spirituality. XI (2)

- 6. Kumari, P. & Dutta, M. (2019). Impact of Work Ethics on QWL, Productivity and Corporate Image of an Organization. International Organization of Scientific Research, 24(4).
- 7. Minz, Swati and Munda P, (2019), International Journal of Management and Business Studies, 8(4)
- 8. Kouser, K. & Priyam, A.(2019). Comparison between Subspace and conventional clustering for High Dimensional Data Analysis. International Journal of Engineering and Advanced Technology, 8(03), 101.
- Kouser, K. & Priyam, A.(2019). Comparison between Subspace and conventional clustering for High Dimensional Data Analysis. International Journal of Engineering and Advanced Technology, 8(03), 101.
- 10. S P Tiwari, V K Yadav, P Pal, **B K**Sharma (2018) Minimal Fuzzy
 Realization for Fuzzy <u>Behaviour:</u>
 A bicategory-theoretic, Approach.
 Journal of Multiple-Valued Logic & Soft Computing, 31(2), 105.
- 11. Maurya, S., & Mukherjee, K. (2019). An Energy Efficient Architecture of IoT based on Service Oriented Architecture (SOA), An International Journal of Computing and Informatics, 43(01), 87



- 12. Bhattacharya, A., Goswami, R. T. & Mukherjee, K (2019). An Ensemble voted Feature Selection technique for Predictive Modeling of Malwares of Android. International Journal of Information System Modeling and Design (IJISMD), 10(2), 24
- 13. Bhattacharya, A., Goswami, R. T., & Mukherjee, K (2018). A feature selection technique based on rough set and improvised PSO algorithm (PSORS-FS) for permission based detection of Android malwares. International Journal of Machine Learning and Cybernetics.10(7), 1893.
- 14. Goswami, S., & Mukherjee, K (2019). High Performance Fault Tolerant Resource Scheduling in Computational Grid Environment. International Journal of Web-Based Learning and Teaching Technologies (IJWLTT), 15(1), 4
- 15. Das, D. & Mukhopadhyaya, S. (2018). Distributed Algorithm for Painting by a Swarm of Robots under Limited Visibility. Journal of Advanced Robotic Systems, 15(05), 1
- 16. Mitra, S., Das, A. (2018), Adaptive Routing Model in Wireless Sensor. World Journal of Modelling and Simulation, 14 (04), 289

4. Publications in Proceedings

 Priyadarshani Swati & Bhagat Manju. "World of Work and Women (An empirical study on factors affecting work life balance of women employees in organised sector)." World O Work & Women", 60th Labour Economics Conference, 19-21 December 2018, Mumbai (Conference Volume Pg 232-233).

5. Book:

1. P.S. Bishnu and Vandana Bhattacherjee (2019), Data analysis using probability and statistics using R Language, PHI publication. (ISBN Hard copy) 978-93-87472-65-5, (ISBN e-Book) 978-93-87472-66-2.

6. Chapter(s) in Edited Book

- Bhagat, S., Mukhopadhyaya, K. & Mukhopadhyaya, S. (2019). Computing Under Restricted Visibility. In Flocchini, P., Prencipe, G. & Santoro, N. (Eds.), Distributed Computing by Mobile Entities, LNCS 11340 (pp. 134-183). Springer Nature Switzerland.
- Sadhu, A.K., Sardar, M., Das, D. and Mukhopadhyaya, S. (July 2018). Gathering in Discrete Domain: State-of-the-Art. In Mandal J. K., Bhattacharyya, D. & Auluck, N. (Eds.), AISC series on Advanced Computing and Communication Technologies -702 (pp. 11-18). Singapore: Springer

SECTION 4

ACTIVITIES/ FACULTY MEMBERS / DOS/DAS

7. Student Activities

SI. No.	Name of the Activity	Students' Co- Ordinator (If any)	Faculty Co-ordinator (if any)	Date / Duration	
1	Inter Society Dumb Charades	Rashmi Rani	Dr. Anis Haider	06-Apr-19	
2	Game Of The Year	Anurag Kumar	Dr.Umesh Prasad	23-Feb-19	
3	Just Do It	Rishab Rituraj	Dr. Soumitro Chakrborty	10-Feb-19	
4	Flix Freak	Nisha Ranjan	Dr. Satrajeet Choudhury	09-Feb-19	
5	Brain Drain	Rashmi Rani	Dr. Anis Haider	09-Feb-19	
6	Inter Society Faceoff	Nisha Ranjan	Dr. Satrajeet Choudhury	09-Feb-19	
7	Nutshell	Ravleen Kaur	Dr. Soumitro Chakrborty	29-Jan-19	
8	Break The Ice	Shubham	Dr. Jaya Pal	26-Oct-18	
9	Coder Jam	Shubham	Dr. Jaya Pal	25-Oct-18	
10	Binet Simon	Shubham	Dr. Jaya Pal	24-Oct-18	
11	Tambola	Rishab Rituraj	Dr. Soumitro Chakrborty	05-Oct-18	

SI. No.	Name of the Activity	Students' Co- Ordinator (If any)	Faculty Co-ordinator (if any)	Date / Duration
12	Biztalk	Diksha Lath	Dr. Anis Haider	05-Sep-18
13	Montage	Diksha Lath	Dr. Anis Haider	04-Sept-18
14	App Challenge	Rashmi Rani	Dr. Anis Haider	31-Aug-18
15	Vaktaby	Rashmi Rani	Dr. Anis Haider	30-Aug-18
16	Code Hunt	Rashmi Rani	Dr. Anis Haider	30-Aug-18
17	Take-De-Bait	Parul Agarwal	Dr.Mili Dutta	27-Aug-18
18	Tech Quiz	Parul Agarwal	Dr.Mili Dutta	27-Aug-18
19	Mun	Nisha Ranjan	Dr. Satrajeet Choudhury	23-Aug-18

8. List of Faculty members

SI. No.	Name	Designation	TEQIP Sponsored
1	Dr. A.N.Jha	Professor	No
2	Dr. (Mrs.) Amrita Priyam	Associate Professor	
3	Dr. (Mrs.) Srabani Mukhopadhyaya	Associate Professor	
4	Mrs. Onima Tigga	Assistant Professor	
5	Dr. Pranab Kumar	Associate Professor	
6	Dr. Arun Kumar Singh	Assistant Professor	
7	Dr. Abhay Ranjan Srivastava	Assistant Professor	
8	Dr. N.K.Singh	Assistant Professor	
9	Mr. Amar Kumar	Assistant Professor	
10	Dr. Sanjay Kumar	Assistant Professor	
11	Mr. N.P. Tiwary	Assistant Professor	
12	Dr. Kuntal Mukherjee	Assistant Professor	
13	Dr. Sandeep Nath Sahdeo	Assistant Professor	
14	Ms. Anupama Sahai	Assistant Professor	
15	Dr. Parth Sarathi Bishnu	Assistant Professor	
16	Dr. Somnath Mukherjee	Assistant Professor	
17	Dr. Binod Kumar Sharma	Assistant Professor	
18	Dr. (Ms.) Jaya Pal	Assistant Professor	
19	Dr. Ashutosh Mishra	Assistant Professor	
20	Dr. Syed Anis Haider	Assistant Professor	
21	Dr. (Mrs.) Mili Dutta	Assistant Professor	
22	Mr. Amitabh Chandan	Assistant Professor	
23	Dr. Jaleswar Bhagat	Assistant Professor	
24	Dr. Umesh Prasad	Associate Lecturer	
25	Mr. D.K.Mishra	Associate Lecturer	
26	Dr. Soumitro Chakravorty	Assistant Professor	
27	Dr. (Mrs.)Swati Priyadarshini	Associate Lecturer	

SI. No.	Name	Designation	TEQIP Sponsored
28	Dr. Avinash Sinha	Assistant Professor	
29	Mr. Satrajeet Choudhary	Assistant Professor	
30	Dr. Pradeep Munda	Assistant Professor	
31	Dr. B.N. Sanyal	Assistant Professor	
32	Ms. Siba Mitra	Assistant Professor	
33	Dr. Tanmoy Kumar Banerjee	Assistant Professor	

9. Achievements of Students

SI. No.	Name of Student	Achievement/ Position/ Award etc	Organised by	Date and Venue
1	Geet Arora	2 nd position	Montage	Bizwit Society, BIT Lalpur
		4 th position	Take-de-bait	Debsoc Society, BIT Lalpur
2	Yukta Goenka	1 st position	Montage	Bizwit Society, BIT Lalpur
		3 rd position	Tambola	Interact Society, BIT Lalpur
3	Navnit Kr, Sharma	2 nd position	Tambola	Interact Society, BIT Lalpur
4	Swapnil Roy	4 th position	Business quiz	XISS, Ranchi
		1 st position	Tech quiz	Debsoc Society, BIT Lalpur
5	Sumit Grover	3 rd position	Nutshell	Interact Society, BIT Lalpur
6	Astha Shandilya	3 rd position	App challenge	Bitexl Society, BIT Lalpur
7	Debarati Roy	3 rd position	Vaktaby	Bitexl Society, BIT Lalpur
		2 nd position	Code hunt	Bizwit Society, BIT Lalpur
		2 nd position	Rain drain	Bitexl Society, BIT Lalpur
8	Chitra Kumari	2 nd position	Inter society dumb charades	Bitexl Society, BIT Lalpur
9	Saurav Upadhayay	2 nd position	Code hunt	Bitexl Society, BIT Lalpur
10	Sefali Rani	2 nd position	Business case competition	Motarhaat, Ranchi
11	Kumari Harshita	2 nd position	Business case challenge	Motarhaat, Ranchi
12	Shalini Poddar	2 nd position	Business case challenge	Motarhaat, Ranchi
13	Sakshi agarwal	1st position	Biztalk	Bizwit Society, BIT Lalpur
14	Hansa sinha	2 nd position	Mun	Naps, BIT Lalpur
		1st position	Folk dance	Bihan, Ranchi
15	Arpit ayush	2 nd position	Flix freak	Naps, BIT Lalpur
16	Shivam singh		Information security	K.A.T.D. of India
17	Aman raj	1 st position	Online poster making	Naps, BIT Lalpur
18	Archit	1st position	Online poster making	Naps, BIT Lalpur
19	Akshat	2 nd position	App challenge	Bitexl Society, BIT Lalpur
20	Ashna	3 rd position	App challenge	Bitexl Society, BIT Lalpur
		2 nd position	Montage	Bizwit Society, BIT Lalpur
		3 rd position	Alfaz-e-khuld	Naps BIT Lalpur
21	Priya singh	3 rd position	Mehfil-e-rangrez	Debsoc, BIT Lalpur

8. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
1.	Shri R N Sahay, Principal Commissioner IT	19-02-2019	
2.	Mr Anand Madhav Mishra, Regional Head (Jharkhand) Reliance Communication Ltd	22.11.18	
3.	Mr. Abhijit Roy Regional Training Manager Himalayan Drug Company	6.9.2018	
4.	Mr. Tuhin Das Proficient Mind Bangalore	28.9.2018	
5.	Visit of BIT Lalpur Campus by +2 students accompanied by the principal and other staffs of Sree Ayyappa Public School, Bokaro	14.12.2018	
6.	Mr. Shivesh Singh Head – Business HR Bandhan Bank	10.4.2019	



NOIDA Off Campus

SECTION 1

DEPARTMENTAL PROFILE





1. About the Campus:

Birla Institute of Technology, Noida Campus is one of the leading Technical Institutions in the National Capital Region in the State of Uttar Pradesh. Established in the year 1998, the Institution has set bench marks every year, and grown into an Institution of Excellence in Technical Education. Located at the entrance of NOIDA, BIT Noida Campus has become a household name for its excellence in Discipline, Teaching, Training and Placement. Its rich academic tradition has always attracted the most talented students who later on went on to make important contributions to the society.

Vision: "The BIT Noida Campus will stimulate both the hearts and minds of scholars, empower them to contribute to the welfare of society at large; train them to adopt themselves to the changing needs of the econom; advocate them for cultural leadership to ensure peace, harmony and prosperity for all."

Birla Institute of Technology, Noida Campus aims to become an Institution of excellence in imparting quality Outcome Based Education that empowers the young generation with Knowledge, Skills, Research, Aptitude and Ethical values to solve Contemporary Challenging Problems.

Facilities Provided

- In order to nurture effective learning among students, all class rooms are well equipped with AC and LCD Projectors.
- The Institute has a well-stocked library with more than 5000 volumes on various subjects along with latest editions of prescribed books, several periodicals, journals and high value books to give the students a winning edge.
- The centre believes in holistic personality development of students providing ample space for their recreational activities like – Canteen, Auditorium, Table Tennis space, and badminton, a centralised college computer centre and fully equipped labs.
- The centre is well equipped with e-journals (Emerald, Pro Quest ABI Complete, Pro Quest Dissertations & Thesis, Science Direct), and research software like MATLAB and dedicated internet facility for the research scholars.

Department of Animation & Multimedia

The Department of Animation and Multimedia started as an UGC innovative programme in the year 2004 at the Noida

Campus of BIT Mesra. The programme was offered as a 3 year B.Sc Degree Course and this was a national first in India. The popularity and the escalating demand soon saw BIT respond with a Master's Degree programme in Animation and Multimedia in the Noida and Jaipur Campus in 2009 to be subsequently followed by a Doctoral Research programme. Apart from being the first institution to offer a degree programme in Animation in our country, the department has consistently been rated as the best Animation school in the NCR by the Hindustan Times and other survey engines since 2010. The department has very proactive teachers who constantly interface with the industry at large both in India and abroad. Many have been invited by even American and European Universities to interact and give consultations.

Department of Computer Science

The mission of the department is to impart quality education, to produce innovative and globally competent technocrats having sound knowledge in the fields of Computer Science and Engineering. Department of Computer Science and Engineering running various reputed PG & UG programmes such as 2 years M.Tech (CS), 3 years Full Time MCA and 3 Years BCA, with the curriculum specifically designed to reflect the depth and breadth of latest technologies, research and innovations in computer science field. The department provides extensive computing

resources for research and education. In order to build the intellectual capital of researchers, the department also runs Doctoral programme in Computer Science.

Department also have state-of-the-art Computing Labs with latest configuration Dell Systems and required softwares.

Department of Management

Since 1998, the Department of Management at BIT Noida Campus has set benchmarks in management education in Delhi NCR region with its focus on excellence in imparting practical knowledge to undergraduate, postgraduate and doctoral students. The department is enriched with highly acclaimed and dedicated faculties as most of them are doctorate in diversified areas. The department offers Ph. D. in management, Two years Masters of Business Administration (MBA) and Three years Bachelor of Business Administration (BBA) course. The course curriculum is based on latest Choice Based Credit System (CBCS) for developing world-class managers capable of solving complex managerial problems. Management Students Development **Programmes** (MSDP) (comprised of Guest Lecture Series, Career preparation sessions and Industry University interface sessions), Personality Development Programmes, Industrial Visits in corporate are regularly conducted to boost their career prospects and employability.

SECTION 2 SEMINAR / CONFERENCE

2. Seminar / Conferences / Short – Term Courses Conducted by the Department/Campus

SI. No.	Title of Seminar/ Conference/ Short Term Courses/ Workshop	Coordinator	Funding / Sponsoring Agency	Date of Event
1.	Workshop on "BIG DATA ANALYTICS"	Mr. Anil Kumar	BIT	10.10.18
2.	Guest Lecture on "INTERNET OF THINGS"	Mrs. Seema Sharma	BIT	01.11.18
3.	Google News Initiative India Training Networks Verification Workshop on Facts Checking & Online Verification on Social Media Platforms – By Nimish Kapoor (Google Certified Trainer on Fact Verification)	Dr Suparna Dutta, Partha Acharya	Vigyan Prasar	14.02.19

3. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Charu Wahi & Seema Sharma	Big Data and Analysis	NA	FICCI	FICCI Federation House, Delhi	August 13, 2018
2	Dr Niket Mehta	National seminar cum workshop on e-content, MOOCs (SWAYAM)	AICTE	Khalsa College, Delhi University	Khalsa College, New Delhi	August 31, 2018
3	Dr. Munish Makkad	Thrust and Challenges in The Indian Financial Sector: The Way Forward	Department of Financial studies, University of Delhi	Association of Finance and Control, Univ. of Delhi	Hotel Eros Shangrila	September 22, 2018
4	Dr. Vandna Sharma	Facets of Business Excellence 2018	Self	IMT Ghaziabad	IMT Ghaziabad	22-26 Nov 2018
5	Mr. Anil Kumar	Facets of Business Excellence 2018	Self	IMT Ghaziabad	IMT Ghaziabad	22-26 Nov 2018
6	Seema Sharma	FDP on Artificial Intelligence and Machine Learning	BIT	IIT Roorkee	C-DAC Noida	17-21 Dec 2018
7	Dr. Suparna Dutta. & Dr. Niket Mehta	International Conference in Research in Business	Suchitra Publication	Suchitra Publication Allahabad	India Inter- national Centre, New Delhi	Feb 2019
8	Mrs Preety Bajaj, Mrs. Ritu Jain	Evolving HR Solutions in the Era of Disruption	IOCL	Indian Oil Corporation Ltd (Pipelines Division) Noida	Indian Oil Bhawan Noida	March 26, 2019
9	Charu Wahi & Seema Sharma	A.I. Readiness of India & Way Forward	NA	FICCI	FICCI Federation House, Delhi	May 1, 2019
10	Dr. Smitha Jha	12 th National Workshop on Recent Trends in Software testing	TEQIP III	BIT MESRA	R & D building	20th-24 th May 2019
11	Dr. Suparna Dutta	Indo-Global Multidisciplinary Educational Conference 2019	Confederation of Indian Universities, Common Wealth Vocational University, Commonwealth Society for Innovation & Research, Confederation Internation Benevolent Research Foundation	Confederation of Indian Universities, Common Wealth Vocational University, Commonwealth Society for Innovation & Research, Confederation Internation Benevolent Research Foundation	BANGKOK	1-4 June 2019

SECTION 3 RESEARCH PUBLICATIONS

4. Publications in Journals:

- Jha, P., Makkad, M. and Mittal, S. (2018). Performance-oriented factors for women entrepreneurs a scale development perspective. International Journal of Entrepreneurship in Emerging Economies. 10 (02) 329-360.
- Puri S. & Singh, S.P. (2018). Hindi Text Document Classification System using SVM and Fuzzy – A Survey, International Journal of Rough Sets and Data Analysis (IJRSDA) IGI Global, Volume 5, issue 4, page 1-131.
- 3. Sharma, K. & Sharma, V. (2018). Evaluating knowledge management practices in Indian manufacturing and service industry: an overview, International Journal of Knowledge Management Studies, Vol.9, No.3, pp. 222-242.
- Sharma, M. (2018). Development of a 'Green building sustainability model' for Green buildings in India, Journal of Cleaner Production 190, 238-551.
- Alam, M., Mohd., Sikdar, P., Kumar, A., Mittal, A. (2018). Assessing adherence and patient satisfaction with medication: Validation of TSQM in emerging markets, International Journal of Pharmaceutical and Healthcare Marketing 12(6), Pp. 409-432.
- Suryanarayana Ch, S., Singh, S.P. (2018). An Efficient Framework for Test Case Optimization based on the Flower Pollination Algorithm, Jour of Adv Research in Dynamical & Control Systems, Vol. 10, 10-S.
- 7. Wahi, C. (2019). Secured AODV to prevent Single and Collaborative Black Hole Attack in MANETs, International Journal of Innovative Technology and Exploring Engineering (IJITEE), Vol. 8, Issue -8S3. (Scopus Indexed).
- 8. Wahi, C., Bhattacherjee, V. & Chakraverty, S. (2019). Current Taxonomy of Trust based Secure

- Routing in MANETs, Journal of Advanced Research in Dynamical & Control Systems, Vol. 11, 04-S, 2019. (Scopus Indexed).
- 9. Puri, S. & Singh, S.P. (2019). Advanced Applications on Bilingual Document Analysis and Processing System, International Journal of Applied Methaheuristic Computing, IGI Global, volume 12, Issue 4, Article 6.
- 10. Puri S. & Singh, S.P. (2019). A Hybrid Hindi Printed Document Classification System using SVM and Fuzzy An Advancement, Journal of Information Technology Research (JITR), IGI Global, volume 12, Issue 4, Article 6.
- 11. Agarwal, P. & Singh, S.P. (2019). A Novel Cryptographic System for Efficient User Revocation in Dynamic Groups of Cloud Computing Environment, Journal of Advance Research in Development and Control System, Page no. 353-363, Volume 11, 07-special issue.
- 12. Misra, Y. & Sharma, V. (2019). Adoption of competency frameworks-Comparative analysis of Public and Private Sector Organisations in India, International Journal of Public Sector Performance Management (IJPSPM), Vol.5, No.1, pp.81-104.

5. Publications in Proceedings:

- 1. Sharma, Vandna and Kumar, Anil. Assessing the contribution of Internship in developing Management Competencies amongst b-school Interns at IOCL, Proceedings of the International Conference on Facets of Business Excellence (FOBE 2018), IMT Ghaziabad, 22-26 Nov 2018, ISBN: 978-93-88630-05-4.
- 2. Dhir, Richa and Sharma, Vandna. Are we missing something in B-school education? Developing positive psychology in students through Psychological Capital, Proceedings of

- the International Conference on Facets of Business Excellence (FOBE 2018), IMT Ghaziabad, pp.258-267, 22-26 Nov 2018, ISBN: 978-93-88630-05-4.
- 3. Mehta Niket, Dutta Suparna (2019), Overcome the Challenges of Social Message Communication in Digital Age through Games, 16th International Conference on Remote Engineering and Virtual Instrumentation, 3-6 Feb 2019, Indian Society for Remote Engineering and Data Science (INSOREDS), Bangalore.

