Annual Report 2013-14





BIRLA INSTITUTE OF TECHNOLOGY

(Deemed University) Mesra, Ranchi - 835215, Jharkhand, India



The Institute Prayer प्रार्थना

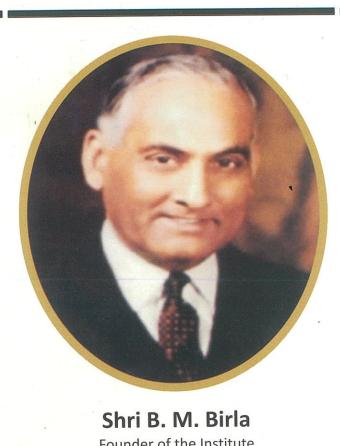
यं शैवाः समुपासते शिव इति ब्रह्मेति वेदान्तिनो बौद्धाः बुद्ध इति प्रमाण पटवः कर्तेति नैस्यायिकाः । अर्हन् नित्यथ जैन शासनताः कर्मेति मीमांसकाः सोऽयं नो विद्धातु वांच्छित फलं त्रैलोक्य नाथो हरिः ।।

"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 Agent, those devoted to the Jaina doctrines as Arhat, the ritualists of the Mimamsa School as Karma – grant us all our hearty desire."

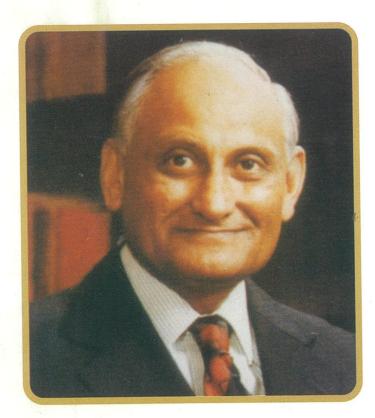
हे जग त्राता, विश्व विधाता, हे सुख शांति निकेतन हे । प्रेम के सिन्धु, दीन के बन्धु, दुःख दरिद्र विनाशन हे । नित्य अखण्ड अनन्त अनादि, पूरन ब्रह्म सनातन हे । जगआश्रय जगपति जगवन्दन, अनुपम अलख्न निरंजन हे । प्राण सखा त्रिभुवन प्रतिपालक, जीवन के अवलम्बन हे ।

You are the saviour and the creator of the Universe, the abode of peace and happiness, the ocean of love, the friend of the helpless, the reliever of sorrows and afflictions. You are the external, the indivisible and the infinite. You are the complete universe and the prime Being. You are the shelter, the lord and worshipped of world. You are unparalleled, unseen and blissful. You are friend of the living, the preserver of the universe and the support of our life.





Founder of the Institute

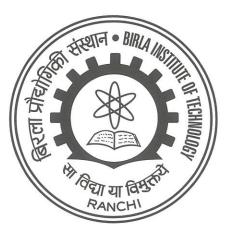


Shri G. P. Birla
Former Chairman of the Board of Governors



Shri C. K. BirlaChairman of the Board of Governors

Annual Report 2013-14



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BIRLA INSTITUTE OF TECHNOLOGY

(Deemed University) Mesra, Ranchi, Jharkhand India

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CONTENTS

ACTIVITY REPORT OF THE INSTITUTE BY THE VICE CHANCELLOR	1
NTRODUCTION	23
Administration	24
Institute Campus	24
Institute Building	24
Residential Complex	25
Auditorium	26
Games & Sports Complex	26
Dispensary-Cum-Health Center	27
Shopping Centre	28
Hostel Accommodation	29
Academic Programmes	30
Students Enrolement	33
Admission During 2013-2014	35
Convocation, Results, Degree/Diploma Awarded	47
Summary of the Faculty Position	49
Department Wise Details of Faculty Position	50
DEPARTMENTS	73
Department of Architecture	.5 79
Department of Bio Engineering	
Department of Chemical Engineering & Technology	
Department of Chemistry	116
Department of Civil and Environmental Engineering	
Department of Computer Science and Engineering	127
Department of Electronics and Communication Engineering	1//
Department of Electrical & Electronics Engineering	157
Department of Hotel Management & Catering Technology	160
Department of Management	, 160 167
Department of Mathematics	10/
Department of Mechanical Engineering	. 1/4 101
Department of Pharmaceutical Sciences & Technology	. 101
Department of Physical Education & Sports	. 190
Department of Physics	. 200
Department of Production Engineering	. 205
Deaprtment of Remote Sensing	. 215
Department of Space Engineering and Rocketry	. 22]
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME	
NATIONAL CADETS CORPS	
NATIONAL SERVICE SCHEME	