6. Book:

Chapter(s) in Edited Book

1. Dutta Suparna, Mehta Niket (2019), Relevance of Behaviour Change Communication in the Mahatma Gandhi and Pandit Deendayal Upadhyay Legacy, Edited Book: Mahatma Gandhi and Pandit Deendayal Upadhyay: Concurrence on Economic Intellection, ISBN Number 978-81-934842-2-7, Swaranjali Publications, Ghaziabad, Uttar Pradesh, India

SECTION 4

AWARD / PATENT / COLLABORATIONS

7. Award / Recognition Bestowed on Faculties (State / National / International)

SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
1.	Dr. Arun Mittal		Managalmay Institute of Management Technology, Greater Noida		Feb'2019
2.	Suparna Dutta	Best Film (Producer)	Ministry of Science & Technology, Vigyan Prasar, DBT, Vigyan Bharaty		Oct 2018 Lucknow

SECTION 5

ACTIVITIES/ FACULTY MEMBERS / DOS /DAS

8. Departmental Students' Activities

SI. No.	Name of the Activity	Students' Co-Ordinator (If any)	Faculty Co- ordinator (if any)	Date / Duration
1	Print-Ad Competition	Dramatics, Literary, & News Publication Society – President - Ayushi Gupta (BBA VI), Nilansha Bansal (MBA IV)	Dr. Arun Mittal	16.04.19
2	Entrepreneurial Orientation Session by Mr. Manan Sharma, Founder & CEO DevstringX Technologies	Entrepreneureship Development Programme Cell- President- Md. Ikhtedar Khan	Dr. Monika Bisht	16.04.19
3	CORPORATE ROADIES	HR Club- President- Yogita Singh (MBA IV)	Mrs. Preety Bajaj	12.04.19
4	Swachh Bharat Club BIT Noida organised a movie show of 'Halkaa' movie to create awareness about cleanliness practises	-	Dr. Niket Mehta	12.04.19
5	Poster Making Competition: Save Water	Environment Protection and Awareness Club – President - Ms. Mansi (BBA VI)	Dr. Meenakshi Sharma	10.04.19

SI.	Name of the Assista	Students' Co-Ordinator (If	Faculty Co-	Date /
No.	Name of the Activity	any)	ordinator (if any)	Duration
6	Mock Parliament	Dramatics, Literary, & News Publication Society – President - Ayushi Gupta, (BBA VI), Nilansha Bansal (MBA IV)	Dr. Arun Mittal	09.04.19
7	MBA IV/MCA IV Industrial Visit to Orient Electric Ltd., Noida	Shrestha Dutt	Dr. Monika Bisht	29.03.19
8	MBA/MCA IInd Industrial Visit to Yakult Danone India Pvt. Ltd., Sonepat	Padmakshi	Dr. Monika Bisht	28.03.19
9	Inter PG Department Debate Competition on "Artificial Intelliegence: A Boon or Bane to Mankind	President, Business Research & Gaming Club- Ms. Nilansha Bansal, MBA IV SEM	Dr. Vandna Sharma	27.02.19
10	Career Preparation session on Verbal Ability, Times Group	Subheshwar Jha, Ginni Malik - BBA IV	Dr. Vandna Sharma, Mr. Anil Kumar	22.02.19
11	Career Preparation session on Quant Techniques by Mr. Praveen Chandra, Times Group	Subheshwar Jha, Ginni Malik - BBA IV	Dr. Vandna Sharma, Mr. Anil Kumar	13.02.19
12	National & International Career Options after Graduation Mr. Avinashi Sharan, Co-Founder, Cinque	Priya Bhardwaj, Aditya Deshpande, Mansi - BBA VI	Mrs. Pramila Joshi	06.02.19
13	Expert Talk on Wealth Management by Mr. Puneet Arora, Founder & CEO Cyan Advisors	Swati Das (BBA VI)	Dr. Monika Bisht	31.01.19
14	Lecture on Goal Setting by Mr. Navdeep Singh, Senior buyer British Telecom	Ginni Malik, Mayank Bellani- BBA IV	Dr. Arun Mittal	30.01.19
15	Lecture on "Stock Prediction Via Machine Learning & Artificial Intelligence	President, Business Research & Gaming Club- Ms. Nilansha Bansal, MBA IV SEM	Dr. Vandna Sharma	21.01.19
16	AICTE- MHRD Innovation Cell Webinar Workshop on IPR	Shreshtha Dutt, Nilansha Bansal - MBA IV	Dr. Vandna Sharma, Mr. Anil Kumar	10.01.19
17	AICTE- MHRD Innovation Cell Webinar Workshop on India first Leadership Talk series	Shreshtha Dutt, Nilansha Bansal - MBA IV	Dr. Vandna Sharma, Mr. Anil Kumar	08.01.19
18	Lecture on Cancer Prevention & Early Detection, By Dr. Savera Ahmad, Dharamshila Cancer Hospital	Leo & Rotaract Club- President- Aditya Deshpanade (BBA V), Karnik Sharma, Haravindh (BBA III)	Dr. Asha Prasad	16.11.18
19	Expert Talk on Mutual Fund by Ms. Ruchira Bajaj, HDFC Bank	Deepak Kumar	Dr. Monika Bisht	04.10.18
20	Orientation Workshop on Soft Skills	Shreshtha Dutt (MBA IV)	Dr. Vandna Sharma, Dr. Suparna Dutta, Mr. Anil Kumar	20.08.18 - 21.08.18
21	Career Decision Making workshop by Mr. Avinashi Sharan, Co-Founder, Cinque	Subheshwar Jha, Ginni Malik, Rimjhim Sharma -BBA III	Mrs. Pramila Joshi	10.07.18

SI. No.	Name of the Activity	Students' Co-Ordinator (If any)	Faculty Co- ordinator (if any)	Date / Duration
22	Orientation Lecture on		Dr. Vandna	09.07.18
	Expectations of Industry from		Sharma, Mr. Anil	
	Future Professionals		Kumar	

9. List of Faculties

SI. No.	Name	Designation	TEQIP Sponsored
	Department of Comp	outer Science	
1	Dr. Peeyush Tewari	Associate Professor	No
2	Dr. (Mrs.) Ila Sahay	Associate Professor	No
3	Mrs. S. Mallika	Assistant Professor	No
4	Dr. S.P. Singh	Assistant Professor	No
5	Mr. Anil Kumar	Assistant Professor	No
6	Mr. Pankaj Gupta	Assistant Professor	No
7	Mrs. Mrinalini Mehta	Assistant Professor	No
8	Dr. (Mrs.) Vibha Kaw	Assistant Professor	No
9	Mrs. Soma Sircar	Assistant Professor	No
10	Mr. Aruna Malik	Assistant Professor	No
11	Mrs. Sheetal Sehgal	Assistant Professor	No
12	Mrs. Pramila Joshi	Assistant Professor	No
13	Mrs. Muntaha Ahmad	Assistant Professor	No
14	Mrs. Smitha Jha	Assistant Professor	No
15	Mr. Anurag Joshi	Assistant Professor	No
16	Mrs. Priti Sharma	Assistant Professor	No
17	Ms. Charu Wahi	Assistant Professor	No
18	Mrs. Seema Sharma	Assistant Professor	No
19	Dr. Bharat Bhushan Sagar	Assistant Professor	No
20	Mr. Umair Ujala	Assistant Professor	No
21	Mr. Sanjay Kumar	Assistant Professor	No
22	Mrs. Lipika Jha	Associate Lecturer	No
23	Mr. Rakesh Singh	Associate Lecturer	No
	Department of Ma	nagement	
24	Dr. Munish Makkad	Professor	No
25	Dr. (Mrs.) Asha Prasad	Professor	No
26	Dr. (Mrs.) Vandna Sharma	Associate Professor	No
27	Dr. (Mrs.) Meenakshi Sharma	Associate Professor	No
28	Mrs. Rachana Pratik	Assistant Professor	No
29	Ms. Harpreet Charanjit	Assistant Professor	No
30	Mrs. Ritu Jain	Assistant Professor	No
31	Mrs. Preety Bajaj	Assistant Professor	No
32	Dr. Arun Mittal	Assistant Professor	No
33	Dr. K.B. Singh	Assistant Professor	No
34	Dr. (Ms.) Monika Bisht	Assistant Professor	No
35	Dr. Abhishek Singh	Assistant Professor	No

SI. No.	Name	Designation	TEQIP Sponsored			
37	Dr. (Mrs.) Suparna Dutta	Associate Professor	No			
37	Dr. Soumendra Bhattacherjee	Assistant Professor	No			
	Department of Animation	on & Multimedia				
38	Mr. Niket Mehta	Assistant Professor	No			
39	Mr. Partha Acharya	Assistant Professor	No			
40	Mr. Aroop Kerketta	Assistant Professor	No			
41	Mr. Kiran A. Shetti	Sr. Animation Trainer	No			
42	Mr. Lalit Mohan Bhatt	Editor	No			
43	Mr. Rahul Dora	Tech. Superintendent	No			
44	Mr. Das Mohan Singh	Designer	No			
45	Mr. Obed H. Longvah	Cinematographer	No			
46	Mr. Manoj Kumar	Animator	No			
	List of Adjunct Faculties					
1	Dr. J. C. Pandey	Retired Bank Manager Allahabad Bank	No			

SECTION 6 OTHER INFORMATION

10. Achievements of Students

Sr. N	Name of Student	Achievement/ Position/Award etc	Organised by	Date and Venue
1.	Aniket Ray & Shubham	Certificate of	Tomorrow's India	06.10.18
	Kumar, BBA IV	Excellence in Startup	Global Summit:	At Indira Gandhi Indoor
		Battelfield	Edition IV	Stadium, New Delhi

11. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
1.	Mrs. Nidhi Verma Sales Manager (North East India), FUJIFILMS, India	06.07.18	
2.	Mr. Avinashi Sharan, Co-Founder, Cinque	11.07.18	
3.	Ms. Ruchira Bajaj, HDFC Asset Management Company Ltd.	04.10.18	

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
4.	Dr. Savera Ahmed, Consultant - Preventive Oncology, Dharamshila Cancer Foundation and Research Centre	15.11.18	
5.	Mr. Navdeep Singh, Founder, "Yugandhar-Aadhar Naye Bharat Ka" & Senior Buyer at British Telecom	30.01.19	
6.	Mr. Puneet Arora, Founder & CEO Cyan Advisors	31.01.19	
7.	Mr. Himanshu Bansal, Software Engineer, JPMorgan Chase & Co.	21.01.19	
8.	Mr. Pankaj Goel, Sr. Business Analyst, IBM	27.02.19	SEA AVENTAGE OF THE SEA OF THE SE
9.	Mrs. Shweta, IBM	27.02.19	

12. List of Distinguished Alumni

SI. No.	Name, Batch and Affiliation	Short Description
1.	Neeti Kesarwani, MBA 2016-2018 Batch, Manager at Thomas Assessments Pvt. Ltd. (India & SAARC Region)	SheisManageratThomasAssessmentsPvt.Ltd.(India&SAARCRegion) Central Delhi, India, Self-driven, result oriented with over a decade of managerial experience into diverse industries like e-learning, pharmaceutical, assessments and learning and development. Have built and managed large teams and projects with CXO level stakeholder management across sectors.

2.	Bikram Sachdeva, MBA 2009 -2011 Batch, Regional Finance Controller at Ashok Leyland Ltd. Ahmedabad	He is Regional Finance Controller at Ashok Leyland Ltd. Ahmedabad, an MBA professional with more than 7 years of experience in finance and logistic cost control and accounting. He worked in Accounts payable, receivable, budgeting and forecasting for sales and marketing activities. I have an experience in AR & AP, reconciliation, SAP Hana FI and SD module at user level.
3.	Indira Wadhawan, MBA 2009-2011 Batch, Manager- HR at ABP News Network	She is Manager-HR at ABP News Network, A certified OD practitioner and currently an HR partner with experience in talent management (Acquisition, Engagement, Development & Retention) Organizational Development, Manpower Planning & Budgeting and HR Policies, Process and Practices.
4.	Prerna Khaitan, MBA 2013-2015, Research Associate S& P Global Market Intelligence	She is Regional Head Key Engagement – Make My Trip & Goibibo. She is into designing and executing strategies around PAN india hotels to gain competitive advantage. Experienced in research & analytics, consulting, business development & deal making. Currently in client acquisition and strategy building, revenue management, category management of chain hotel partners, demand supply analysis and inventory management for hotel partners.
5.	Sumit Prasad, MCA 2010-13, Lead Engineer, Samsung	He is working as Project Lead at Samsung Research Institute, Noida for North America Region. He is currently into project planning, scheduling management and planning sessions for new recruits, calculating man power requirements for project.

13. Any other relevant information

Details of Placement 2018-19:

Discipline	Branch	Total No. of Students	Placed	Average Salary
MCA	MCA	17	13	3.75 LAC
MBA	MBA	31	12	3.5 LAC

• Ph.D. Degree awarded to Smitha Jha (PhD/142/09) on the topic "Scheduling problem in Grid heterogeneous system", Pankaj Gupta (PhD/140/09) on the topic "Temporal data mining" and Niket Mehta (PhD/145/09) on the topic "21st Century approach to communication: Gaming as a prime tool of new media communication".



Patna Off Campus

SECTION 1 DEPARTMENTAL PROFILE

About the Campus

Birla Institute of Technology, Mesra, Patna Campus came into existence in the year 2006 with the initiative of Government of Bihar and BIT Mesra with a vision to provide quality education to the students of Bihar who wishes to pursue their career in technical education. By far, BIT Patna is one of the best equipped, technically sound professional college in the state of Bihar. The Institute offers Bachelor of Technology in Civil, Mechanical, Production, CSE, IT, ECE and EEE disciplines. Apart from this Institute also offers BBA, BCA, M. Tech. (ECE & CSE) and Ph.D. Programmes in different disciplines.

Central Library is well equipped with LIBSYS software and enriched with IEEE, ASCE, ASME, EBSCO, J-GATE, SCIENCE DIRECT etc online resources. Currently a total number of titles available in the library are 3483, whereas book volume is 40, 514 and total number of national, international and E-books are 49, 9397 and 1, 34, 000 respectively.

Laboratories of different departments are well equipped with latest softwares and good quality equipments required to

provide quality education, research and training. A glimpse of laboratories includes Computer Application lab, Analog and Digital Communication lab, Digital Electronics and Integrated Circuit lab, Circuit Simulation Microprocessor lab, Fiber Optics Communication lab, Instrumentation & Industrial Instrumentation lab, VLSI Design lab, Wireless Communication & Networking lab, Microwave & Advanced Communication lab, Power System Lab, Power Electronics lab, Material Science lab, Digital Electronics lab, Digital Signal Processing lab, Scientific Computing lab, Measurements & Instrumentation lab, APE lab, Control System lab, Electrical Machine lab, MATLAB & E-CAD, Microprocessor and Microcontroller lab, Engineering Mechanics lab, Fluid Mechanics lab, Manufacturing Processes lab, Automobile Engineering lab, Heat Transfer lab, Thermal Engineering lab, Dynamics lab, Solar Application Lab, Heat Treatment furnace, 3-axis CNC Lathe, Metrology lab, Tool Design lab, Work study lab, Soil Mechanics lab, Strength of Materials lab, Hydraulics & Hydraulic M/c lab, Highway Engineering lab, Field Surveying & Geology lab etc.

Training & Placement office at Patna is well equipped and designed to smoothly handle and support the campus placement process of students at every stage. An **average package of Rs 5.70 lakhs** per annum with the **highest at Rs.9.00 lakhs** per annum has been offered last year. A detailed placement report of 2018-19 batch is appended below:

PLACEMENT REPORT 2018-19

Name of Company	CIVIL	CSE	EEE	ECE	IT	Mech	Prod	Total	СТС
Affine Analytics		1						1	6
Amadeus Software Labs		1						1	8.35
Amdocs		5						5	6.3
Byjus				1		1		2	8
Cognizant		5		9	4	1		19	3.3
Edvizo		1						1	8
Ericsson		2			1			3	5.25
EXL Service		1		3				4	5

Name of Company	CIVIL	CSE	EEE	ECE	IT	Mech	Prod	Total	СТС
Gandhi Fellowship			1				1	2	3.6
Graveiens Eduservices				1			2	3	3.6
Infosys Ltd.(System Engg.)		6	1	3	5		1	16	3.6
Infosys Ltd. (Specialist Prog.)		1						1	8
Lowes India Services		1			1			2	8.5
Maq Software		2			2			4	7
Oracle FBGBU		1						1	9
Pie Infocomm Pvt. Ltd.	1	2		2		5		10	3.2
Polestar Solutions		1						1	5.01
PORT STREAM		1						1	3.7
Prism Johnson	1							1	4.83
Reliance JIO		2		2				4	4.5
Teg Analytics Internship		1						1	
Teqforce		1			1			2	3
Vodafone		2	2	5				9	4.25
Wheelseye Technologies		1						1	8
ZS Associates India Pvt. Ltd.		2						2	6.83
Grand Total	2	40	4	26	14	7	4	97	
Average CTC Offered: 5.70 Lacs									

	BE
Lowest CTC Offered:	3
Highest CTC Offered:	9

SECTION 2

RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

h) Ongoing Projects

SI. No.	Project Title	PI / Co PI / Collaborator, if any				
a	Energy Audit	PI- Mr. Sanjay Kumar	BREDA	03.10.2012	4.75 Lacks	2012-2019
	11KV feeder	Co- PI- Mr. Kumar Nikhil				
	under PESU area					

i) Projects Completed:

SI. No	Droject Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction		Date of completion of the Project
a.	Design and drawing vetting of saharsa storm water drainage project	Prof. Balram Singh, Dr. Syed Tabin Rushad and Ms. Badana Mahto	Project Director BUIDCo, Patna	10.05.18	180000.00	20.11.18

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Date of completion of the Project
b.	Concrete Mix Design (M25) for retaining wall at Chapra bahas POL Terminal Motihari	Dr. Anish and Dr. Angshuman Mandal	M/s Ram Baran Singh Apex Pvt. Ltd.	29.08.18	59000.00	29.10.18
C.	Compressive strength test of paver block	Dr. Syed Tabin Rushad	M/s T & G Associates Kothwan, Rupaspur, Patna	07.09.18	2950.00	11.09.18
d.	Testing of disturbed soil sample collected at Sugav and Hardidhi	Dr. Anish, Dr. Angshuman Mandal and Ms. Bandana Mahto	SHAARC PROJECTS LIMITED	06.09.18	69600.00	12.03.19
e.	Compressive strength of cubes (M25) for CNG facility in BIT Patna for GAIL India	Dr. Syed Tabin Rushad	M/s Gail Through M/S Mecon	19.11.18	4720.00	14.12.18
f.	Compressive strength of 3 no of cubes and 5 no of 100A bricks (DMCH campus)	Dr. Syed Tabin Rushad	M/S Cohesive Infrastructure Dev. Pvt. Ltd	04.12.18	5900.00	14.12.18
g.	Compressive strength test of Paver Block (fan shape)	Dr. Syed Tabin Rushad	M/s T & G Associates Kothwan, Rupaspur, Patna	27.02.19	2950.00	01.03.19
h.	Compressive strength of 3 no of cubes and 5 no of 100A bricks (Jhanjarpur campus)	Dr. Syed Tabin Rushad	M/S Cohesive Infrastructure Dev. Pvt. Ltd	14.01.19	5900.00	23.01.19
i.	Compressive strength of 3 no of cubes and 5 no of 100A bricks (DMCH campus)	Dr. Syed Tabin Rushad	M/S Cohesive Infrastructure Dev. Pvt. Ltd	05.03.19	5900.00	07.03.19
j.	Compressive strength of 3 no of cubes and 5 no of 100A bricks (Jhanjarpur campus)	Dr. Syed Tabin Rushad	M/S Cohesive Infrastructure Dev. Pvt. Ltd	05.03.19	5900.00	07.03.19

SECTION 3

SEMINAR / CONFERENCE

3. Seminar / Conferences / Short – Term Courses Conducted by the Department/Campus

SI. No.	Title of Seminar/ Conference/ Short Term Courses/ Workshop	Coordinator	Funding / Sponsoring Agency	Date of Event
1	Innovation in Technology	Dr. Upendra Kumar	BIT, Patna	19 January 2019
2	Pre Incubation Interaction training program	Dr. Upendra Kumar	Bihar Startup	22 to 27 April 2019
3	Development of Android Application	Ratnesh Mishra	BIT Mesra Patna Campus	5 to 9 March 2018
4	Green Building and Energy Simulation (Workshop)	Ar. Ashutosh Kumar	Bihar Renewable Energy Development Agency	11 &12 Feb. 2019
5	Pre-incubation Interaction Training Programme for Applicants of Start-up	Dr. Upendra Kumar & Dr. Vijay Agrawal	Department of Industries, Govt. of Bihar	22 to 27 April 2019
6	Financial Literacy for financial Inclusion –JaaduGinniKa	Dr. Vijay Agrawal	AICTE	24 Aug 2018
7	StartAb workshop	Dr. Vijay Agrawal	StartAb	31 Oct 2018
8	An Academic Workshop on "Finite Element Analysis" by Professor P.C. Pandey (Ex Professor IISC Bangalore)	Dr. Anish	BIT Mesra, Patna Campus	08.05.2019 - 10.05.2019
9	An Academic Seminar on "Are We Ready to Take Up Challenges in Water Resources?" by Professor Ashok K. Keshari, Civil Engineering Department, IIT Delhi.	Prof. Balram Singh	BIT Mesra, Patna Campus	26.07.2019
10	Short Term Training Programme on IOT	Dr. Megha Dadel	DST, Govt. of India	8 to 18 May 2019
11	Short Term Training Programme on NBA Accreditation	Ms. Trisha Kumar	NITTTR Kolkata	4 to 14 Feb. 2019

4. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Dr. S.K. Pradhan	ICNSMD-2018	Delhi University	Delhi University	Delhi University	17 & 18 Dec. 2018
2	Dr. S.K. Pradhan	NBA Accreditation	NITTTR Kolkata	NITTTR Kolkata	BIT Patna	4 to 14 Feb. 2019
3	Kumar Nikhil	Emerging Techniques in Mechanical Engineering and its Application	TEQIP-III	Mechanical Engineering Dept.	B.I.T, Mesra, Ranchi	5 to 9 March 2019
4	Adhishree	Microgrid Stability, Protection and Control	QIP, CEP	Electrical Engineering Dept.	IIT Roorkee	27 to 31 May 2019
5	R K Mishra	NBA Accredition	MHRD	NITTR Kolkata	BIT Patna	4-14 Feb. 2019
6	Md. Asif Hasan	NBA Accredition	MHRD	NITTR KOLKATA	BIT Patna	4 to 14 Feb. 2019



SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date	
7	Mayank Singh	NBA Accredition	MHRD	NITTR KOLKATA	BIT Patna	4 to 14 Feb. 2019	
8	DR. Ayan Kumar Das	1. International Conference on Computational Intelligence 2. 2 nd International Conference on Computational Intelligence in Pattern Recognition (CIPR)	BIT Mesra	CSE Department, BIT Mesra IIEST, Shibpur	BIT Mesra, Ranchi IIEST, Shibpur, Kolkata	10-11 Dec 2018 19-20 January, 2019	
9	Dr. Subhash Chandra Pandey	International Conference on Computational Intelligence and Data Analytics	Computer Society of India, IET	Gandhi Institute for Technology, Bhubaneswar, Odisa	Bhubaneswar	26-27 Oct, 2018	
10	Ratnesh Mishra	Advance in wireless optical networks	TEQIP MNNIT Allahabad	MNNIT Allahabad	Department of Electronics and Communication Engineering, MNNIT, Allahabad	27.5.2019 to 01.6.2019	
11	Ratnesh Mishra	Internet Of Things	Department of Science and Technology Bihar	BIT Patna Campus Bihar	Department of Electronics and Communication Engineering, BIT Patna Campus	8 th May, 2019 to 18th May, 2019	
12	Ratnesh Mishra	National Board Of Accreditation	NITTTR Kolkata	NITTTR Kolkata	NITTTR Kolkata BIT Mesra Patna Campus	4 to 14 Feb. 2019	
13	Ratnesh Mishra	International conference on rural livelihood improvement for enhancing farmer's income through sustainable innovative agri and allied enterprises	ICAR Patna	BIT Patna Campus	ICAR Patna And BIT Patna Campus	30.10.2018 to 01.11.2018	
14	Sweta Kumari	A closed loop robust controller for SSHI based piezoelectric energy harvester	NA	CADEC-2019, VIT Amaravati, India	Amaravati, India	2-3 March 2019	
15	Dr. Ritesh Kumar Badhai	NBA Accreditation	BIT Patna	NITTTR Kolkata	BIT Patna	4 to 14 Feb. 2019	
16	Dr. Shahiruddin	NBA Accreditation	BIT Patna	NITTTR Kolkata	BIT Patna	4 to 14 Feb. 2019	

	SI. Io.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
	17	Dr K.P.Tiwary	International conference on Advance Materials	BIT Mesra	Centre for Nanoscience and Nanotechnology, Jamia Millia Islamia, New Delhi	Jamia Millia Islamia, (Central Univ.) New Delhi	6-7 March, 2019
	18	Dr P.Kour	XVIII -School on Neutron as Probes of Condensed Matter (NPCM-2018)	BIT Mesra	UGC-DAE Consortium for Scientific Research, Mumbai Center and Solid State Physics Division, BARC, Mumbai	BARC Mumbai	28/10/18 to 1/11/18
	19	Dr P.Kour	UGC-sponsored 82st orientation programme	BIT Mesra	UGC-Human Resource Development Center (HRDC), Patna University	Patna	22/01/19 to 18/02/19
2	20	Dr P.Kour	ICMAGMA2018	BIT Mesra	NISER, BHUBANESWAR	Bhubneshwar	9/12/18 to 13/12/18
2	21	Dr. K. Sharma	International conference on Advanced Material - 2019	BIT	Centre of Nanoscience and Technology	Jamiya Milliya Islamia, (Central University) New Delhi	6-7 March 2019
2	22	Dr. Anamika Nandan	NBA Accreditation	NITTTR, Kolkata	NITTTR, Kolkata	BIT Patna	4 to 14 Feb. 2019
2		Ar. Ashutosh Kumar	Disaster risk mitigation and management for the built environment	BIT Patna	Council of Architecture	MEASI Academy of Architecture, Chennai	7 th January 2019 11 th January 2019
2	24	Dr. Rajnish Kumar	NBA Accreditation	NITTTR Kolkata	NITTTR Kolkata and B.I.T Mesra (Patna Campus)	B.I.T Mesra (Patna Campus)	4 to 14 Feb. 2019
2	25	Dr. Rajnish Kumar	Finite Element Method	B.I.T Mesra (Patna Campus)	B.I.T Mesra (Patna Campus)	B.I.T Mesra (Patna Campus)	08 - 10.05.2019
2	26	Dr. Prakash Chandra Srivastava	Finite Element Method		B.I.T Mesra (Patna Campus)	B.I.T Mesra (Patna Campus)	08.05.2019 to 10.05.2019
2	27	Dr. Prem lata Singh	Finite Element Method	B.I.T Mesra (Patna Campus)	B.I.T Mesra (Patna Campus)	B.I.T Mesra (Patna Campus)	08 - 10.05.2019
2	28	Dr. Sweta	Kano Model Analysis of Customer Needs and QFD Parameter Selection for Prosthetic Sockets	TEQIP	BIT-Mesra	BIT-Mesra	18-19 February 2019
2	29	Dr. Vijay Agrawal	Bihar Ideathon-2018	Department of Information Technology, Govt. of Bihar	CII	Sardar Patel Bhawan, Shastri Nagar, Bailey Road Patna	3-4 December 2018
3	30	Manish Oraon	Processing and Characterization of materials	BIT Mesra	NIT Rourkela	NIT Rourkela	06-08 Dec. 2018



SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
31	Manish Oraon	Role of Industrial Engineering in Industry 4.0 Paradigm	BIT Mesra	Siksha O anusandhan	IIIE Odisha Chapter Bhubaneswar	27-30 Sep. 2018
32	Manish Oraon	Advances in Materials and Manufacturing Engineering	BIT Mesra	KIIT, Bhuabneswar	KIIT, Bhuabneswar	15-17 March 2018
33	Manish Oraon	NBA Accreditation	NITTTR, Kolkata	NITTTR, Kolkata	BIT Patna	4 to 14 Feb. 2019
34	Manish Oraon	Internet of Things	DST	BIT Patna	BIT Patna	08-18 May. 2019
35	Dr. Anish	Training Programme " NBA Accreditation"	NITTTR Kolkata	NITTTR Kolkata	BIT Patna	04-02-19 to 14-02-19
36	Mrs. Bandana Mahto	Training Programme " NBA Accreditation"	NITTTR Kolkata	NITTTR Kolkata	BIT Patna	04-02-19 to 14-02-19
37	Dr. S.T. Rushad	Training Programme "NBA Accreditation"	NITTTR Kolkata	NITTTR Kolkata	BIT Patna	04-02-19 to 14-02-19
38	Dr. Chhaya Yadav	Orientation programme on Education Administration		BIT, Mesra Ranchi	BIT, Mesra Ranchi	11.02.2019 to 16.05.2019
39	Dr. Chhaya Yadav	STTP on NBA Accreditation	NITTTR Kolkata	NITTTR Kolkata	BIT, Mesra Patna Campus	4 to 14 Feb. 2019
40	Mr. Santosh Upadhyaya		NITTTR Kolkata	NITTTR Kolkata	BIT, Mesra Patna Campus	4 to 14 Feb. 2019
41	Dr. Rajni Singh	Workshop cum Training program on" Institutional Digital Repository"		IIT, Patna	IIT, Patna	17.09.2018 to 18.09.2018

SECTION 4 RESEARCH PUBLICATIONS

5. JOURNAL:

- Mayank Singh, R.C. Jha, "Object-Oriented Usability Indices for Multi-Objective Demand Side Management Using Teaching-Learning Based Optimization", Energies, 2019, 12(3), 370.
- K.P. Tiwary, F. Ali, R.K. Mishra, S. Kumar, K. Sharma "Study of structural, morphological and optical properties of cu and ni doped cds materials prepared by microwave assisted solvo thermal method", Digest Journal of nanomaterials and bio informatics, Vol 14, Number 2, April-June 2019.

CHAPTER:

 Singh, Mayank & Jha, R. & Hasan, . (2019). Prediction of Energy Availability from Solar and Wind for Demand Side Management: SIGMA 2018, Volume 1. 10.1007/978-981-13-1819-1_29.

PROCEEDING:

Adhishree Srivastava, Jayant Mani Tripathi, Abhinav, S.K. Parida, "Protection Coordination in Grid Connected and Islanded mode of Microgrid", IEEE 8th Power India International Conference (PIICON), 10-12 Dec, 2018, NIT Kurukshetra. Adhishree Srivastava, Ritu Meena, S.K Parida, "Effect of PV and FACTS on Small Signal Stability", IEEE 20th National Power System Conference (NPSC), 14-16 Dec, 2018, NIT Trichy.

6. Publications in Journals (International/National)

- Dhiman, S.K., Kumar, Arbind, Kumar. & Prasad, J.K. (2019). Heat Transfer by satellite cluster of cylinders at subcritical Reynolds number. Heat and Mass Transfer (Springer), ISSN 0947-7411, 55 (3) 595-612, 2019.
- Pradhan, S.K, . Kumar, A., Kour, P., Pandey, R., Kumar, Pawan, Kar, M.. and Sinha, A.N. (2018) Tuning of Dielectric and impedance properties of PVDF by incorporation of Mg doped PZT, J Mater Sci: Mater Electronics 29: 16842, 0957-4522
- 3. Kour, P, Pradhan, SK, Kumar, P, Sinha, SK and Kar M(2018), Effect of Nd Doping on Dielectric and Impedance Properties of PZT Nanoceramics Journal of Electronic Materials, 47(5), 2861-2870, 0361-5235.
- 4. Keshri, A.K., Mishra, B.K., & Mallick, D.K. (2018). A predator–prey model on the attacking behavior of malicious objects in wireless nanosensor networks. Nano communication networks, 15, 1-16.
- 5. Subhash Chandra Pandey (2018). Can Artificially Intelligent Agents Really be Conscious? Sadhana, 43(7), 110. (SCI, IF: 0.769)
- 6. Ratnesh Mishra et al (2019) "Energy Efficient Wireless Network Security with Using Block Cipher Technique "paper has been published in to IJMTE, DOI:16.10089.IJMTE.2019. V9I5.19.28441.
- 7. Ratnesh Mishra et al (2019) "Energy Optimization on Symmetric Key Encryption and Decryption Algorithm using Genetic Algorithm" International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-10, August 2019

- 8. Ratndesh Mishra et al(2019) "Medical Expert System for Diagnosis of Assorted Diseases Using AI" paper has been published in to UGC Approved Journal IJMTE, DOI:16.10089. IJMTE.2019.V9I5.19.28453, Page no 3802-3808
- Kumari, S., Sahu, S., & Gupta, B. (2018). Efficient SSHI circuit for piezoelectric energy harvester uses one shot pulse boost converter. Analog Integrated Circuits and Signal Processing, December 2018, Volume 97, Issue 3, pp 545-555.
- 10. Kumar, A. Kumar, A. Badhai, R.K. and Suraj, P. "Design of a printed symmetrical CPW-fed monopole antenna for on-body medical diagnosis applications", Journal of Computational Electronics, (2018), 17 (4), pp 1741–1747
- 11. Mishra Shipra, Chandra M., "Wavelet based power normalized spectrum for Hindi Speech recognition, " April 2019 Circuits Systems and Signal Processing.DOI:10.1007/s00034-019-01113-1, (SCI, I.F.=1.9)
- 12. Kumara S, Sinha S.K., Chaudhary R.K., Preparation of PbTi0.8-xTb0.2MgxO3 nano ceramics by high energy ball milling, Digest Jr of nanomaterials and Biostructure, 13(4) 2018, 1249 (SCI Indexed)
- 13. Sinha S.K., Kumari S, Chaudhary R.K, Dielectric and piezoelectric properties of PbTi 0.8–xSe0.2SmxO3 nanoceramics prepared by high energy ball milling, Applied Physics A, 125(3)2019, 171 (SCI indexed)
- 14. Sinha S.K., Kumari S, Chaudhary RK, Studies of dielectric and piezoelectric properties of PbTi0:8_x Te0:2GdxO3 nano ceramics prepared by high energy ball milling, Jr of Advance dielectrics, 9(2) 2019, 1950017 (SCI indexed)
- 15. Kumari S, .Sinha S.K, Chaudhary R.K, Studies of modified lead titanate by HEBM method, Wul, 25(11)2018, 59

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- Bala Neha, Raj SWATI, Shikha Deepkumari, Ali Furdaus, Singh Anjali, KourP and Sinha S.K., (2019) Synthesis and Study of Zirconium DopedLithium Titanate Ceramics, Material Today Proceeding18, 1459-1464 (Scopus Indexed)
- 17. Tiwary, K.P., Ali, F., Mishra, R.K., Kumar, S., and Sharma, K. (2019) Study of Structural, Morphological And Optical Properties Of Cu And Ni Doped Cds Nanoparticles Prepared by Microwave Assisted Solvo Thermal Method. Digest Journal of Nanomaterials and Biostructures, 14 (2), 305 (SCI Indexed)
- 18. Pradhan, S.K, . Kumar, A., Kour, P., Pandey, R., Kumar, Pawan, Kar, M. and Sinha, A.N. (2018) Tuning of Dielectric and impedance properties of PVDF by incorporation of Mg doped PZT, J Mater Sci: Mater Electronics 29: 16842, 0957-4522 (SCI)
- 19. Kour, P, Pradhan, SK, Kumar, P, Sinha, SK and Kar M (2018), Effect of Nd Doping on Dielectric and Impedance Properties of PZT Nanoceramics Journal of Electronic Materials, 47 (5), 2861-2870, 0361-5235 (SCI)
- 20. Tiwary K.P., Ali F, Mishra R.K, Kumar S., Sharma K. (2019), Study of Structural, Morphological and Optical properties of Cu and ni doped CdS Nanoparticles prepared by Microwave AssistatedSolvo Thermal Method. Digest Journal of Nanomaterial and Biostructures, 14 (02), 305
- 21. Prakash Chandra Srivastava, Anju Chaurasia, Yogesh Gupta & Anuj Bhardwaj (2019) Composite non polynomial spline solution of boundary value problems in plate deflection theory. International journal for computational methods in engineering science and mechanics (Taylor & Francis) 1550-2295.
- 22. Prakash Chandra Srivastava, Anju Chaurasia, Yogesh Gupta (2019) Solution of Higher Order Boundary Value Problems by Spline Method.

- American journal of Applied Mathematics.7(2).
- 23. Sehgal R, Dubey AM. (2019), "Identifications of Critical Sucess factor for Public-Private Partnership Projects" in J Public Affairs. 2019; e1956. Wiley. DOI: https://doi.org/10.1002/pa.1956
- 24. S. Ashutosh, P.K. Sunil & D.M. Ashish (2018), "Determinants of Organizational Learning in a Firm: An Empirical Analysis of Indian IT Industry" Global Business Review, 21(3), 1-14
- 25. Sheel Shalini, and Kanhaiya Lal "Incremental Mining of Temporal High Utility Itemsets in Dynamic Databases" DOI:16.10089.IJMTE.2019. V9I5.19.28446, Page No:3744-3758
- 26. Mandal A., & Maity D. (2019). Non-linear transient analysis of soil domain under variable soil properties with spring-dashpot type local absorbing boundaries. Geomechanics and Geoengineering, An International Journal. Taylors & Francis Group. Published online 16th April, 2019. https://doi.org/10.1080/17486025.20 19.1601266
- 27. Anish, Chaubey, A. K., Vishwakarma, S., Kumar, A., & Stanis. (2019). Transient response of rhombic laminates. Structural Engineering and Mechanics, 70(5), 551. https://doi.org/10.12989/SEM.2019.70.5.551
- 28. Anish, Chaubey, A., Kumar, A., Kwiatkowski, B., Barnat-Hunek, D., & Widomski, M. K. (2019). Bi-Axial Buckling of Laminated Composite Plates Including Cutout and Additional Mass. Materials, 12(11), 1750. https://doi.org/10.3390/ma12111750
- 29. Anish, Kumar, A., & Chakrabarti, A. (2018). Influence of openings and additional mass on vibration of laminated sandwich rhombic plates using IHSDT. Journal of Thermoplastic Composite Materials, 89270571878568. https://doi.

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- 30. Anish, Kumar, A., & Chakrabarti, A. (2019). Failure mode analysis of laminated composite sandwich plate. Engineering Failure Analysis, 104, 950–976. https://doi.org/10.1016/j.engfailanal.2019.06.080
- 31. Kumar, M., & Sahay, R. R. (2018). Wavelet-Genetic Programming Conjunction Model For Flood Forecasting In Rivers. Hydrology Research, (49.6), 1880-1889

7. Publications in Proceedings:

- Ayesha Tabassum, Sayema Sadaf, Ditipriya Sinha, Ayan Kumar Das, "Secure Anti-Void Energy-Efficient Routing (SAVEER) Protocol for WSN-Based IoT Network", In Proceedings of Second International Conference on Computational Intelligence, doi: https://doi.org/10.1007/978-981-13-8222-2_11, ISBN: 978-981-13-8221-5, pp. 129-142, Springer, 2018.
- Ditipriya Sinha, Sreemana Datta, Ayan Kumar Das, "Secure Data Sharing for Cloud-Based Services in Hierarchical Multi-group Scenario", In Proceedings of Second International Conference on Computational Intelligence, doi: https://doi. org/10.1007/978-981-13-8222-2_19, ISBN: 978-981-13-8221-5, pp. 229-244, Springer, 2018.
- 3. Ayan Kumar Das, Ayesha Tabassum, Sayema Sadaf, Ditipriya Sinha, "Attack Prevention Scheme for Privacy Preservation (APSP) Using K Anonymity in Location Based Services for IoT", In 2nd International Conference on Computational Intelligence in Pattern Recognition (CIPR), doi. https://doi.org/10.1007/978-981-13-9042-5_23, ISBN: 978-981-13-9041-8, pp. 267-277, Springer, 2019.
- Vikash Kumar, Ayan Kumar Das, Ditipriya Sinha, "Statistical Analysis of the UNSW-NB15

- Dataset for Intrusion Detection", In 2nd International Conference on Computational Intelligence in Pattern Recognition (CIPR), doi. https://doi.org/10.1007/978-981-13-9042-5_24, ISBN: 978-981-13-9041-8, pp. 279-294, Springer, 2019.
- 5. Sweta Kumari, Subrat Kumar Swain, Sitanshu Sekhar Sahu, Aditya Kumar, Prashant Kumar & Bharat Gupta, _A Closed loop Robust Controller for SSHI based Piezoelectric Energy Harvester, Proceedings of first annual conference on Computer-Aided Developments: Electronics and Communication (CADEC-19), (978-0-429-34071-0).
- A. Kumari, R. K. Badhai and P. Suraj, "A Compact Polygon Shape Ultra Wideband Antenna for Portable Devices, " 2018 International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET), Chennai, 2018, pp. 1-4. https://doi. org/10.1109/WiSPNET.2018.8538728
- 7. S. Kumar, P. Suraj and R. K. Badhai, "Triple-band Compact Monopole Antenna Using Defected Ground Plane, " 2018 International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET), Chennai, 2018, pp. 1-4.https://doi.org/10.1109/WiSPNET.2018.8538624
- 8. A. Utsav, A. Kumar, R. K. Badhai and P. Suraj, "A Dual Band on Body Monopole Antenna for WiMAX and X-Band Applications, " 2018 3rd International Conference for Convergence in Technology (I2CT), Pune, 2018, pp. 1-5. https://doi.org/10.1109/I2CT.2018.8529681
- Shahhli Tabassum, Shahiruddin, M A Hassan, D K Singh, "Dispersion over All Telecommunication Bands with Hexagonal Photonic Crystal Fiber", 2018 4th International Conference on Recent Advances in Information Technology (RAIT), 2018, DOI: 10.1109/RAIT.2018.8388974

8. Book:

- Chapter(s) in Edited Book:
- Subhash Chandra Pandey (2019). Recent Developments in Big Data Analysis Tools and Apache Spark, Big Data Processing Using Spark in Cloud (pp. 217-236). Springer Nature Singapore.
- 2. Subhash Chandra Pandey (2019). The Rudiments of Energy Conservation and IoT, Energy Conservation for IoT Devices (pp.1-17). Springer Nature Singapore.
- 3. Bhardwaj, P. and Badhai, R.K., (2019). Design of Planar Triple-Band Electrically Small Asymmetrical Antenna for ISM, WLAN, and X-Band Applications. In Optical and Wireless Technologies (pp. 539-549). Springer, Singapore.
- 4. Shahli Tabassum, Shahiruddin, Dharmendra K. Singh and M. A. Hassan(2019). Low Confinement Loss Solid Core Rectangular Photonic Crystal Fiber. In Optical and Wireless Technologies (PP. 271-277). Springer Nature Singapore Pte Ltd.

SECTION 5

AWARD/ PATENT/ COLLABORATIONS

9. Award / Recognition Bestowed on Faculties (State / National / International)

SI. No.	Name of the Faculty Member	Title of the Award / Honour	Organisation	State / National / International Level	Year / Duration
1	Dr. Anamika Nandan	Nation Builder Award	Rotary, Patna	State	5 th September 2018
2	Dr. Anish	Editorial Board Member	International Journal of Statistical Analysis	International	2019- Till date

SECTION 6

ACTIVITIES/ FACULTY MEMBERS / DOS/DAS

10. Departmental Students' Activities

SI. No.	Name of the Activity	Students' Co- Ordinator (If any)	Faculty Co- ordinator (if any)	Date / Duration
1	SAE BAJA	Sheetanshu Shekhar	Dr. Soumen Mandal	7.03.19 to 11.03.19
2	IEEE Student Chapter, BIT Patna		Mr. Mayank Singh	30.07.19 to 31.07.19
3	Xordieum, Electrical Club		Mr Mayank Singh	24.08.19
4	Training And Placement		Ratnesh Mishra as Advisor	1.07.18 to till date
5	ACM Society		Dr. Upendra Kumar	Nov, 2018
6	Heritage walk Patna by Ministry of Tourism, Govt, of Bihar	Mohit Kumar Mangala	Ar. Ashutosh Kumar	16.09.18
7	Career option in Banking & Finance Sector	Priti	Dr. Vijay Agrawal	24.10.18
8	Personality Development	Shubhangi Suman	Dr. Vijay Agrawal	29.08.18
9	The Art of Stress Management	Prakreeti Mehrotra	Dr. Vijay Agrawal	26.09.18
10	Prakrida-19		Core Committee members- Dr. Manish Oraon, Dr. Prashant Prakash, Mr. T.A. Amar	15-17 Feb. 19

SI. No.	Name of the Activity	Students' Co- Ordinator (If any)	Faculty Co- ordinator (if any)	Date / Duration
11	KAIZEN SPORTS (AIIMS PATNA), Winner of Volleyball, Runner of Football	Saket Kumar and Ankit Sharma	SS Yadav	1 st to 3rd March'19
12	CNLU Sports Fest (CNLU PATNA) Winner of Volleyball	Saket Kumar	SS Yadav	18 th to 20 th Feb'19
13	PRAKRIDA (BIT PATNA) Winner of Volleyball (M), Football, Carom (M), Chess (M), Runner of Basketball (M/W), Lawn Tennis, Kabaddi, Table Tennis, Badminton (M/W)	Swami Ranjan, Saket Kumar, Ankit Sharma, Avinash, Pawan Kumar, Shreshi Singh		18 th to 20 th Feb'19
14	MARATHON (PRAKRIDA)	Preman Sharma	SS Yadav	17 th Feb'19
15	SOCIAL PREMIER LEAGUE (CRICKET) Winner of Cricket	Swami Ranjan	SS Yadav, Dr. K Lal, Dr. Prashant Prakash, Dr. Amit Raghuwanshi	7 th to 9 th Feb'19
16	Annual Athletics Meet (BIT Patna)	Vivek Kumar	SS Yadav, Dr.K Lal	18 th to 20 th Jan'19
17	VAJRA (BIT MESRA) Participated in Volleyball (M), Cricket, Badminton and Basketball (M/W)	Swami Ranjan, Saket Kumar, Ankit Sharma and Avinash	SS Yadav, Dr.K Lal	2 nd to 4 th Nov'18
18	SPARDHA (IIT BHU) Bronze Medal in Javelin Throw (M), Participated in Volleyball, Cricket and Football	Swami Ranjan, Saket Kumar and Ankit Sharma	SS Yadav, Dr.Amit Raghuwanshi	26 th to 28 th Oct'18
19	INFINITO (IIT PATNA) Winner of Volleyball (M), Winner of Football, Gold in 100, 200 M Race	Saket Kumar and Ankit Sharma	SS Yadav, Dr. K Lal, Dr. Prashant Prakash, Dr.Amit Raghuwanshi	12 th to 14 th Oct'18
20	INTER BRANCH VOLLEYBALL TOURNAMENT (M & W)	Sudanshu Jha and Shefali	SS Yadav	4 th to 9 th Sep'18
21	INTER BRANCH FOOTBALL TOURNAMENT	Vineet and Ritu Raj	SS Yadav	4 th to 9 th Sep'18
22	INTER BRANCH CRICKET TOURNAMENT	Ayush	SS Yadav	25 th Aug'18 to 2 nd Sep;18
23	"Cultural Night-2019" Organised by Civil Engineering Society	General Secretary: Saket Kumar	Dr. Angshuman Mandal	01 Day (02.05.19)
24	"Survey camp-2019" Organised by Civil Engineering Department	Saket Kumar	Prof. R. R. Sahay & Dr. B. N. Singh	6 Days (10.03.19 - 15.03.19)
25	"Technical Event Edifice 2018" Organised by Civil Engineering Society	General Secretary: Saket Kumar	Prof. R.R. Sahay	3 days (04.08.18 - 06.08.18)

11. List of Faculties

SI. No.	Name	Designation	TEQIP Sponsored
1		Professor & Director	No
2	Dr. B.K. Singh Dr. S.P. Lal	Professor	No
3	Mr. Kapil Deo Prasad	Assistant Professor & In-Charge	No
4	Dr. Manish Oraon	Assistant Professor	No
5	Mr. Thakur A. Amar	Assistant Professor	No
6	Dr. Prashant Prakash	Assistant Professor	No
7	Dr. Arbind Kumar		No
8	Prof.Girish Pathak	Professor & In-Charge Assistant Professor	No
9	Dr.Soumen Mandal	Assistant Professor	No
10	Dr.S. K. Pradhan	Assistant Professor	No
	Dr. Ravi Shankar Anand		
11		Assistant Professor	No
12	Dr. Anand Kumar	Assistant Professor	No
13	Prof. Chandan Kumar	Assistant Professor	No
14	Prof. Amit Kumar	Assistant Professor	No
15	Mr Sanjay Kumar	Assistant Professor & In-Charge	No
16	Mr Kumar Nikhil	Assistant Professor	No
17	Mr Mayank Singh	Assistant Professor	No
18	Mr Raj Kumar Mishra	Assistant Professor	No
19	Mrs Shraddha Kishor	Assistant Professor	No
20	Mr Md. Asif Hasan	Assistant Professor	No
21	Ms Adhishree	Assistant Professor	No
22	Dr. Kanhaiya Lal	Assistant Professor & In-Charge	No
23	Mr. Subho Chaudhuri	Assistant Professor	No
24	Dr. Upendra Kumar	Assistant Professor	No
25	Dr. Subhash Chandra Pandey	Assistant Professor	No
26	Mrs. Sheel Shalini	Assistant Professor	No
27	Mr. Shridhar Kumar	Assistant Professor	No
28	Mr. Ajit Kumar Keshri	Assistant Professor	No
29	Mr. Ratnesh Mishra	Assistant Professor	No
30	Dr. Ayan Kumar Das	Assistant Professor	No
31	Mr. S. K. Chatterjee	Assistant Professor	No
32	Mr. Madhup Kumar	Associate Lecturer	No
33	Mr. Adnan Mahmood	Associate Lecturer	No
34	Dr. Partha Paul	Assistant Professor	No
35	Dr. Shahiruddin	Assistant Professor & In-Charge	No
36	Dr. Ritesh Kumar Badhai	Assistant Professor	No
37	Dr. Megha Dadel	Assistant Professor	No
38	Dr. Poonam Priyadarshini	Assistant Professor	No
39	Mr. Atul Kumar Pandey	Assistant Professor	No
40	Ms. Shipra Mishra	Assistant Professor	No
41	Ms. Shweta	Assistant Professor	No



SI. No.	Name	Designation	TEQIP Sponsored
42	Dr. Priyadarshi Suraj	Assistant Professor	No
43	Dr. S. K. Sinha	Associate Professor & In-Charge	No
44	Dr. K. P. Tiwary	Assistant Professor	No
45	Dr. Binay Bhushan	Assistant Professor	No
46	Dr. Paramjit Kour	Assistant Professor	No
47	Dr. Kaushlendra Sharma	Assistant Professor & In-Charge	No
48	Dr.Anubha Singh	Assistant Professor	No
49	Dr. Rajnish Kumar	Assistant Professor & In-Charge	No
50	Dr. Premlata Singh	Assistant Professor	No
51	Dr. P.C. Srivastava	Assistant Professor	No
52	Dr. Anamika Nandan	Assistant Professor & In-Charge	No
53	Ar. Ashutosh Kumar	Assistant Professor	No
54	Ar. Jaya Zambad	Assistant Professor, (on contract)	No
55	Dr. Vijay Agrawal	Associate Professor & In-Charge	No
56	Dr. Iftekhar Ahmad	Assistant Professor	No
57	Dr. A.K. Mahanty	Assistant Professor	No
58	Dr. Sunil Kumar Pandey	Assistant Professor	No
59	Dr. A. M. Dubey	Assistant Professor	No
60	Dr Amit Raghuvanshi	Assistant Professor	No
61	Dr. Sushil Kumar	Assistant Professor	No
62	Ms. Sohini Ghosh	Assistant Professor	No
63	Dr.Sweta	Assistant Professor	No
64	Dr. Sultan Khan	Assistant Professor	No
65	Dr. Balram Singh	Professor & In-Charge	No
66	Dr. R. R. Sahay	Professor	No
67	Dr. Anish	Assistant Professor	No
68	Dr. S. T. Rushad	Assistant Professor	No
69	Dr. Angshuman Mandal	Assistant Professor	No
70	Mr. Bandana Mahto	Assistant Professor	No
71	Mr. B. N. Singh	Associate Lecturer	No
72	Mr. Suresh Singh Yadav	Associate Lecturer & In-Charge	No
73	Mr. K. C. Bajpai	Visiting Professor & In-Charge	No

12. Board of Studies

SI. Name of the Member		Designation	Role
	Dr Anamika Nandan (In-charge, Department of Architecture, BIT Patna)	Ex-Officio	Internal Member, Board of studies, Department of Architecture, BIT Mesra
	Mr. Kapil Deo Prasad	Assistant Professor & In-Charge	Internal Member

SECTION 7 OTHER INFORMATION

13. Student Entrepreneurship activities/Start-ups if any

SI. No.	Name of Student	Source of Funding	Title of Startup	Short Description
	Mr. Prem Prabhat	Start up, Bihar	Amplitec Automation Private limited	It is IoT based project, which control Office, Homes, Buildings from any types of accidents like safty from thieft, fire in home due to sort circuit, Gas leakage etc

14. Publication by students, if any

- 1. Ayesha Tabassum, Sayema Sadaf, Ditipriya Sinha, Ayan Kumar Das, "Secure Anti-Void Energy-Efficient Routing (SAVEER) Protocol for WSN-Based IoT Network", In Proceedings of Second International Conference on Computational Intelligence, doi: https://doi.org/10.1007/978-981-13-8222-2_11, ISBN: 978-981-13-8221-5, pp. 129-142, Springer, 2018.
- Ayan Kumar Das, Ayesha Tabassum, Sayema Sadaf, Ditipriya Sinha, "Attack Prevention Scheme for Privacy Preservation (APSP) Using K Anonymity in Location Based Services for IoT", In 2nd International Conference on Computational Intelligence in Pattern Recognition (CIPR), doi. https://doi.org/10.1007/978-981-13-9042-5_23, ISBN: 978-981-13-9041-8, pp. 267-277, Springer, 2019.

15. Achievements of Students

SI. No.	Name of Student	Achievement / Position / Award etc	Organised by	Date and Venue
1	Ankit Kumar	Silver Medal in "Electrical Installation"	Skill India Competition	June, 2018
2	Priyanka	Worked on Conceptual Drawing for Kilkari- A Project by UNICEF	UNICEF, Patna Office	7 th August, 2019, Kilkari Bhawan Rajendra Nagar Patna
3	Dibyank Darshi	Prepared Conceptual Drawing for Kilkari- A Project by UNICEF	UNICEF, Patna Office	7 th August, 2019, Kilkari Bhawan Rajendra Nagar Patna
4	Shalini	Prepared Conceptual Drawing for Kilkari- A Project by UNICEF	UNICEF, Patna Office	7 th August, 2019, Kilkari Bhawan Rajendra Nagar Patna
5	Krish	Prepared Conceptual Drawing for Kilkari- A Project by UNICEF	UNICEF, Patna Office	7 th August, 2019, Kilkari Bhawan Rajendra Nagar Patna
6	Mohit Kumar Mangla	Design competition "PARIKLPANA" 3 rd Prize	Architects Association of Gaya	25 th February, Gaya
7	Vibhanshu	Design competition "PARIKALPNA" 3 rd Prize	Architects Association of Gaya	25 th February, Gaya

SI. No.	Name of Student	Achievement / Position / Award etc	Organised by	Date and Venue
8	Anindita	AIR -14 GATE, 2019	IIT, Madras	March, 2019
9	Anurag	AIR -14 GATE, 2019	IIT, Madras	March, 2019
10	Shubhangi Suman	Won First Prize in State level Poster Competition	National Productivity Council & BIA	11 th February, BIA building Patna, 2019
11	ShivashishTek	Won Gold Medal in Basketball Tournament	BIT-Patna Prakrida-2019	16-18 February, 2019
12	Shantanu Mohan	Won Gold Medal in Basketball Tournament	BIT-Patna Prakrida-2019	16-18 February, 2019
13	Ashish Kumar	International Diana Awardee	The Diana Award	30 April 2019
14	Ashwin Harsh	Won Silver Medal in Bihar State Snooker Championship	Bihar Sports Federation	20 th October 2018
15	Saket Kumar	"Player of the tournament" in Kaizen 19.	AIIMS, PATNA	(21.03.2019 - 24.03.2019), AIIMS PATNA
16	Saket Kumar	Winner of Jeevatva 19 (As volleyball Captain),	Sports fest organized by Chanakya National Law University, Patna	(15.02.2019 - 17.02.2019), Chanakya National Law University, Patna
17	Saket Kumar	Best Spiker of the tournament in Prakrida 19 (As volleyball Captain),	Inter Annual Sports fest organized by Birla Institute of Technology Mesra, Patna Campus	(15.02.2019 - 17.02.2019), Birla Institute of Technology Mesra, Patna Campus
18	Saket Kumar	Winner of Infinito 18 (As Volleyball Captain),	Sports fest organized by IIT-Patna	(12.10.2018-14.10.2019) At IIT PATNA
19	Premen Sharma	Winner of Infinito 18 (As Football Player),	Sports fest organized by IIT-Patna	(12.10.2018 - 14.10.2019) At IIT PATNA
20	Premen Sharma	Winner of the Football tournament in Prakrida 19 (As Football Player),	Inter Annual Sports fest organized by Birla Institute of Technology Mesra, Patna Campus	(15.02.2019 - 17.02.2019), Birla Institute of Technology Mesra, Patna Campus

SI. No.	Name of Student	Achievement / Position / Award etc	Organised by	Date and Venue
21	Premen Sharma	Secured 3 rd Position in High Jump in Intra Annual Athletic Meet, BIT Patna (As individual participant)	Intra Annual Athletic Meet organized by Birla Institute of Technology Mesra, Patna Campus	(23.01.2019 - 25.01.2019), Birla Institute of Technology Mesra, Patna Campus
22	Ankita Kiran	Secured 2 nd Position in Table Tennis Doubles at BIT Patna	Inter Annual Sports fest organized by Birla Institute of Technology Mesra, Patna Campus	(15.02.2019 - 17.02.2019), Birla Institute of Technology Mesra, Patna Campus
23	Archisha and Subham Kumar	Secured 2nd Position in "House of Cards" Samnibesha-2019 at IIT PATNA	"Technical Event Samnibesha - 2019" Organised by IIT PATNA	(08-02-2019
24	4 Ravi Kumar Participated in AUTO CAD Training Program and Qualified the Certification Exam		Computer Foundation Private Limited	One Month (10-12-2018 - 10-01-2019)
25	Ankit Sharma	Winner of Infinito 18 (As the Vice Captain of the Football Team),	Sports fest organized by IIT-Patna	(12.10.2018-14.10.2019) At IIT PATNA
26	26 Ankit Sharma Winner of the Footb tournament in Prakr (As the Vice Captair Football Team),		Inter Annual Sports fest organized by Birla Institute of Technology Mesra, Patna Campus	(15.02.2019-17.02.2019), Birla Institute of Technology Mesra, Patna Campus
27	Abhishek Krishnan, and Shreya	Secured 2nd Position in "Float the Boat" Technika-2019 at BIT PATNA	Technical Event "Technika - 2019" at BIT PATNA	29.03.2019-31.03.2019, Birla Institute of Technology Mesra, Patna Campus
28	Abhishek Krishnan and Shreya	Secured 2nd Position in "Spagity Bridge" Technika-2019 at BIT PATNA	Technical Event "Technika - 2019" at BIT PATNA	29.03.2019-31.03.2019, Birla Institute of Technology Mesra, Patna Campus

SI. No	Name of Student	Achievement / Position / Award etc	Organised by	Date and Venue
29	Amarjeet Shah	Secured 1nd Position in "House of Cards" Technika-2019 at BIT PATNA	Technical Event "Technika - 2019" at BIT PATNA	29.03.2019-31.03.2019, Birla Institute of Technology Mesra, Patna Campus
30	Amarjeet Shah	Secured 1nd Position in "Float the Boat" Technika-2019 at BIT PATNA	Technical Event "Technika - 2019" at BIT PATNA	29.03.2019-31.03.2019, Birla Institute of Technology Mesra, Patna Campus
31	Amarjeet Shah	Secured 1nd Position in "Spagity Bridge" Technika-2019 at BIT PATNA	Technical Event "Technika - 2019" at BIT PATNA	29.03.2019-31.03.2019, Birla Institute of Technology Mesra, Patna Campus

16. Distinguished Visitors from Industry/Academia/Research organizations

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture
1.	Dr. Kamini Sinha	19 th August, 2019	
2.	Ar. C.S. Sinha	12 th February, 2019	
3.	Ar. Mohit Kumar	27 th Septemer, 2018	
4.	Prof. Manoj Kumar	May 2019	
5.	Ar. R. R. Raje	7 th Dec, 2018	

SI. No.	Name of Visitor with Affiliation	Date of Visit	Picture	
6.	Mr. Dilip Kumar Sharma	30 th and 31 st January 2019	The same of the sa	
7.	Mr. Rameshwar Singh, DGM (Customer Technical Services) J K Cement Ltd. Guest Talk on	22.02.2019		
8.	Ms. Ananya Kumari, Executive Business Development, Scanpoint Geomatics Limited Company,	30/08/2019		
9.	Professor Ashok K. Keshari, Civil Engineering Department, IIT Delhi.	26/07/2019	⊕	
10	Professor P.C. Pandey (Ex Professor IISC Bangalore)	08/05/2019-10/05/2019		

17. List of Distinguished Alumni

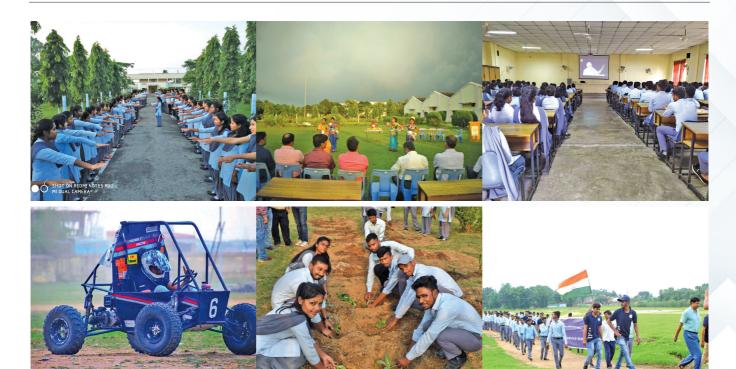
SI. No.	Name, Batch and Affiliation	Short Description
1.	Shivam Shrivastava, 2007-2011 Batch, IES (rank 8 2014 batch)	Working in Indian Railway service
2.	Ankur Dhanuka, 2006-2010	He left IOCL after 8 yrs. of service and now presently doing master in public policy program from Harvard University.
3.	Saurav Murarka, 2008-2012	Working in IOCL, Participated in NASA Lunar Robot Competition 2011, Washington DC
4.	Arkajyoti Chatterjee	Woking in Infineon at package of 13 LPA
5.	Shreya Kumar	Studying MS in Arizona State University
6.	Er. (Ms.) Tanushre	2k7, DVC
7.	Er. Manish Kumar	2k7, IR
8.	Er. Siddharth Bhardwaj	2k10, IES
9.	Er. Bimal Kumar	2k12, RITES
10.	Er. Anjenaya	2k12, Ph.D. Scholar, IIT KGP

18. Any other relevant information

SI. No.	Particulars	Date	Distinguished Guest	Department/ Faculty Coordinator
11.	International Yoga Day	21.06.2019	Yoga Guru Shri Pankaj Kumar (Art of Living)	
12.	World Environment Day	05.06.2019	Mr. Shyam Rajak (Minister; Dept. Of Industries, Govt. of Bihar)	
13.	Blood Donation Camp	15.03.2019	Mr. Vinay Kumar (Regional Head NSS) and team of Doctors from PMCH	
14.	Youth Parliament 2019	24.01.2019	Dr. Satya Pal Singh (Hon'ble Minister of State MHRD, Govt. of India)	NSS/ Mr. Shridhar Kumar
15.	·			
16.	World Population Day	11.07.2018	Mr. Vinay Kumar (Regional Head NSS)	
17.	World Cancer Day	04.02.2019	Mr. Shyam Rajak (Minister; Dept. Of Industries, Govt. of Bihar) and team of Doctors from PMCH	



UNIVERSITY POLYTECHNIC



SECTION 1 DEPARTMENTAL PROFILE

1. About the Department / Campus:

University Polytechnic offers Diploma in Engineering program in six different disciplines and BMLT program. The University Polytechnic is fully residential. It has well equipped library, laboratories, T&P cell, NSS, sports, games facilities and other amenities. Most of the faculty at University polytechnic are doctorate and have well expertise in their respective areas. University polytechnic function as a genuine laboratory of ideas and innovative solutions to produce globally competent technical manpower. University polytechnic recently established an Institution Innovation Council as per norms of MHRD's innovation cell.