OFF CAMPUSES

	Allahabad	235
	Deoghar	240
	Jaipur	250
	Kolkata	264
	Lalpur	
	NOIDA	276
	Patna	285
O	FF SHORE CAMPUSES	
	Muscat	205
	Ras Al Khaimah	
U	NIVERSITY POLYTECHNIC	309
CI	ENTRAL LIBRARY	314
Tŀ	RAINING & PLACEMENT DIVISION	321
Sĩ	'UDENTS' ACTIVITIES	326
ΑΙ	NNEXURES	
	ANNEXURES - I	221
	ANNEXURES - II	
	ANNEXURES - III	
	ANNEXURES - IV	
	ANNEXURES - V	
	ANNEXURES - VI	
	ANNEXURES - VII	2/11

ACTIVITY REPORT OF THE INSTITUTE BY THE VICE CHANCELLOR

Birla Institute of Technology, Mesra, Ranchi founded by the industrialist and philanthropist Late Shri B.M. Birla in 1955, attained the status of a Deemed University in the year 1986. The rich legacy of the founder has been carried forward by Late Shri. G. P. Birla and the present chairman of Board of Governors, Shri C. K. Birla by continuing his commitment to provide high quality education in diverse fields.

The Institute, in conformity with the vision of its distinguished founder, has grown from strength to strength and has indeed spread its wings both in terms of the number of programmes as well as geographical spread. The Institute has seven off campuses in India: Jaipur, Noida, Allahabad, Patna, Deoghar, Kolkata and Lalpur and two off shore campuses: Ras Al Khaimah and Muscat. The Institute has been fortunate to have blessings and support from our present Chancellor, His Excellency Hon'ble Dr. Syed Ahmed, the Governor of Jharkhand and the former Chancellors as well.

BIT, by virtue of the quality of its academic programmes, has consistently been ranked amongst the leading technical Institutes of the country. Academic programmes are offered in as many as seventeen academic disciplines. At present the total faculty strength stands at 710 and students' strength above 10,000 including the campuses in India and abroad.

The Institute has initiated many schemes to strengthen quality education to the students, career advancement of faculty members, progression of students towards higher education and generating career opportunities through the campus placement programme in reputed organizations across the globe. The Institute has been working dedicatedly towards the vision of producing quality technical graduates, competent teachers, scientists and leaders for the academics, research, industry and administration under the guidance and dynamic leadership of the Chairman.

A brief of multidimensional activities of the Institute during the year 2013-14 is as follows:

1.0 BOARD OF GOVERNORS

In pursuance of the 47th meeting of the Board of Governors held on 31st October 2013 following academic decisions have been implemented:

A. Merger of a few Academic Departments

- Department of Biotechnology and Centre for Biomedical Instrumentation have been merged and the name of the new Department, after merger, is Department of Bio-Engineering
- Department of Applied Mechanics and Department of Mechanical Engineering have been merged and the name of the new Department, after merger, is Department of Mechanical Engineering
- Department of Civil engineering and Environmental Science & Engineering Group have been merged and the name of the new Department, after merger, is Department of Civil & Environmental Engineering

- Department of Information Technology and Department of Computer Science & Engineering have been merged and the name of the new Department, after merger, is Department of Computer Science & Engineering
- The Centre of Excellence in Climatology has become part of Department of Physics
- Department of Chemical & Polymer Engineering has been renamed as Department of Chemical Engineering & Technology
- Department of Food Processing Technology has been merged with Department of Chemical Engineering & Technology
- Department of Pharmaceutical Sciences has been renamed as Department of Pharmaceutical
 Sciences & Technology

B. Appointment of Head of Departments

- The appointment of HODs has been made on rotation basis initially for a period of one year which may be extended for another year on satisfactory performance
- The maximum period may not be more than 3 years
- Associate Professor (with at least 3 year experience as Associate Professor in the Department)
 may be appointed as HOD in such cases where the term of an incumbent as HOD has already
 exceeded 3 years and where there is only one Professor in the Department. This has been
 made effective from April 1, 2014.