SECTION 2 RESEARCH PROJECTS

2. Sponsored Projects (Research and Consultancy)

A) Ongoing Projects

SI. No.	Project Title	PI / Co PI / Collaborator, if any	_		Sanctioned Amount	Duration of the Project
1.	Unnat Bharat Abhiyan	Mr. Manoj Kumar	MHRD	01-09-18	1.0 lakh	2 years

B) Projects Completed

SI. No.	Project Title	PI / Co PI / Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Date of completion of the Project
1.	NA					

SECTION 3

SEMINAR / CONFERENCE

3. Seminar / Conferences / Short – Term Courses Conducted by the Department/Campus

SI. No.	Title of Seminar/ Conference/ Short Term Courses/ Workshop	Coordinator	Funding / Sponsoring Agency	Date of Event
1.	Induction program	Mr. Rakesh, Mr. Ramnish Sinha and Mr. Abhay Kumar	Institute	30-07-18 to 14-08-18
2.	Session on "Surgical Strike day" by Col. Rajesh Warke	Dr. Chanchal Mishra	Institute	26-09-18
3.	Two-day workshop on Application of IoT (Internet of Things)	Md. Maqubool Hosain, Dr. Sumana Kumari and Mr. Manoj Kumar	Institute	06-10-18 to 07-10-18
4.	Seven-day workshop in collaboration with Renforcer motorsports and ARC on Vehicle dynamics and design for go-kart fabrications	Mr Shankar kumar, P.R. Mahto and R.K. Prasad	Institute	30-10-18 to 05-11-18
5.	Six days workshop on Entrepreneurship awareness camp	Dr. S.S Kumar, Mr. Manoj Kumar, and Dr. Meena Singh	EDII, NSTEDB, Dept. of Science and Technology (DST),	28-01-19 to 03-02-19
6.	One-week Workshop on "Web-Development tools"	Mr. Niraj Kumar	Institute	29-04-19 to 03-05-19

4. Conferences/ Seminars/ Workshops/ Staff Development Programmes attended by Faculty Members:

Sr. No	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Mishra	3 rd International Conference on Innovations in Pharmaceutical Sciences (ICIPS) workshop	ICMR	GNITC (Autonomous), Hyderabad, Telangana		03-08-18 to 04-08-18
2.	Dr. Mohd Neyaz Ahsan	Orientation Program	UGC	UGC-HRD center	Academic Staff College, Ranchi University	
3	Dr. Shambhu Sharan Kumar and Mr. Manoj Kumar	•	DST Government of India	DST Government of India		24-09-18 to 06-10-18
4	Singh	4 th International conference on NCCS- 2018				03-11-18 to 04-11-18

Sr. No	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
5	Dr. G M Ansari	9 th International Conference on Quality, Reliability, Infocom Technology and Business Operations		Delhi University	Delhi University	27-12-18 to 29-12-18
6.	Dr. Chanchal Mishra	Quality Improvement Programme on "Cutting Edge and Emerging Technologies in Pharmaceutical Education and Research	AICTE	Department of Pharmaceutical Sciences and Technology, BIT Mesra, Ranchi.	Department of Pharmaceutical Sciences and Technology, BIT Mesra, Ranchi.	
7	Mr. Sanjay Jha	QIP on "Developmental Path of Phytopharmaceuticals" (Division of Pharmacognosy	AICTE	Department of Pharmaceutical Sciences and Technology, BIT Mesra, Ranchi	Department of Pharmaceutical Sciences and Technology, BIT Mesra, Ranchi	
8	Mr. Rakesh, Mr. Manoj Kumar, Mr. Prabhat Ranjan Mahto	National conferences on Recent advancement in Mechanical Engineering	TEQIP III	Department of Mechanical engineering, BIT Mesra	Department of Mechanical engineering, BIT Mesra	18-02-19 to 19-02- 19
9	Dr. Satish Kumar	Workshop on Intellectual Property Rights & Patent Filing	TEQIP	IPR CELL	BIT, MESRA	28-06-19

SECTION 4 RESEARCH PUBLICATIONS

5. Publications in Journals : (International/National)

- 1. Kumar S.S (2018). Novel Synthesis of Nano-particles modified Stoving Top-coats for Dev. in Weathering and Corrosion Resistance", Anveeksha Research Journal of SSKGDC, 1(1), 28-37.
- 2. Hosain, M., Kumari, S., & Tiwary, A.K. (2019). Compact Filtenna for WLAN Applications. Journal of Microwaves, Optoelectronic.s and Electromagnetic Applications, 18(1), DOI:10.1590/2179-10742019v18i11220
- 3. Kumar, A. (2019). Blockchain Technology, Challenges and Opportunities, International journal of Computer Trends and Technology, 67(4) 1-5.
- 4. Kumar, A. (2019). Architecture of Indian Healthcare Information Management System based on Blockchain. International journal of Computer Trends and Technology, 67(4) 6-8.

6. Book:

Chapter(s) in Edited Book

1. Singh, N. (2019). Application of QbD Framework for Development of Self Emulsifying Drug Delivery Systems" (chapter 14). In Pharmaceutical Quality by Design (pp. 297-350). Elsevier, Academic Press.

SECTION 5

ACTIVITIES/ FACULTY MEMBERS / DOS /DAS

7 Departmental Students' Activities

SI. No.	Name of the Activity	Students' Co-Ordinator (If any)	Faculty Co-ordinator (if any)	Date / Duration
1.	UNIFESTO 2019		Dr. Chanchal Mishra Mr. P R Mahto Mr. Shankar Kumar	03-03-19
2.	Saraswati puja	Students of last semester	-	10-02-19

8. List of Faculties

SI. No.	Name	Designation	TEQIP Sponsored
1	Dr. S.S Solanki	Professor and Director	
2	Mr. Devendra Kumar Jain	Assistant Professor	No
3	Dr. Shambhu Sharan Kumar	Assistant Professor	No
4	Mr. Ramkesh	Assistant Professor	No
5	Dr. (Mrs.) Meena Singh	Assistant Professor	No
6	Dr. G.M. Ansari	Assistant Professor	No
7	Mr. Abhay Kumar	Assistant Professor	No
8	Dr. (Mrs.) Sandhya Rani	Assistant Professor	No
9	Dr. Satish Kumar	Assistant Professor	No
10	Dr. T. K. Parashar	Assistant Professor	No
11	Mr. Pradeep Toppo	Assistant Professor	No
12	Mr. Ramnish Sinha	Assistant Professor	No
13	Mr. Rajendra Mahto	Assistant Professor	No
14	Dr. (Mrs.) Sumana	Assistant Professor	No
15	Dr. (Mrs.) Neeru Singh	Assistant Professor	No
16	Mrs. Rekha Kumari	Assistant Professor	No
17	Dr. Mohd. Neyaz Ahsan	Assistant Professor	No
18	Dr. Chanchal Kumar Mishra	Assistant Professor	No
19	Mr. Manoj Kumar	Assistant Professor	No
20	Mr. Niraj Kumar	Assistant Professor	No
21	Mrs. Nirupam	Assistant Professor	No
22	Mr. Rohit Kamal Chatterjee	Assistant Professor	NO
23	Mr. Rakesh	Associate Lecturer	No
24	Mr. N. K. Mukherjee	Associate Lecturer	No
25	Mr. Maqubool Hossain	Associate Lecturer	No
26	Mr. Narendra Kumar Singh	Physical Training Instructor	No
27	Mr. Sanjay Jha	Teaching Assistant	No
28	Mr. Shankar kumar	Teaching Assistant	No
29	Mr. P.R.mahto	Teaching Assistant	No

9. Board of Studies

SI. No.	Name of the Member	Designation	Role
1	Dr. S. Padmanabhan, BIT, Mesra	Dean AP	Chairperson
2	Prof. (Dr.) S.S. Solanki	Professor and Director, University Polytechnic	Vice- Chairperson
3	Dr. J.P Pandey	Professor and Controller of Examination	Vice- Chairperson
4	Dr. R.P. Sharma	HOD, Mechanical, BIT, Mesra	Institute Member and Subject Expert
5	Dr. Sanjay Kumar Jha	HOD, Production, BIT, Mesra	Institute Member and Subject Expert
6	Dr. P.R. Thakura	HOD, EEE, BIT, Mesra	Institute Member and Subject Expert
7	Dr. Srikanta Pal	HOD, ECE, BIT, Mesra	Institute Member and Subject Expert
8	Dr. Vandana Bhatacharjee	HOD, CSE, BIT, Mesra	Institute Member and Subject Expert
9	Dr. S. Samanta	HOD, Pharmacy, BIT, Mesra	Institute Member and Subject Expert
10	Mr. Arvind Kumar	GM, JSPL, Patratu	Member from Industry
11	Dr. P.K. Chatterjee	GM, Mecon	Member from Industry
12	Mr. Arvind Prasad	GM, BSNL	Member from Industry
13	Mr. N.C. Agarwal	CEO, Meditron	Member from Industry
14	Mr. Pratyush Pathak	SDE, BSNL	Member from Industry
15	Mr. Ashok Prabhakar	SDE, BSNL	Member from Industry
16	Dr. Noman Alam	Microbiologist, Medanta	Member from Industry
17	Mr. Lalji Prasad	JE, JSEB	Member from Industry
18	Mr. Dhiman Das	Proprietor, Mind Tree, Tatisilwai	Member from Industry
19	Dr. Shambhu Sharan Kumar	Assistant Professor	Internal Member
20	Mr. Ramkesh	Assistant Professor	Internal Member
21	Mr. Rekha Kumari	Assistant Professor and Coordinator	Internal Member
22	Mr Manoj Kumar	Assistant Professor and Coordinator	Internal Member
23	Mr. Rakesh	Associate Lecturer	Internal Member
24	Mr. P. Toppo	Assistant Professor	Internal Member
25	Dr. G.M. Ansari	Assistant Professor and Coordinator	Internal Member
26	Mr. Ramnish Sinha	Assistant Professor	Internal Member
27	Dr. Sumana Kumari	Assistant Professor and Coordinator	Internal Member
28	Dr. Meena Singh	Assistant Professor and Coordinator	Internal Member
29	Mr. N.K. Mukherjee	Associate Lecturer	Internal Member
30	Dr. Mohd. Neyaz Ahsan	Assistant Professor and Coordinator	Internal Member
31	Dr. Neeru Singh	Assistant Professor	Internal Member
32	Dr. T. K. Parashar	Assistant Professor	Internal Member
33	Mr. R.K. Chatterjee	Assistant Professor	Internal Member
34	Ms Sada Firdaus Alam	Guest Faculty	Guest Faculty

10 Any other relevant information

- MHRD, Government of India certified an Institution Innovation Council at University polytechnic on 11 Sep 2019.
- Mr. Abhay Kumar was invited from Department of IT & e-Gov. Govt. of Jharkhand as a

"Mentor" to take part in the "Start-up India Jharkhand Yatra", on August 13, 2018 event and as a Judge on August 28, 2018 event for Grand Finale.

- Dr. Satish Kumar Appointed as reviewer of International Journal 'Environmental Monitoring and Assessment' published by Springer.
- Dr. Satish Kumar appointed as REVIEWER of International 'Journal of Colloid and Interface Science' published under ELSEVIER (Impact factor-6.361)
- Dr. Satish Kumar served as Jury member in Inspire award Manak Scheme (science exhibition) organized by Dept. of Science & Technology, Govt. of India at Hazaribag on January 08, 2019 & in state level program at Ranchi on12-13 January, 2019.
- Dr. Shambhu Sharan Kumar appointed as reviewer and member of International Journal "Journal of Research in Engineering and Applied Science".
- Dr. Sandhya rani Nominated as Mentor for Atal Tinkering Lab, an approach to create an environment of Scientific temperament, innovation and creativity amongst Indian students under Atal Innovation Mission at NITI Aayoq, Govt. of India
- Dr. Satish Kumar invited as Special Guest & Resource Person in inaugural function of ATAL TINKERING LAB established under Niti Aayog, Government of India at Dr. B. R. Ambedker Memorial School, Piska-Nagri, Ranchi on 22 June, 2019.

NSS

- On the Occasion of Independence Day 15 Aug. 2018 and Republic day 26 Jan 2019, NSS organised Prabhat Pheri.
- Teacher's day was celebrated on September 5, 2018.
- NSS day was celebrated on September 24, 2018 wherein students and faculty have taken oath for selfless work for the nation.
- Swachh Bharat Abhiyan and School Chalo Abhiyan conducted at Village NEORI, TUKU TOLA, CHUTTU and Naya Toli on 30-09-2018.
- Dr. G.M. Ansari, Incharge, NSS, University Polytechnic organised Personality Development classes along with Mr. Abhay Kumar, Dr. Neeru Singh and Dr. Chanchal Kumar Mishra for University Polytechnic 3rd and 5th semester student from 9th August 2018 to 21 October 2018.
- On the occasion of Birth Anniversary of Sardar Vallabh bhai Patel (National Unity Day), NSS has organised a Poster Making Competition on 31-10-18.

Sports Activities

- Volleyball tournament was held in the month of September 2018 between Boys hostel.
 Hostel 1 won the match.
- Inter hostel Football Tournament held in the month of November 2018. In Girls category BMLT won the Match and in the Boys category, 2K18 batch won the match.
- A Cross Country Race was organized on February 03, 2019 for boys and girls. In boy's category, Eshwar Munda (Mechanical) stood First followed by Vivek Kumar Ohdar (EEE) and Sanjeev Mahto (EEE). In Girls category Sunita Kumari of BMLT stood first followed by Priyanka Kumari (Electronic) and Rani Kumari (Electronic).
- 12th Annual Athletic Meet was Held on February 07 and 08, 2019. In the meet 200 students participated in 26 Athletic events. The Individual Championship for Girls Category was awarded to Kumari Diksha of BMLT. In Boys category the individual Championship was awarded to Himanshu Nayak of EEE. Electronic Branch won the overall Team Championship.

Technical Education Quality Improvement Programme

Introduction and Objectives

The Project, Third phase of Technical Education Quality Improvement Programme (referred to as TEQIP-III) is fully integrated with the Twelfth Five-year Plan objectives for Technical Education as a key component for improving the quality of Engineering Education in existing institutions with a special consideration for Low Income States and Special Category States and support to strengthen few affiliated technical universities to improve their policy, academic and management practices. Based on the good performance in TEQIP-I and TEQIP-II and on the strength of our Institutional Development Proposal (IDP) for TEQIP-III, our Institute has been selected to participate in TEQIP-III.

Birla Institute of Technology is selected under sub-component 1.1 in which the Institute will receive Rs. 15 crores for Improving quality and equity in engineering institutions.

BIT is under the twinning arrangements to Build Capacity and Improve Performance of the institutions in partnership with Institute of Chemical Technology, Mumbai.

Induction programme for the benefit of newly joined students of first year B. Tech, Workshops for pedagogy training, improve student learning, Graduate employability, Faculty and Staff development, Joint research projects, Research and Development, Mentoring/Twinning, Management Capacity Development, Industry-Institute Interaction etc., Establishment of Infrastructure for SWAYAM PRABHA, enhanced GATE participation rate and Joint activities with Industry are among the main objectives of TEQIP-III.

Details of Activities Carried out:

- Improvement in Teaching, Training and Learning Facilities:
 - Up gradation of Existing laboratory facilities:

Various Softwares has been purchased through TEQIP-III for Remote Sensing, Civil & Env. Engg., Electronics & Communication Engg. and Central Instrumentation Facility.

The list of Softwares are:

- Watersh modelling system, Voxler 4, TerrSet Geospatial Monitoring and Modeling Software"
- 3-D Modelling (UAV) processing S/w"
- Plaxis Software "
- SPSS Statistical Software"
- CST STUDIO SUITE
- ADS Software University License for 5 users"
- ANSYS softwares for HPC Environment"
- Various Equipment's has been purchased through TEQIP-III for EEE, ECE, Production, CSE, Chemistry, Physics and Remotes Sensing Departments. The list of equipment's are:
 - EDS detector"
 - Digital storage Oscillosope
 - Wireless Sensor Networks (WSN) Lab Solution
 - Desktop Computers
 - Computers (Workstation)
 - Photocopier Machine
 - FTIR Spectrometer
 - USB Data acquisition Card

- Photo Electric Setup
- LAI Meter
- Ultrasonic Flaw Detector
- Furniture's are also procured for some of the departments.

Faculty and Staff Development:

Faculty and Staff Development is an important component of TEQIP. Following activities were conducted under head FSD during the period:

Two hundred eighty-five (285) faculty & staff members were financially supported for attending seminar, conference, workshop, training programme etc. under TEQIP.





Good Governance

Workshop on Lab safety: Pitfall & Remedies

Workshop/Training program/ Conferences organized under TEQIP:

Workshop sessions on "GRAB YOUR OPPORTUNITY" by ICT Mumbai NCRAME 2019 One week workshop on emerging techniques in mechanical engineering and its application (TEQIP III FUNDED) Workshop on Development of IOT based Power Electronic Interface for Green Energy System 28.01.19 to 1.02.19 18.02.19 to 09.03.19 20.05.19 to 24.05.19			
2 International Conference on Computational Intelligence (ICCI 2018) 3 Workshop sessions on "GRAB YOUR OPPORTUNITY" by ICT Mumbai 4 NCRAME 2019 5 One week workshop on emerging techniques in mechanical engineering and its application (TEQIP III FUNDED) 6 Workshop on Development of IOT based Power Electronic Interface for Green Energy System 7 12th National Workshop on Resent Trends in Software testing 8 Lectures on Institutional Reforms & Good Governance by ICT Mumbai on 8th Oct and 9th Oct 2018 in the Institute Conference Hall of BIT Mesra under the TEQIP-III twinning program between BIT Mesra & ICT Mumbai 9 Lecture series on "Particle Physics" and "Ceramics" by Mr. Paresh Salame & Mr. Mohan Narayan under twinning program with ICT Mumbai conducted at BIT Mesra 10 Workshop on statistical methods in biological engineering and R programming conducted by ICT Mumbai in Department of Bioengineering on for students & faculty members 11 Workshop on Intellectual property Rights 11 Workshop on Intellectual property Rights 11 International Reforms (ICCI 2018) 18.02.19 28.01.19 20.05.19 to 24.05.19 20.05.19 to 29.05.19 20.05.19 to 29.05.		Title of Programme	_
Workshop sessions on "GRAB YOUR OPPORTUNITY" by ICT Mumbai NCRAME 2019 One week workshop on emerging techniques in mechanical engineering and its application (TEQIP III FUNDED) Workshop on Development of IOT based Power Electronic Interface for Green Energy System 12th National Workshop on Resent Trends in Software testing Lectures on Institutional Reforms & Good Governance by ICT Mumbai on 8th Oct and 9th Oct 2018 in the Institute Conference Hall of BIT Mesra under the TEQIP-III twinning program between BIT Mesra & ICT Mumbai Lecture series on "Particle Physics" and "Ceramics" by Mr. Paresh Salame & Mr. Mohan Narayan under twinning program with ICT Mumbai conducted at BIT Mesra Workshop on statistical methods in biological engineering and R programming conducted by ICT Mumbai in Department of Bioengineering on for students & faculty members Workshop on Intellectual property Rights 10.06.19	1	Workshop on Lab safety: Pitfall & Remedies" by ICT Mumbai	17 Dec 2018
4 NCRAME 2019 5 One week workshop on emerging techniques in mechanical engineering and its application (TEQIP III FUNDED) 6 Workshop on Development of IOT based Power Electronic Interface for Green Energy System 7 12th National Workshop on Resent Trends in Software testing 8 Lectures on Institutional Reforms & Good Governance by ICT Mumbai on 8th Oct and 9th Oct 2018 in the Institute Conference Hall of BIT Mesra under the TEQIP-III twinning program between BIT Mesra & ICT Mumbai 9 Lecture series on "Particle Physics" and "Ceramics" by Mr. Paresh Salame & Mr. Mohan Narayan under twinning program with ICT Mumbai conducted at BIT Mesra 10 Workshop on statistical methods in biological engineering and R programming conducted by ICT Mumbai in Department of Bioengineering on for students & faculty members 11 Workshop on Intellectual property Rights 120.05.19 to 24.05.19 20.05.19 to 24.05.19	2	International Conference on Computational Intelligence (ICCI 2018)	10.12.18 to 11.12.18
One week workshop on emerging techniques in mechanical engineering and its application (TEQIP III FUNDED) Workshop on Development of IOT based Power Electronic Interface for Green Energy System 12th National Workshop on Resent Trends in Software testing Lectures on Institutional Reforms & Good Governance by ICT Mumbai on 8th Oct and 9th Oct 2018 in the Institute Conference Hall of BIT Mesra under the TEQIP-III twinning program between BIT Mesra & ICT Mumbai Lecture series on "Particle Physics" and "Ceramics" by Mr. Paresh Salame & Mr. Mohan Narayan under twinning program with ICT Mumbai conducted at BIT Mesra Workshop on statistical methods in biological engineering and R programming conducted by ICT Mumbai in Department of Bioengineering on for students & faculty members Workshop on Intellectual property Rights 10.06.19	3	Workshop sessions on "GRAB YOUR OPPORTUNITY" by ICT Mumbai	28.01.19 to 1.02.19
and its application (TEQIP III FUNDED) 6 Workshop on Development of IOT based Power Electronic Interface for Green Energy System 7 12th National Workshop on Resent Trends in Software testing 8 Lectures on Institutional Reforms & Good Governance by ICT Mumbai on 8th Oct and 9th Oct 2018 in the Institute Conference Hall of BIT Mesra under the TEQIP-III twinning program between BIT Mesra & ICT Mumbai 9 Lecture series on "Particle Physics" and "Ceramics" by Mr. Paresh Salame & Mr. Mohan Narayan under twinning program with ICT Mumbai conducted at BIT Mesra 10 Workshop on statistical methods in biological engineering and R programming conducted by ICT Mumbai in Department of Bioengineering on for students & faculty members 11 Workshop on Intellectual property Rights 10 10.06.19	4	NCRAME 2019	18.02.19 to 19.02.19
Green Energy System 7 12 th National Workshop on Resent Trends in Software testing 8 Lectures on Institutional Reforms & Good Governance by ICT Mumbai on 8 th Oct and 9 th Oct 2018 in the Institute Conference Hall of BIT Mesra under the TEQIP-III twinning program between BIT Mesra & ICT Mumbai 9 Lecture series on "Particle Physics" and "Ceramics" by Mr. Paresh Salame & Mr. Mohan Narayan under twinning program with ICT Mumbai conducted at BIT Mesra 10 Workshop on statistical methods in biological engineering and R programming conducted by ICT Mumbai in Department of Bioengineering on for students & faculty members 11 Workshop on Intellectual property Rights 10 10.06.19	5		05.03.19 to 09.03.19
8 Lectures on Institutional Reforms & Good Governance by ICT Mumbai on 8:10.18 to 9:10.18 8th Oct and 9th Oct 2018 in the Institute Conference Hall of BIT Mesra under the TEQIP-III twinning program between BIT Mesra & ICT Mumbai 9 Lecture series on "Particle Physics" and "Ceramics" by Mr. Paresh Salame & Mr. Mohan Narayan under twinning program with ICT Mumbai conducted at BIT Mesra 10 Workshop on statistical methods in biological engineering and R programming conducted by ICT Mumbai in Department of Bioengineering on for students & faculty members 11 Workshop on Intellectual property Rights 10.06.19	6	·	20.05.19 to 24.05.19
8th Oct and 9th Oct 2018 in the Institute Conference Hall of BIT Mesra under the TEQIP-III twinning program between BIT Mesra & ICT Mumbai 9 Lecture series on "Particle Physics" and "Ceramics" by Mr. Paresh Salame & Mr. Mohan Narayan under twinning program with ICT Mumbai conducted at BIT Mesra 10 Workshop on statistical methods in biological engineering and R programming conducted by ICT Mumbai in Department of Bioengineering on for students & faculty members 11 Workshop on Intellectual property Rights 10.06.19	7	12 th National Workshop on Resent Trends in Software testing	20.05.19 to 24.05.19
Salame & Mr. Mohan Narayan under twinning program with ICT Mumbai conducted at BIT Mesra 10 Workshop on statistical methods in biological engineering and R programming conducted by ICT Mumbai in Department of Bioengineering on for students & faculty members 11 Workshop on Intellectual property Rights 10.06.19	8	8^{th} Oct and 9^{th} Oct 2018 in the Institute Conference Hall of BIT Mesra	8.10.18 to 9.10.18
programming conducted by ICT Mumbai in Department of Bioengineering on for students & faculty members 11 Workshop on Intellectual property Rights 10.06.19	9	Salame & Mr. Mohan Narayan under twinning program with ICT Mumbai	28.01.19
	10	programming conducted by ICT Mumbai in Department of Bioengineering	15.04.19
12 Prevention of Harassment at workplace 25.06.19	11	Workshop on Intellectual property Rights	10.06.19
	12	Prevention of Harassment at workplace	25.06.19

Development of Research Interest among student:

- One hundred ninety eight BE/ME/MTech/PhD students have been financially supported for attending Seminar/Conference etc. from TEQIP fund.
- Thirteen UG Students participated in Summer Internship at ICT Mumbai under TEQIP-III.

Support to Start Up activities:

- Entrepreneurship Development Cell Program Flagship fest E-Summit 19 on 19-20 Jan 2019.
- Annual Technical Student Fest of BIT, Mesra: PANTHEON 2018 was held during 5-7 Oct 2018 has been financially supported through TEQIP-III.



BIT DISPENSARY





About Dispensary

The present BIT Dispensary is 20 bedded including 8 bedded two isolation wards fully functional Health Care Centre providing facilities to BIT Students, Faculties, their families and staff members & their families plus Villagers around the Campus.

The Dispensary is functioning in all the 3 shifts (Round the clock 24x7) including Sunday & Holidays attending all OPD and IPD & Emergency Cases.

Presently it is manned by 4 Allopath & 1 Homeopath Doctor put in shift/General shift and about 20 paramedical staff. We have also Dentist, Physiotherapist, Skin, & Gynecologist as visiting specialist every week for health care service.

Details of Dispensary Staffs

	SI. No.	Dispensary Staffs	Contact No.				
	Medical officer						
	1.	Dr. Mona Deepa	9431952122				
	2.	Dr. Anju Kumari	9973962840				
	3.	Dr. Madhu Pramanik	9546745091				
\	4.	Dr. Dharmendra Kumar	9576174033				
\		Visiting Specialist	Specialization				
	5	Dr. Rishi Raj	Dentist				
	6	Dr. Renu Sinha	Gynecologist				
	7	Dr. R.P. Chaudhary	Skin Specialist				
	8	Dr. Pramod Kumar	Physiotherapist				
\	9	Dr. P. Mohanty	Homeopathy Physician				

The workforce, as per the need and work load is quite insufficient and we are in the process of appointing and adding up few more Doctors & Paramedics to give our services in a better way.

The dispensary is functioning essentially as a primary health centre and patients who need specialized treatment or hospitalization are referred to multi specialty hospitals. All students and staff members & their two dependent children are covered under Mediclaim policy by Oriental General Insurance Company.

The Health Centre is equipped with 4 Ambulances, available in all the 3 shifts fitted with Oxygen Cylinders & first aid kits.

SI. No.	Dispensary Staffs			
	Nursing Staffs			
10	Mrs. Renu Kumari			
11	Mr. R.E. Singh			
12	Mrs. Sanju Devi			
13	Mrs. Pinki Kachhap			
14	Mrs. Sunita Pallai			
15	Mrs. Nupur Tigga			
16	Mrs. Aruna Goswami			
	Office Attendant			
17	Mr. B. Munda			
18	Mr. Bijay Lakra			
	Pharmacist			
19	Mr. A.K. Tarun			

SI. No.	Dispensary Staffs		
20	Mr. B.P. Yadav		
21	Mr. Umesh Prasad		
	Storekeeper		
22	Mr. Mahesh Kumar Sinha		
23	Mr. Rajeev Ranjan		
	Dressing staffs		
24	Mr. Anil Kumar		
25	Mrs. Janki Devi		
26	Mrs. Pramila Devi		

SI. No.	Dispensary Staffs			
	X-Ray Technician			
26	Mr. K. Mahto			
	Lab Technician			
27	Mr. S. K. Singh			
	Ward Attendant			
28	Mr. R. S. Mahto			
29	Mr. Saurav Kumar			
30	Mr. Jitendra Kumar			
31	Mr. Akash Kermali			

At present, the following facilities/services are available in the dispensary:

- 1. OPD services including part time specialist OPD viz.Skin, Obs/ Gynecologist & Dental surgeon & Physiotherapist.
- 2. In patient services for minor ailments.
- 3. Emergency Services
- 4. Homeopathy Clinic
- 5. Dental Clinic
- 6. Physiotherapy Unit
- 7. X-Ray Unit
- 8. ECG Unit
- 9. Isolation ward 02 (one each for male & Female patients)
- 10. Dressing unit

New Development & Modification done:

- 1. Purchase of new dental chair set
- 2. Purchase of new dental X- Ray machine set
- 3. Purchase of new refrigerator
- 4. Purchase of new 2 nos. B type oxygen cylinder
- 5. Purchase of new one Desktop Computer

To be commissioned:

- i. Complete Renovation & modernization of the existing infrastructure.
- ii. Minor OT

The following specialist doctor's services on part-time basis will be provided soon.

- 1. ENT Specialist
- 2. Radiologist and Sonologist
- 3. Pediatrician
- 4. Orthopedic Surgeon
- 5. MD. Physician: Diabetic, Hypertension, Asthma, Thyroid, Epilepsy, T.B & Leprosy clinic.

Services provided during the period 01.07.2018 to 30.06.2019

Total number of patients	: 41611
Number of outdoor patients treated & supplied medicines	: 41611
Male	: 23509
Female	: 18102

Categories:

Categories.		
Students	:	13463
Staff Members and their dependents	:	21386
Non-entitled cases	:	7081
Number of patients admitted & treated	:	792
Number of patients referred	:	275
Medical Budget Allocation (2018-19)	:	Rs. 4500000 (Approx.)
Expenses incurred	:	Rs. 4450000 (Approx.)
Number of patients treated by Homeopathic Physician	:	4611
Number of patients treated by Dental Surgeon	:	2556
Number of patients treated by Gynecologist	:	403
Number of patients treated by Skin Specialist	:	1103
Number of patients treated by Physiotherapist	:	2275
Number of Chicken Pox, Measles & Herpes patients treated & supplemedicines	lied :	14
Number of X-Ray done	:	190
Number of ECG done	:	76
Number of Blood Donation camp organize in dispensary	:	03
Number of Medical camp organize in dispensary	:	03



NATIONAL CADETS CORPS



1. About NCC at BIT, Mesra:

National Cadets Corps of BIT MESRA is one of the important components of the Institute which impart military training to include technical and physical subjects for first 6 semesters Technical Council has approved the duration of NCC training for 3 years (6 semesters) starting from 2017-18 batch. NCC has 200 cadets on its roll who are given basic knowledge in Corps EME, Corps Engineers and Corps Signals. NCC also enhance

the overall personality of the Cadets and shaping young minds as well as inculcating nationalism, patriotism and building good citizen among new generation youths.

2. No. of students enrolled: -

Total Students: 200

Boys : 134
Girls : 66

3. Achievement of NCC:

SI. No.	Activity	Venue	Date	No. of Cadets
а	Swachh Bharat Abhiyan	Ormanjihi, Ranchi, Birsa Zoo Premises	15/09/2018	42
b	Swachh Bharat Abhiyan	Masu Village	27/09/2018	18
С	Run for Unity	Sainik Market to Sahid Chowk	31/10/2018	150
d	Arm Display	BIT, MESRA	During Pantheon 2018	
е	Cashless Transactions	NIFFT-HATIA Campus	01/11/2018	190

SI. No.	Activity	Venue	Date	No. of Cadets
f	Anti-Plastic Abhiyan	BIT, Campus	20/11/2018	14
g	Swachh Bharat Abhiyan	BIT, Campus	29/01/2019	16
h	Swachh Bharat Abhiyan	BIT, Campus	19/03/2019	22
i	Blood donation	BIT, Campus	29/05/2019	2 Officers, 1 JCO, 23 Cadets

4. NCC Team:

SI. No.	Name of Faculty Member / NCC Officer	Department / NCC	Designation
(a)	Kishore Kumar Senapati	CSE Department	Lieutenant
(b)	Amritanjali	CSE Department	Caretaker Officer

5. Any other relevant point:

In session 2018-19, NCC has conducted apart from classes, activities like firing, blood donation, adoption of village tree plantation to name a few. The cadets put up impressive parade during Republic Day and Independence Day which was lauded by all. The Army band brought more color and fanfare to the parade. The following major activities were conducted by the NCC:-

- Live firing of. 22 Rifles by cadets.
- Participation in Republic Day and Independence Day Parade.
- Tree Plantation by cadets.
- Blood Donation by the entire NCC Team incl the cadets.
- Facilitator for other Battalion and Units as well as CRPF people.









NATIONAL SERVICE SCHEME

About National Service Scheme

The National Service Scheme (N.S.S) is a Central Sector Scheme of Government of India, Ministry of Youth Affairs & Sports. It provides opportunity to the student youth to take part in various government led community service activities & programs. The sole aim of the N.S.S is to provide hands on experience to young students in delivering community service.

Motto of N.S.S.

The motto of the National Service Scheme is: 'NOT ME BUT YOU'. This reflects the essence of democratic living and upholds the need for selfless service and appreciation of the other person's point of view and also to show consideration for fellow human beings. It underlines that the welfare of an individual is ultimately dependent on the welfare of society on the whole. Therefore, it should be the aim of the N.S.S to demonstrate this motto in its day-to-day program.

Aim of N.S.S. BIT Mesra

The program aims to develop student's personality through community service. The main objective of this program is to instill social welfare in students and to provide service to society without bias. N.S.S volunteers work to ensure that everyone who is needy gets help to enhance their standard of living and lead a life of dignity.

B.I.T Mesra offers N.S.S as an elective subject in all undergraduate programs for 1st and 2nd year

students. N.S.S., BIT Mesra organises regular and special activities in the ten adopted villages namely Rudia, Panchauli, Kenduatoli, Humbai, Mesra East, Mesra West, Neori, Chuttu, Kedal and Nawatoli.

Total no. of NSS units : 09

Total no. of volunteers enrolled : 642

a) Boys - 422b) Girls - 220

Achievement of N.S.S.

- Mr. Ravi Kumar has been selected for the prestigious "NSS Award 2017-18". The award ceremony will be held at Rashtrapati Bhawan, New Delhi on 24th September 2019.
- 4 volunteers from N.S.S. BIT Mesra participated in Trekking and Cultural Exchange Program under "Ek Bharat Shresth Bharat" held at Goa from 22nd - 28th July, 2018. (Organized by Directorate of Sports & Youth Affairs, Government of Goa)
- 5 volunteers from N.S.S. B.I.T Mesra participated in "National Integration Camp" held at NIFFT Hatia from 06th 12th December 2018. (Organized by Ministry of Youth Affairs & Sports, Government of India)

Team N.S.S. BIT Mesra

SI. No.	Name of Faculty Member	Department	Designation
01	Dr. O.P. Pandey	Mechanical Engg.	Program Coordinator
02	Mr. Gautam Shandilya	НМСТ	Program Officer
03	Dr. Yogender Aggarwal	Bioengineering	Program Officer
04	Dr. Shashank Pushkar	Computer Sc. & Engg	Program Officer
05	Dr. Syeda Darahkshand Jabeen	Mathematics	Program Officer
06	Dr. Prabjot Kaur	Mathematics	Program Officer
07	Mr. Pranjal Kumar	НМСТ	Program Officer
08	Dr. Praveen Srivastava	НМСТ	Program Officer
09	Dr. Abhijeet Nag	Mechanical Engg.	Program Officer
10	Dr. Sanjeet Kumar	ECE	Program Officer

The major events conducted by N.S.S B.I.T Mesra during 2018-19:

International Yoga Day: On the occasion of 4th International Yoga Day, N.S.S., BIT Mesra organized a yoga session in the college premises. More than 120 volunteers & faculty members gathered for the event. They were given information about the benefits of yoga and its possibility to benefit each age group in some way or the other.



Independence Day: On the occasion of 72nd Independence day of India, N.S.S., BIT Mesra organized a Prabhat Pheri in the college campus. The rally was organized to spread the message of love, peace and harmony. More than 550 N.S.S. volunteers, faculty & staff members participated in the event.

Friendly Football Match: On the ocassion of National Sports Day, N.S.S., BIT Mesra organized a football match in the adopted village of Rudia. The event was organized in association with the sports department of BIT Mesra & was aimed to make the players realize the true meaning of sportsmanship. The event witnessed the participation of more than 80 volunteers, faculty & villagers.







Swachh Bharat Abhiyaan: A cleanliness drive was organized by N.S.S. BIT Mesra from 1st August to 15th August 2018 in the college premises & nearby adopted villages, wherein all the volunteers took part in cleaning the villages and also took the initiative to make people aware about the importance of cleanliness.





Blood Donation Camp: On the occasion of Gandhi Jayanti, N.S.S., B.I.T Mesra organized a Blood Donation Camp at the Institute dispensary. The camp was organized in collaboration with two hospitals - Medanta & Seva Sadan. A total of 392 units of blood was collected during the camp making it a huge success.

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N.S.S. Day: In order to commemorate N.S.S. Day, which is celebrated on 24th September, a cleanliness drive was organized inside the BIT campus. The drive witnessed the participation of more than 540 volunteers, faculty & staff members. The objective of the campaign was to mobilise people and reinforce the "Jan Aandolan" for cleanliness to contribute to Mahatma Gandhi's dream of a Clean India.



National Unity Day (Run for Unity): N.S.S BIT Mesra organized a "Run for Unity" on 27th October 2018 in order to celebrate National Unity Day. The event was conducted in association with sports department of BIT Mesra. Students and faculty members enthusiastically participated in the event and played a vital role to spread the message of national integration.





Cloth Distribution Drive: A cloth distribution drive was organized by N.S.S. BIT Mesra on 28th October 2018 in the nearby villages of Bhattatoli and Mesra West. This event was conducted just before Diwali in an effort to bring happiness in the lives of villagers.





National Youth Day: On the occasion of National Youth Day, N.S.S. BIT Mesra provided an opportunity to volunteers to express their artistic and literary talents through Group Discussion, Poster Making, and Speech Competition on 11th January 2019.



बीआईटी एनएसएस के कार्यक्रम में बोले स्टुडेंट्स, युवाओं की सोच पर खरी नहीं उतर रहीं हैं राजनीतिक पार्टियां

रांची | बीआईटी मेसरा में एनएसएस की ओर से राष्ट्रीय एनएसएम की ओर से राष्ट्रीय जुबा दिवस मनाया गया। इस अवसर पर एक ग्रुप डिस्कशन, भाषण प्रतियोगिता और पेटिंग प्रतियोगिता डुंडं। 'राजनीतिक प्रतियोगिता डुंडं। 'राजनीतिक पार्टियों का युवाओं की स्पोच पर खरा न उत्तरने के विषय पर स्टूडेंट्स ने चर्चा की। वहीं, भाषण व पेटिंग का विषय 'देश के विकास में युवाओं का के भाषणा व पेटिंग का किषय 'देश के विकास में युवाओं का क्या योगदान' था। इस अवसर पर एनएसएस अध्यक्ष डॉ. महेंच पंतर, कार्यक्रम सम्ब्यक्ष प्रो. ओपी पांडेय, कार्यक्रम अधिकारी डॉ. अभिजीत नाग, डॉ. शशांक, डॉ. योगन्द, प्रो. गौतम, डॉ. संजीत, डॉ. प्रमजीत, डॉ. प्रशांक, डॉ. योगन्द, प्रो. खें. प्रवीण, छात्र प्रमुख अक्षय, शौर्य, रवि, आकर्षित और बित्तन आदि उपस्थित रहे।



जेनेसिस: एनआईटी राउरकेला ने जीता वुल्फ ऑफ दलाल स्ट्रीट बीआईटी मेसरा में चल रहे विवज और डिबेट कार्कममाँ पर आधारित जेनेरिसर के दूसरे दिन रांची के अलावा अन्य शहरों के स्कूल-कॉलेजों के स्टूडेंट्स ने भाग लिया। शनिवार का मुख्य आकर्षण 'कूल्फ ऑफ दलाल स्ट्रीट' क्विज कंपीटशन था। इसमें पत्क कुमार क्विज मास्टर थे। इसमें रांची के कॉलेजों के अलावा एनआईटी राउरकेला, एनआईटी जमशेदपर

अराक्षेत्र युनिमंदिन की टीमों ने भाग लिया एनआईटी राउस्केटला की टीम जीती। एनआईटी जमरोचपुर की दो टीमें मेकेंड और खर्ड रहीं। बहीं, पिरामिड में टीम एन्डगेम, टीम निल्स एंड को., टीम बॉल्स किस बने। इसमें प्रतिभागी टीम के एक सदस्य को पर्दे पर दिखाए कुछ

Republic Day: A prabhat pheri was organized in the college premises on the occasion of 70th Republic Day of India. More than 570 volunteers, faculty & staff members participated in the rally spreading the message of love, peace & harmony.





Handicapped Children Home Visit: N.S.S. BIT Mesra organized a visit to Handicapped children home on 9th February 2019. The volunteers interacted with the children & played games with them. The aim of this visit was to develop among the volunteers a sense of realization for the handicapped children.





ANNUAL REPORT 2018-19

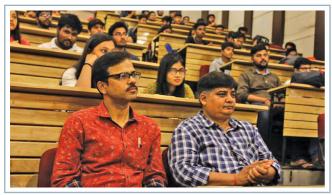
Walter Branch

Stress Management Workshop: N.S.S. BIT Mesra organized a stress management workshop in association with Sahaja Yoga Meditation on 10th February 2019. The workshop was organized to make the volunteers realize the importance of meditation in today's world. The workshop witnessed the participation of more than 450 N.S.S. volunteers, faculty & staff members.



Blood Donation Seminar 2019: N.S.S. B.I.T Mesra organized a Blood donation seminar on 14th March 2019. The seminar was conducted to make the volunteers understand the importance of donating blood. The seminar was attended by more than 200 volunteers, faculty & staff members.





Blood Donation Camp: On 16th March 2019, N.S.S. BIT Mesra organized a Blood Donation

Camp at the Institute dispensary. The camp was organized in collaboration with two hospitals - Medanta & Seva Sadan. A total of 342 units of blood was collected during the camp making it to be a huge success.



Yoting Awareness: In view of the coming Lok Sabha elections, N.S.S. BIT Mesra organized a voting awareness campaign in the adopted villages of Nawatoli, Pancholi, Mesra West, Neuri & Kedal on 6th April 2019. The awareness was conducted to make people understand the importance of voting & to encourage the youngsters to take part in the electoral process. The event involved the participation of more than 250 N.S.S. volunteers.







STUDENTS ACTIVITIES

BIT TECH FEST- PANTHEON 2018



With an ambition to provide a platform for the youth to showcase their technical skills and display cutting-edge technologies, BIT conducts one of the biggest technical fests of Eastern India- Pantheon.

In its truest sense, Pantheon is an intricately strung assortment of technological marvels blended with a unique taste of youthful exuberance. This edition of Pantheon dove deeper into the wondrous world of technology through its intriguing theme "Techstones:Then.Now.Next.". Cognoscenti and connoisseurs of technology gathered together with their thinking caps on from 5th to 7th October, 2018.

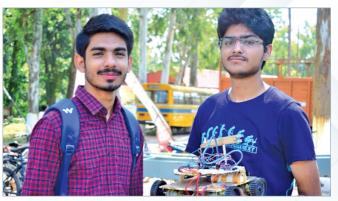
A plethora of exquisite events and workshops were organized in the fields of Scientific Research, Coding, Robotics, Oration, and Quizzing which helped the budding engineers prove their mettle and emerge victorious. The Flagship events included the All-terrain Robot making competition, 'Droid Trooper', 'Eureka'-the Science Exhibition, 'Codezilla'- the online coding contest, 'CyberBridgeton'- the bridge simulation module and 'Illuminati'- the mock paper presentation contest. Apart from this, Pantheon'18 provided a myriad of fun-filled activities including gaming events, debates and presentations which provided a delightful treat along with an intellectual platform.

BIT SPORT FEST-VAJRA 2018

The idea of VAJRA was inspired by the thought to amalgamate different sporting events under one roof and build a world-class platform to recognize, nurture, and reward talent in the most righteous manner, that is, through realizing our love and passion for the game. It is with this inspiration that the students and members of the administration of BIT Mesra turned the idea into what has grown leaps and bounds ever since its genesis.











During the past three years, VAJRA has grown from just a sports fest with a select few participants to one of the most celebrated sports fest of Eastern India with a wide array of athletes participating from all over India. VAJRA'18 saw a participation of 660 students from 26 different colleges from all around India.

The 28th Chetan Devraj Memorial Cricket Tournament marked the beginning of VAJRA 2018. The three day fest saw staggering performances in 7 different sports namely- Cricket, Chess, Volleyball, Basketball, football, table tennis and badminton and witnessed ecstasy and fresh ideation, a transcendent opportunity to hone one's finesse and adroitness and luxuriate in the grandeur of victory and exuberance. For the first time in the glorious history of VAJRA, an EDM night, Celesta was held with many acclaimed artists in the helm.

The aspiring sportsmen not only astounded everyone with their performances but also with their zeal to fight till the end. The efforts and dedication of the entire VAJRA family helped in taking the sports fest to unprecedented heights this year.

BIT CULTURAL FEST-BITOTSAV 2019

BITOTSAV, the annual socio-cultural festival of Birla Institute of Technology, Mesra, is undoubtedly one of the biggest campus and youth festival of Eastern India. This year it was presented by **TvF** (**The Viral fever**), co-presented by **Jeep**, in association with **MTV Beats**, **Vh-1 and Dainik Bhaskar**, the fest took place over a span of 3 days from **14**th **to the 17**th **of February**, **2019**.

The Theme this year was 'celebration of cultures'. It began on the 14th February with the Heritage Night which featured a glimpse of the vivid and kaleidoscopic cultural vibrancy of the Asian Continent. The night also played host to **the renowned poet and YouTube sensation**, **Mr. Amandeep Singh** whose heart-rendering beat poetry brought a wave of applause throughout. The band night on the 16th February, featured two of the most famous Indie-Rock bands of India, 'Moongphali' and 'Nalaayak' whose performances electrified the crowd to their core. The 'MTV Beats Pro-Nite' on the 17th of February stood witness to an array of enchanting musical performances by the stalwarts of Indian music industry. The first pro-nite star, the 'ravishing' **Shalmali Kholgade** weaved an aura of



resplendence. The 'dazzling duo' **Sachin-Jigar**, made BITians tap their feet to some of their popular numbers and infused energy and vigour throughout.



Performances by BIT Students



Performances by Ms. Shalmali Kholgade and the Duo Sachin & Jigar

Environmental Initiatives

River Cleaning Drive:





Tree Plantation Campaign: More than 100 trees were planted inside the campus





Jharkhand Science and Environment Festival 2019:

The 8th edition of Jharkhand Science and Environment Fest was successfully organized for the entire East-Zone on 2nd February 2019. This fest witnessed more than 600 school students from states like Jharkhand, Bihar, West Bengal etc. for the first time ever.





SI. No.	Participating Institutions	Total Visiting Members
1	MGM High School Bokaro	18
2	JNV Hazaribagh	25
3	Shiksha Niketan Jamshedpur	19
4	Sapphire International School Ranchi	32
5	DAV Nirja Sahay Ranchi	15
6	Saint Thomas Ranchi	15
7	DAV Bistupur Jamshedpur	25
8	SS DAV Centenary Public School, Khunti Ranchi	128
9	DPS Ranchi	25
10	DAV Hehal Ranchi	13
11	Guru Gobind Singh Public School, Bokaro	31
12	DAV Gandhinagar Ranchi	20
13	Atomic Energy School Jadugoda Jamshedpur	27
14	St Xaviers College Ranchi	83
15	DPS Gaya	12
16	DAV Muzaffarpur	52
17	DAV Chatra	62
18	Chinmaya Vidyalaya Bokaro	15
19	Taurian World School Ranchi	6
20	DPS Greater Ranchi	16
21	Sarala Birla Pblic School Ranchi	5



Entrepreneurship Development Cell





WORKSHOPS:

Workshop on Stock Market Analysis and Investing:

A guest workshop by Mr. Saurabh Dafria, Founder of Phinnacle Wealth Advisors, in collaboration with TEQIP was conducted on 8th August 2018.

Mock Pitching Workshop:

The "Investor Mock Pitching Session-cum-workshop" was conducted on the 24th of August and aimed for the introduction of all the upcoming entrepreneurs, start-up owners and zealous fresher's to the world of pitching sessions.

Stock Market Workshop:

The workshop on Stock Market was held from 25th to 29th of September. In the span of four days, the principles of stock market were covered and students were elucidated on the terms like 'initial public offering', 'market making', 'compound interest 'and' bid price'. A general idea on mutual funds was also given.

Social Entrepreneurship Workshop:

A workshop by the guest speaker Mr. Divyaditya Kothari was held on November 10th. The main topic of the workshop was social entrepreneurship and how one can develop the skills to be a successful social entrepreneur.

Big Data Workshop:

In this tech advancing world, data science has emerged as one of the best-earning ideas. To help one dive headfirst into the world of Data we organized a certified workshop on Big Data. It was a 5-day Workshop conducted by Mr Ashish Misra of RCPL

EVENTS and GUEST LECTURES:

Start-up India Jharkhand Yatra:

Start-up awareness event conducted in collaboration with Start-up India conducted on 11th August 2018. It was an initiative by the Department of IT & e-Government of Jharkhand organized in collaboration with Startup India leading to a plethora of incubation offers and incentives as you move up the ladder.

AIC Information Session:

A formal session was organized to spread awareness about Atal Tinkering Labs and Atal incubation Mission on 22nd October 2018. The session was conducted by the NITI Aayog official Dr. Ashish Nayan, who gave a brief on how 'Atal Innovation Mission' works.

A Talk by Mr. Sandeep Gupta:

The Executive Director at J.P. Morgan, India Head of Regulatory Capital Management, Mr. Sandeep Gupta, enlightened the students about the know-how of risk management

Lecture by Dr. Alok Chaturvedi:

The esteemed alumnus of BIT Mesra, Mechanical Engineering and current professor in Purdue University's Krannert Graduate School of Management and the Department of Computer Sciences and also the Founder, Chairman, and the CEO of Simulex Inc. He spoke about social empowerment, entrepreneurship for masses and upliftment of the weaker sections of the society through entrepreneurship.

Virtual Stock Simulation:

A one month online event conducted to give a real life experience of how stock market works to the students.

Rapidough:

RAPIDOUGH focused on the sales and marketing strategy of the participants.

E-Talks

Two E-Talks were organized on topics Trade War and Jio-Past, Present and Future.

E-SUMMIT'19:

BIT Mesra has always had a strong ties with entrepreneurship, leaving its mark across all industries. EDC, BIT Mesra celebrates this entrepreneurial spirit with its annual flagship event E-Summit.

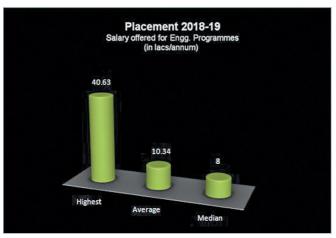
Many prominent Guest Speakers - **Mr Sandeep Jain** and **Mrs Bhargavi Nuvvula** and investors- **Mr Shashikant Choudhary** and **Mr Anil Joshi** graced their presence for the fest.

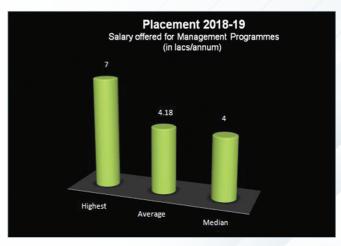
Events that were organised in E-Summit'19 were- B-Plan, IPL Auction, Digital Pyramid.

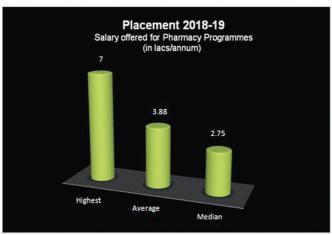


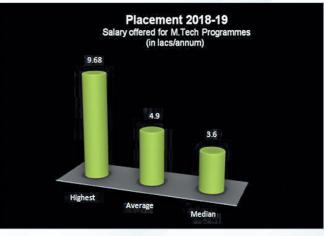
Training and Placement

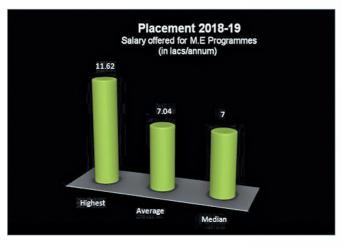
The Campus Recruitment Programme of BIT has been strengthening and also nurturing value added relationships with recruiters across a wide spectrum of industries over the years. Every year new milestones are achieved which speak for the strength of the BIT student community as well as the diversity in academic programmes. During the year 2018-19, the Campus Recruitment Programme maintained its strong position with visits from 141 recruiters across all campuses and by achieving an overall target of 859 job offers. The Mesra campus boasts of an average package of INR 10.4 lakhs per annum and the highest national salary of 40.63 lakhs per annum for BE Progame.

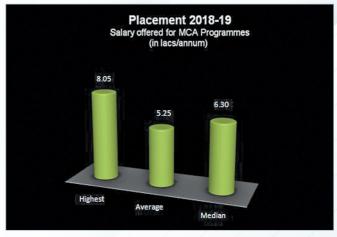












	Student Placed From Various Departments												
SI. No.	Company	Sector	B Tech	M Tech	ME	M Sc.	IMSc	B Pharma	M Pharma	MBA	MCA	Total	
1	Accenture Services Pvt. Ltd	IT	2									2	
2	Accures Legal	Consultancy	1									1	
3	Aditya Birla Fashion & Retail Ltd	Apparel								1		1	
4	Adobe Systems	IT	1									1	
5	ADROSONIC IT Consultancy Services Pvt Ltd	IT	8				1				1	10	
6	Affine Consultancy	Consultancy	4									4	
7	Amadeus Software Labs	IT	4									4	
8	Amazon	Consultancy	3									3	
9	Amazon Development Centre India Pvy. Ltd.	IT	4									4	
10	Amdocs	IT	24								14	38	
11	Amnex Infotechnologies	IT		2		2						4	
12	APAC Sourcing Solutions Ltd.	Pharma	1									1	
13	Axis Bank	FI	5								2	7	
14	AXIS Institute	Education	1									1	
15	Axxela Advisory Services LLP	FI	1									1	
16	Bajaj Electricals	Electronics								1		1	
17	Bandhan Bank	FI								11		11	
18	Baylen De Louis	Apparel								1		1	
19	Bharti Airtel	IT								1		1	
20	Buyhatke	Consultancy	2									2	
21	BYJUS	Education	11		2		2	2		1		18	
22	Cadella	Pharma							3			3	
23	Capgemini Technology Services India Limited	IT	15									15	
24	CGI	Education	12									12	
25	Cholamandalam Investment & Finance Comp. Ltd.	FI								3		3	
26	Cipla Ltd.	Pharma						2	1			3	
27	Cognizant	IT	12				1				4	17	
28	Cypress Semiconductors	Electronics	2		1							3	
29	Deloitte Consulting India Pvt Ltd.	IT	7									7	
30	DRL	Pharma	4						3			7	
31	Edvizo Media Pvt. Ltd.	Consultancy	1									1	
32	Endurance Technologies Ltd.	Manufacturing	2									2	
		Retail								2		2	
	Ericsson	Electronics	2									2	
35	EXL Service	Consultancy	5								3	8	
36	Fastenal India Sourcing, IT & Procurement Pvt Ltd	IT	3				1					4	

	Student Placed	From Various	Dep	artr	nen	ts						
SI. No.	Company	Sector	B Tech	M Tech	ME	M Sc.	IMSc	B Pharma	M Pharma	MBA	MCA	Total
37	Federal Bank	FI								1		1
38	Futures First Info Services Pvt. Ltd	IT	2									2
39	Gandhi Fellowship	Consultancy	1		1		1					3
40	Godrej & Boyce	Consultancy								1		1
41	Goldman Sachs	FI	7									7
42	HCL Technologies	IT	1	1								2
43	HDFC Asset Management Company Limited	FI								1		1
44	HDFC BANK	FI								3		3
45	Hero Moto Corps	Manufacturing	5									5
46	Hewlett Packard Enterprise	IT	1									1
47	Hindalco Industries	Manufacturing	7									7
48	Hyderabad Industries Ltd.	Manufacturing	2									2
49	ICICI Bank	FI								20		20
50	ICICI Pru	FI								1		1
51	ICICI Securities Limited	FI								2		2
52	IFB	Electronics	3									3
53	Indian Oil Corporation Limited	Manufacturing	8									8
54	Indus Valley Partners (IVP)	IT	2									2
55	IndusInd Bank	FI								2		2
56	Infoedge	IT	7									7
57	Infosys Ltd.	IT	18	1	1	1	3				3	27
58	Innovaccer Consultancy Pvt. Ltd.	Consultancy	1									1
59	Intuit	Consultancy	3									3
60	JnJ	Apparel						2				2
61	JSPL	Manufacturing	1									1
62	JSW Steel Ltd	Manufacturing	3									3
63	JUSCO	Education	10									10
64	Karvy Stock Broking Ltd.	FI								2		2
65	Kota Talent Academy	Education		1								1
66	KPMG	FI	7									7
67	L&T MANUFACTURING	Manufacturing	6									6
68	Lowes India Services	IT	2									2
69	Mahindra Comviva	IT	1									1
70	Mahindra Financial	FI								9		9
71	Maq Software	Consultancy									1	1
72	Maruti Suzuki	Manufacturing	8									8

	Student Placed From Various Departments											
SI. No.	Company	Sector	B Tech	M Tech	ME	M Sc.	IMSc	B Pharma	M Pharma	MBA	MCA	Total
73	Microland Limited	IT	4									4
74	Microsoft India Development Centre	IT	20									20
75	NathCorp	IT					1				1	2
76	NBC Bearings	Manufacturing	3									3
77	Nestle	Manufacturing	2				1					3
78	Netscribes (India) Private Limited	Retail								2		2
79	Nxp	Electronics	3									3
80	OPTUM	Consultancy	8									8
81	Oracle Ofss	Consultancy	5									5
82	Paytm	FI	13									13
83	Presidency University - Bangalore	Education		1								1
84	Pricewaterhouse Coopers (PWC)	IT	20	1			3					24
85	Prism Johnson	Manufacturing								1		1
86	PSIT	Education		1								1
87	Quality Council of India	Manufacturing	2									2
88	Reliance Industries Limited	Manufacturing	1									1
89	Reliance JIO	IT	1									1
90	S K Samanta	Manufacturing	7									7
91	Sabre	IT	5									5
92	Salesforce	Consultancy	2									2
93	Samsung Consultancy Institute Bangalore	Consultancy	3									3
94	Samsung Consultancy Institute Noida	Consultancy	3									3
95	Societe General	FI	8									8
96	Stellium	Consultancy	6									6
97	Strides Pharma Science Limited	Pharma				1	1	1	10			13
98	Synopsys	Consultancy	9									9
99	Tata Aig	FI								4		4
100	TATA Autocomp Systems Ltd.	IT	2									2
101	TATA Hitachi	Electronics	1									1
102	TATA IQ	Consultancy	1									1
103	Tata Motors	Manufacturing	4									4
104	Tata Power	Manufacturing	3									3
105	Tata Steel	Manufacturing	14									14
106	Techstern Solutions	IT	3									3
107	Techture Structures Pvt. Limited	Manufacturing	1									1
108	TEQFORCE Solutions	IT									1	1

	Student Placed From Various Departments											
SI. No.	Company	Sector	B Tech	M Tech	M	M Sc.	IMSc	B Pharma	M Pharma	MBA	MCA	Total
109	Times Internet	IT	3									3
110	Utkarsh Small Finance Bank	FI								2		2
111	VARROC	Manufacturing	1									1
112	Vedanta Limited	Manufacturing	10									10
113	Visa	FI	3									3
114	VKC Group	Manufacturing								1		1
115	Vm Ware	Consultancy	3									3
116	Vodafone	IT	1									1
117	Walmart Labs	IT	5									5
118	Wipro	IT	13				1					14
119	YourOwnRoom	Consultancy								1		1
120	Zindel Pharma	Pharma						1				1
121	Zs Associates India Pvt. Ltd.	Consultancy	3									3
	Total		439	8	5	4	16	8	17	74	30	601



Central Library, BIT-Mesra

Introduction

The Central Library strives to evolve into a model and leading technical university library. The library contributes and supports BIT in building an internationally top ranked academic & research driven institution by establishing a knowledge hub.

Library automation has been completed through LibSys software. The collection comprises of print and electronic documents in the field of basic science, engineering, pharmacy, management and hotel management. Online journals like IEEE, Science Direct, Springer, IOP, ASME, ASCE and others subscribed through Institute fund & e-ShodhSindhu Consortium. E-Library section consisting of a number of networked terminals to access e-journals, e-books and other e-reference resources to the library users under Intranet and Internet environment.

Print Books

Total Volumes : 1, 50, 268
Total Titles : 48, 729
Online Books : 43, 42, 649

Online Journals, Conference

Proceedings, Standards : 26, 228 Print Journals/Magazine : 34

Print Journals

 Indian
 : 24

 Foreign
 : 00

 Magazine
 : 10

 Indian
 : 08

 Foreign
 : 02

 CD/ DVD
 : 4, 303

Bound Volumes : 18, 902

Library home page : http://bitmesra.ac.in/library/default.asp

Library Services : Bibliographic services

Document Lending Services
E Document Delivery Services

Inter Library Loan
Language Laboratory
Literature search

Literature search

New arrivals News clippings

Off Campus Service

ON/Off line database search

Reference Referral

Reprographic

Library Membership

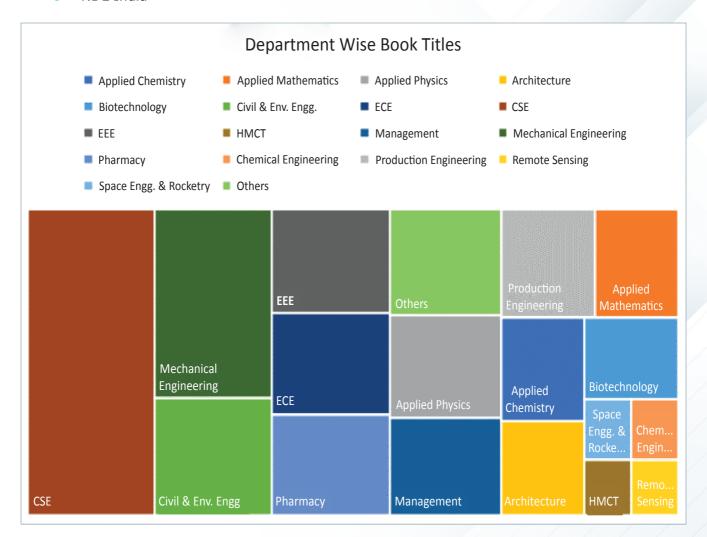
The library serves more than 5000 members, including students, research scholars, faculty, project engineers, and staff.

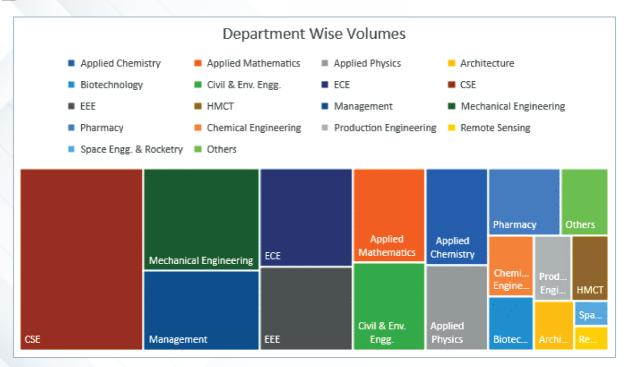
Description	No. of Books	Period of Loan
Teaching Faculty	80	One Month
Non-Teaching Staff	04	One Month
All Under Graduate and Post Graduate students	05	15 Days
All Under Graduate and Post Graduate SC/ST students	10	One Semester
All Under Graduate and Post Graduate OBC student	5	One Semester
Research Scholars	05	One Month
Books from Textbook Section for All Categories	1	1 Day

Library Consortium/Membership

Central library enrolled its membership for following consortium

- e-ShodhSindhu Consortium
- NDL India

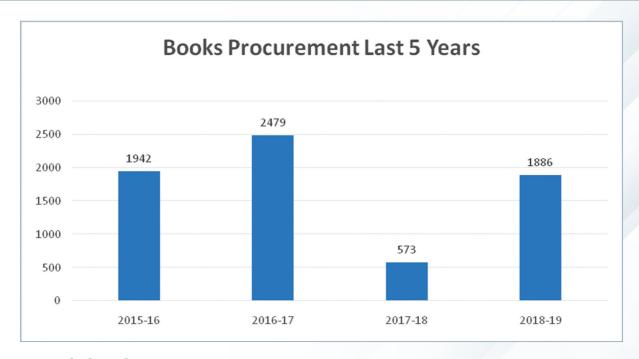




Details of Online Journals/books/thesis & dissertations

SI. No.	Publishers	Web Link
1	ABI/Inform (Management Collection)	http://search.proquest.com
2	American Chemical Society	http://pubs.acs.org
3	American Institute of Physics	http://www.aip.org
4	American Physical Society	http://www.aps.org
5	Annual Reviews	http://www.annualreviews.org
6	ASCE Journals	http://ascelibrary.org/
7	ASME (including AMR)	http://asmedigitalcollection.asme.org/
8	Bentham Science	http://benthamscience.com//ben
9	Cambridge Online Books	http://ebooks.cambridge.org
10	Cambridge University Press	http://journals.cambridge.org
11	EBSCO Databases (Art & Architecture, Hospitality & Tourism Complete	http://web.ebscohost.com
12	Economic & Political Weekly	http://www.epw.in
13	Elsevier's Science Direct	http://www.sciencedirect.com
14	Emerald (Management)	http:www.emeraldinsight.com
15	Grammarly (Online Grammar & Spell checker)	http://www.grammarly.com/edu
16	IEEE/IEL Online	http://ieeexplore.ieee.org/Xplore
17	Institute of Physics	http://iopscience.iop.org/journals
18	ISID (Bibliographic Database)	http://isid.org.in
19	JCCC (Bibliographic Database)	http://www.jccc-ugcinfonet.in
20	McGraw Hills Access Engineering	www.digitalengineeringlibrary.com
21	Oxford University Press	http://www.oxfordjournals.org

SI. No.	Publishers	Web Link
22	Project Muse	http://muse.jhu.edu/browse
23	ProQuest Dissertation & Theses	http://search.proquest.com
24	Royal Society of Chemistry	http://www.rsc.org
25	SciFinder Scholar (Bibliographic Database)	http://cas.org/products/scifindr/index.html
26	SIAM	http://epubs.siam.org
27	Springer Link	http://www.springerlink.com
28	Taylor & Francis	http://www.tandfonline.com
29	Turnitin Ant plagiarism Tools	http://www.turnitin.com
30	Web of Science (Bibliographic Database)	http://apps.webofknowledge.com
31	Wiley-Blackwell	http://onlinelibrary.wiley.com
32	Ebrary online Books	http://site.ebrary.com/lib/bitranchi/home.action



Library Statistics of 2017-18

Total Books Added : Title - 626 & Volumes - 1886 Total Journals Procured : Print - 34 & Online - 26, 228

Total Online books Procured : 43, 42, 649

Total Number of Membership enrolled : 1581
Total Number of Books Issued : 47561
Total Number of Books Returned : 47850

Library Activities:

The Central Library organized awareness program on e-resources on Friday, 12th July 2019 at Seminar Hall -2, R & D Building, BIT Mesra.

Annexure I: LIST OF DEANS & ASSOCIATE DEANS

DEANS

S. No.	Name & Address	<u>Designation</u>
1.	Dr. S. Konar Professor Department of Physics BIT-Mesra, Ranchi	- Dean (Faculty Affairs & Sponsored Research)
2.	Dr. (Mrs.) P. Padmanabhan Professor Department of Bio-Engineering BIT-Mesra, Ranchi	- Dean (Academic Programmes)
3.	Dr. Utpal Baul Professor Department of Management BIT-Mesra, Ranchi	- Dean (Alumni & International Relations)
4.	Dr. S. Dutta Professor Department of Comp. Sc. & Engineering BIT-Mesra, Ranchi	- Dean (Admission & Academic Coordination)
5.	Dr. Mahesh Chandra Professor Department of Electronics & Communication Engineering BIT-Mesra, Ranchi	- Dean (Students Welfare)

ASSOCIATE DEANS

S. No.	Name & Address	<u>Designation</u>
1.	Dr. Ashoke Sharon Asso. Professor Department of Chemistry BIT-Mesra, Ranchi	- Associate Dean (Students Welfare)
2.	Dr. (Mrs.) Vijay Laxmi Professor Department of Electrical & Electronics Engineering BIT-Mesra, Ranchi	- Associate Dean (Students Welfare)

S. No.	Name & Address	Designation
3.	Dr. V.K. Nigam Associate Professor Department of Bio-Engineering BIT-Mesra, Ranchi	- Associate Dean (Students Welfare)
4.	Dr. R.P. Sharma Professor & Head Department of Mechanical Engineering BIT-Mesra, Ranchi	- Associate Dean (Academic Programmes)
5.	Dr. Ritesh Kr. Singh Asso. Professor Department of Production Engineering BIT-Mesra, Ranchi	- Associate Dean (Faculty Affairs & Sponsored Research)
6.	Dr. Sudip Das Professor Department of Space Engineering & Rocketry BIT-Mesra, Ranchi	- Associate Dean (Admission & Academic Coordinations)



Annexure II: MEMBERS OF BOARD OF GOVERNORS

1.	Shri C. K. Birla Birla Tower (9th Floor) 25, Barakhamba Road NEW DELHI – 110 001	Chairman
2.	Joint Secretary (Central Universities) Nominee of MHRD, Govt. of India Dept. of Higher Education 233-C Shastri Bhawan NEW DELHI – 110 001	Member (Nominee of MHRD, GoI)
3.	Dr. (Mrs.) Renu Batra Additional Secretary II University Grants Commission Bahadur Shah Zafar Marg NEW DELHI - 110 002	Member (Nominee of UGC)
4.	Prof. Ajit K. Chaturvedi Director Indian Institute of Technology Roorkee - 247 667	Member (Nominee of AICTE)
5.	Shri Rajesh Kumar Sharma, IAS Secretary Dept. of Higher & Technical Education Government of Jharkhand, Nepal House, Doranda RANCHI – 834 002	Member (Ex-Officio)
6.	Smt. Shubhra Verma, IAS Commissioner South Chhotanagpur Division, Jharkhand, RANCHI – 834 001 Email – scnd.comm.ranc@gmail.com	Member (Ex-Officio)
7.	Shri Satendra Singh, IAS Principal Secretary to the Governor Hon'ble Governor of Jharkhand Raj Bhawan, RANCHI – 834 001	Member (Nominee of the Chancellor)
8.	Shri Rohit Saboo M/s. National Engineering Industries Ltd. Khatipura Road, JAIPUR – 302006	Member (Nominee of HCT)

9.	Shri Madhvan Nayar 23W301 Kimberwick Lane Naperville, Illinois – 60540 (USA)	Member (Nominee of HCT)
10.	Dr. Manoj Kumar Mishra Vice Chancellor BIT, Mesra RANCHI – 835 215	Member (Ex-officio)
11.	Dr. Shradha Shivani Professor Department of Management BIT, Mesra RANCHI – 835 215	Member (Institute Faculty)
12.	Dr. Priyank Kumar Assistant Professor Space Engineering & Rocketry Department BIT, Mesra RANCHI – 835 215	Member (Institute Faculty)
13.	Shri Aroop Zutshi 43804 Green Hills Way Fremont, CA 94539, USA	Member (Nominee of the General Council)
14.	Dr. P. Ghosh Executive Director Birla Institute of Scientific Research Statue Circle JAIPUR - 302 001	Member (Nominee of the General Council)
15.	Dr. Arup Roy Choudhury Chief Commissioner West Bengal Right to Public Service Commission, Kreta Surakha Bhawan 04th Floor, 11A Mirza Ghalib Street KOLKATA – 700 087	Member (Nominee of the General Council)
16.	Shri S. N. Agarwal Chairman Bhoruka Power Ltd. 48, Lavelle Road Bangalore – 560 001	Member (Nominee of HCT)

Annexure III: MEMBERS OF ACADEMIC COUNCIL

SI. No.	Name	Design.	Department	Role
1	Dr. M.K. Mishra	Vice Chancellor	BIT-Mesra	Chairman
2	Dr. J.P. Pandey	Controller of Examination	Examination	Member
3	Dr. Sandip Dutta	Dean	Admission & Academic Coordination	Member
4	Dr. S. Konar	Dean	Faculty Affairs & Sponsored Research	Member
5	Dr. Utpal Baul	Dean	Alumni & International Relations	Member
6	Mrs.(Dr.) P. Padmanabhan	Dean	Academic Programmes	Member
7	Dr. Mahesh Chandra	Dean	Students Welfare	Member
8	Dr. Anand Kr. Sinha	Prof. & Head	Civil & Environmental Engg.	Member
9	Mrs. (Dr.) Vandana Bhattacharjee	Prof. & Head	Comp. Sc. & Engg.	Member
10	Dr. P.K. Srivastava	Prof. & Head	Chemistry	Member
11	Dr. Sudip Das	Prof. & Head	Space Engg. & Rocketry	Member
12	Dr. (Mrs.) Sunita Keshri	Prof. & Head	Physics	Member
13	Dr. Subir Samanta	Prof. & Head	Pharm. Sciences & Technology	Member
14	Dr. Satyaki Sarkar	Asso. Prof. & Head	Architecture	Member
15	Dr. Ramesh Chandra	Prof. & Head	Bio-Engineering	Member
16	Dr. C. Jeganathan	Prof. & Head	Remote Sensing	Member
17	Dr. P.R. Thakura	Prof. & Head	EEE	Member
18	Dr. Sanjay K. Jha	Asso. Prof. & Head	Production Engg.	Member
19	Dr. Srikanta Pal	Prof. & Head	ECE	Member
20	Dr. R.P. Sharma	Prof. & Head	Mechanical Engg.	Member
21	Dr. Gautam Sarkhel	Prof. & Head	Chemical Engineering	Member
22	Dr. (Mrs.) Shradha Shivani	Prof. & Head	Management	Member
23	Dr. Souvik Chakraborty	Prof. & Head	Mathematics	Member
24	Dr. Abhinav Kr. Sandilya	In-charge	HMCT	Member
25	Dr. Sarbani Chakraborty	Professor	EEE	Member
26	Dr. (Mrs.) Usha Jha	Professor	Chemistry	Member
27	Dr. (Mrs.) M. Chakraborty	Professor	Architecture	Member
28	Dr. P.R.P. Verma	Professor	Pharm. Sciences & Technology	Member
29	Dr. (Mrs.) Nisha Gupta	Professor	ECE	Member
30	Dr. S.K. Ghorai	Professor	ECE	Member
31	Dr. Nilanchal Patel	Professor	Remote Sensing	Member
32	Dr. Swapan Kr. Chakraborty	Professor	Mathematics	Member
33	Dr. Birendra Kr. Singh	Professor	Civil & Environmental Engg.	Member

SI.				
No.	Name	Design.	Department	Role
34	Dr. G. Sahoo	Professor	Comp. Sc. & Engg.	Member
35	Dr. S. Jha	Professor	Pharm. Sciences & Technology	Member
36	Dr. D.K. Mohanta	Professor	EEE	Member
37	Dr.(Mrs.) Mandira Mukherjee	Professor	Chemical Engineering	Member
38	Dr. (Mrs.) Manju Bhagat	Professor	Management	Member
39	Dr. R. Sukesh Kumar	Professor	ECE	Member
40	Dr. R.N. Gupta	Professor	Pharm. Sciences & Technology	Member
41	Dr. Vibha Rani Gupta	Professor	ECE	Member
42	Dr. Sudeshna Chakraborty	Professor	Civil & Environmental Engg.	Member
43	Dr. R.N. Bhagat	Professor	Management	Member
44	Dr. Rakesh Kumar Sinha	Professor	Bio-Engineering	Member
45	Dr. T. Ghose	Professor	EEE	Member
46	Dr. (Mrs.) Sudipta Goswami	Professor	Chemical Engineering	Member
47	Dr. Kunal Mukhopadhyay	Professor	Bio-Engineering	Member
48	Dr. (Ms.) Swastika Ganguly	Professor	Pharm. Sciences & Technology	Member
49	Dr. (Mrs.) Bindhu Lal	Professor	Civil & Environmental Engg.	Member
50	Dr. (Mrs.) S.M. Verma	Professor	Pharm. Scicences & Technology	Member
51	Dr. Mohan Varma	Professor	Space Engg. & Rocketry	Member
52	Dr. Sanjay Kumar Sinha	Professor	Physics	Member
53	Dr. K. Jayaram Kumar	Professor	Pharm. Sciences & Technology	Member
54	Dr. S.S. Solanki	Professor	ECE	Member
55	Dr. (Mrs.) Papiya Mitra Mazumder	Professor	Pharm. Sciences & Technology	Member
56	Dr. (Ms.) Vijaya Laxmi	Professor	EEE	Member
57	Dr. S.K. Bose	Professor	Management	Member
58	Dr. S.K. Jain	Professor	Mathematics	Member
59	Dr. B.N. Sinha	Professor	Pharm. Sciences & Technology	Member
60	Dr. D.P. Mishra	Professor	Mechanical Engg.	Member
61	Dr. S. Padhi	Professor	Mathematics	Member
62	Dr. D.J. Biswas	Professor	Architecture	Member
63	Dr. A.P. Krishna	Professor & Registrar (Actg.)	Remote Sensing	Member & Secretary
		OFF CAMPUS	ES	
64	Dr. R.C. Jha	Director	Off-campus, Deoghar	Invitee
65	Dr. Munish Makkad	Director	Off-campus, Noida	Invitee
66	Dr. A.N. Jha	Director (In-charge)	Off-campus, Lalpur	Invitee
67	Dr. B.K. Singh	Director	Off-campus, Patna	Invitee
68	Dr. Abhinav Dinesh	Director	Off-campus, Jaipur	Invitee

Annexure IV: MEMBERS OF THE FINANCE COMMITTEE

Shri C. K. Birla
 Birla Tower (9th Floor)
 Barakhamba Road
 NEW DELHI – 110 001

Chairman

Dr. M.K. Mishra
 Vice Chancellor
 BIT, Mesra, RANCHI

Member

3. Prof. Jose Varghese
Professor of Eminence
Christ University
(Deemed University)
Hosur Road
BANGALORE - 560 029

Member (Nominee of UGC)

4. Shri Satendra Singh, IAS
Principal Secretary to the Hon'ble Governor
Governor Secretariat
Raj Bhawan
RANCHI – 834 001

Member (Nominee of Chancellor)

5. Shri P. C. Agarwala 9/1, R. N. Mukherjee Road KOLKATA – 700 001

Member (Nominee of General Council)

Shri Rohit Saboo
 M/s National Engineering Industries Ltd.
 Khatipura Road
 JAIPUR - 302 017

Member (Nominee of BoG)

7. Shri Y. Goenka
Hon. Treasurer
Birla Tower (8th Floor)
25, Barakhamba Road
NEW DELHI – 110 001

Member

Annexure V: BUILDING WORKS COMMITTEE

Vice Chancellor - Chairman

Honorary Treasurer - Member

Registrar - Member

Dr. Manjari Chakraborty - Member

Professor-Dept. of Architecture

Additional Registrar (F&MM) - Member

Dy. Finance Officer - Member

In-charge (Construction) - Member

Asst. Registrar (Works) - Member Secretary



Annexure VI: LIST OF HEADS/ IN-CHARGES OF THE DEPARTMENT

SI. No.	Name	Designation	Department
1.	Dr. D.J. Biswas	Head	Dept. of Architecture
2.	Dr. Ramesh Chandra	Head	Dept. of Bio-Engineering
3.	Dr. Gautam Sarkhel	Head	Dept. of Chemical Engineering
4.	Dr. P.K. Srivastava	Head	Dept. of Chemistry
5.	Dr. Anand Kr. Sinha	Head	Dept. of Civil & Environmental Engineering
6.	Dr.(Mrs.) V. Bhattacharjee	Head	Dept. of Computer Sc. & Engineering
7.	Dr. Srikanta Pal	Head	Dept. of Electronics & Communication Engineering
8.	Dr. P.R. Thakura	Head	Dept. of Electrical & Electronics Engineering
9.	Dr. Abhinav Kr. Shandilya	In-charge	Dept. of Hotel Management & Catering Technology
10.	Dr. Soubhik Chakraborty	Head	Department of Mathematics
11.	Dr. R.P. Sharma	Head	Dept. of Mechanical Engineering
12.	Dr. Shradha Shivani	Head	Dept. of Management
13.	Dr. Subir Samanta	Head	Dept. of Pharmaceutical Sc. & Technology
14.	Dr. (Mrs.) Sunita Keshri	Head	Dept. of Physics
15.	Dr. C. Jeganathan	Head	Dept. of Remote Sensing
16.	Dr. Sanjay K. Jha	Head	Dept. of Production Engineering
17.	Dr. Sudip Das	Head	Dept. of Space Engineering & Rocketry
18.	Dr. Gautam Sarkhel	In-Charge	Central Instrumentation Facility

Annexure VII: ADDRESSES OF OTHER CAMPUSES OF BIT

DEOGHAR

BIT Mesra, Deoghar Campus

P O Ratanpur, Jasidih,

Dist. Deoghar 815 142, Jharkhand Phone: 9334654856/9308139037

Telefax: 06432-292565

Email: bitdeoghar@bitmesra.ac.in

JAIPUR

BIT Mesra, Jaipur Campus

27, Malviya Industrial Area, Jaipur 302017

Phone: 0141? 4019798 / 4019819

Fax: 2751601

Email: bitjaipur@bitmesra.ac.in

RANCHI

BIT Mesra Lalpur (Ranchi City) Campus

Jharkhand 834001

Phone: 0651-2531817 / 2531676

Fax: 0651-2531686

Email: bitlalpur@bitmesra.ac.in

NOIDA

BIT Mesra, Noida Campus

A-7 Sector 1 Noida 201301

Phone: +91-0120-2553661

Fax: +91-0120-2554146 / 5323095

Email: bitnoida@bitmesra.ac.in

PATNA

BIT Mesra, Patna Campus

Near Patna Airport, P.O. Bihar Veterinary College, Patna 800014

Phone: 0612-2223538, 2223545

Fax: 0612-2227050

Email: bitpatna@bitmesra.ac.in

Annexure VIII

WOMEN CELL COMMITTEE

Dr. Usha Jha - Chairperson

Dr. Manju Bhagat - Member

Dr. S.G. Pampalia - Member

Dr. V.R. Gupta - Member

Dr. Bindhu Lal - Member

Dr. P.M. Majumdar - Member

Ms. Nidhi Jaiswal - Member Secretary

INTERNAL COMPLAINT COMMITTEE

Dr. Nisha Gupta - Chairperson

Dr. Itu Snigdh - Member

Dr. Venkateshan J - Member

Mr. Rahul Rai - Member

Ms. Kaushiki Sengupta - Member(NGO Representative)

Ms. Nidhi Jaiswal - Member Secretary (Legal Representative)



BIRLA INSTITUTE OF TECHNOLOGY

(Deemed to be University)
Mesra, Ranchi - 835 215, Jharkhand, India

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