2.0 ACADEMIC ACHIEVEMENTS

- A Centre of Excellence in Bioresources and Bioprospecting has been started in May 2013 in the then Department of Bio-Technology
- The Department of Chemistry has been identified for support under FIST programme of DST,
 Govt. of India in level I.
- Department of Civil & Environmental Engineering, BIT, Mesra has been identifies as State Technical Agency for Jharkhand State under Pradhan Mantri Gram Sadak Yojana.
- The Department of Remote Sensing has been supported by DST, Govt. of India under FIST programme at level I besides UGC-SAP programme. The Department has been offered a mission mode project entitled "Integrated Watershed Management Plan" for Rs. 7.5 crores by the Ministry of Rural Development, Govt. of India and the Govt. of Jharkhand
- Department of Electrical & Electronics Engineering is recognised as having excellent research potential by DST, Government of India.
- The Department of Pharmaceutical Sciences has been identified for support under FIST programme of DST, Govt. of India in level I.

- The Department of Applied Physics has received support under "Fund for Improvement in Science & Technology Infrastructure" (FIST) programme of the Department of Science and Technology, New Delhi, and under Special Assistance Programme (SAP) of the UGC. The Department has received funding under TEQIP—I and TEQIP—II.
- The Department of Space Engineering and Rocketry has been identified for support under SAP (DRS-II) programme of UGC, Govt. of India in level II.
- The Department of Production Engineering has been identified for support under FIST-II programme of DST, SAP of UGC and NCP of AICTE.
- The Department of Chemical Engineering & Technology has been identified for support under FIST programme of DST, Govt. of India in level I.
- BITIC Muscat Centre (Waljat College of Applied Sciences) has been included in The Guide to Excellence: Global Education and Opportunities, 2013 Edition published by Cambridge University Students' Union, UK as the only Higher Education Institution from Oman. It has also been incorporated in Socrates Almanac of world universities published from Oxford, UK in 2013, from that part of the world. The Engineering Entrance Test of WCAS has been recognized by Technical Universities in Austria (NIMSA) for admission of sponsored Omani students.

2.1 R & D ACTIVITIES OF THE INSTITUTE

The Institute is committed to high - end R&D activities and supports it through Institute Fellowship and travel grants to attend National and International seminars, symposia and conferences.

During the period April 2013 to March 2014, 328 faculty members were supported by the Institute to attend National Seminars and 24 faculty members were offered financial support to attend international conferences. 143 Ph.D. scholars received Institute Research Fellowships.

The high level of research conducted by its Faculty members, Scientific Officers and Research Scholars has led to recognition by the State and National/International agencies like UGC, CSIR, DST, DAE, BRNS, ISRO, DRDO, ARDB, DBT, AICTE, NAMPET, C-DAC, ICAR, BMBF (Germany), Govt. of Jharkhand etc. through sponsored projects and consultancies.

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

Publication in International Journals : 504

Publication in International Proceedings : 137

Publication in National Journals : 61

Publication in National Proceedings : 90

R&D Projects Granted : 25

On-going R&D Projects : 105

R&D Projects Completed : 35

Books Authored/ chapters/edited : 8 / 8 / 2

Patent Granted / Filed : 17

2.2 INFRASTRUCTURAL DEVELOPMENT

Keeping in line with the expansion of its academic programmes, the Institute has continued its efforts to consolidate academic and infrastructural support in the form of equipment, learning resources and space. A few of them are as follows:

- Department of Bio Technology procured Refrigerated Shaking Incubator (REMI), Refrigerated Centrifuge (REMI), UV VIS Double Beam Spectrophotometer (Labtronics), Shimadzu UV-VIS Spectrophotometer, Incubator Shaker (Cooling), Mettler Toledo pH/ORP system, Orbital Shaker, BOD Incubator, Ultra water purification system, Ultra low deep freezer (-860 C), Spectrophotometer with kinetics, Non refrigerated Centrifuge and thermo mixer
- Department of Chemistry procured Molecular Modeling Software, Digital Karl- Fischer titration Apparatus, Precision Recirculating Chiller, Vacuum Pump, HP laserjet M1005 MFP, Print/ Scan/ Copy, Balance, Vacuum Pump, Emergency Showers, Hot air oven, Magnetic Stirrer with Hot plate (3 nos.), Conductivity Meter, pH Meter, Distillation Assembly and Portable Balance
- 3. Department of Civil Engineering procured Digital Theodolites & Auto Levels
- 4. Department of Mechanical Engineering procured Solar Photovoltaic Training Kit and Solar Thermal Training Kit
- 5. Department of Computer Science & Engineering procured 80 computer system
- 6. Department of ECE upgraded and renewed Cadence Software
- 7. Process control laboratory has been newly established in the Department of Electrical & Electronics Engineering during academic year 2013-14.
- 8. Department of EEE procured Twin rotor MIMO System, Magnetic Levitation system, DC servo fundamental trainer kit, circuit breaker, NI Data acquisition Card, controller, NI USRP, NI CRIO, Temperature, Pressure, level and flow controller both manual and PLC based, Transformer testing kit, circuit breaker, Semikron 3 phase inverter NI SBRIO have been installed in the different labs under DigSilent Power factory software, 5 kWP SPV cell, Multi-level inverters, Robotics, V2V energy exchange, ASLK 2 Kits for the lab setup of analog teaching, C2000 Microcontroller Kits 10 nos, digital power experimenter kit, and PM BLDC drive with experimenter kit for the Setup of C2000 Microcontroller Lab PSIM software & C200 Microcontroller Kit
- 9. Environmental Science & Engineering Group procured Respirable Dust Sampler, NOx Analyser, SOx Analyser, Digital Weather Meter, CO Analyser, Multiparameter Water Quality Meter, Vacuum filtration assembly.

- Department of Information Technology procured Cannon iR2420L Xerox Machine, Digital Photocopier with Printer, Projector – SONY (VPL-DX120) (2 Nos.) and Printer, HP Laser Jet 1020 (2 Nos.).
- 11. Department of Pharmaceutical Science & Technology procured Radley's 12 Plus Reaction Station, Rotary vaccum Flash Evaporator, Bacteriological Incubator, Bandelin Ultrasonic Homogenizer, HD2070, Rotary Evaporator, IKA, Magnetic Stirrer with Hot Plate, Digital, Thermo Fisher, Hot Plate, IKA, Columns, Planatary Micro Mill (Fritch, Germany), USP Dissolution Apparatus (Electrolab, Mumbai), Nanospray Dryer (Labultima), Ultracentrifuge (Beckman).
- 12. Department of Physics procured High Temperature Vacuum Furnace, UV-Vis Spectrometer, Atmospheric Pressure Plasma Jet Torch, Thermal CVD System
- Department of Space Engineering &Rocketry procured DC Power Supply, Muffle furnace, Vaccum Oven, LG Air Conditioner, DSC Sample Carrier System, Nitrogen Gas Regulator, LCD Projector, Fog Machine, NI USB-6210
- 14. Department of Production Engineering procured Digital controlled Industrial Microwave Oven
- 15. Department of Chemical Engineering & Technology procuredTray Dryer and Cyclone Separator
- 16. Additional 100 rooms have been added added in Hostel -11
- 17. BIT OC Deoghar procured Dielectric Constant Measurement Trainer, 25 MHz Digital Storage Oscilloscope, Universal IC Tester, Fresnel's bi-prism experiment set up, Optical spectrometer
- 18. BIT off campus Allahabad procured 3 Window Air Conditioners purchased, 1 HP Laser Jet Printer + Fax + Xerox + Scan, 1 24 Port Switch, 1 Axis Point
- 19. In BIT off campus Allahabad a new common room (Area 1400 sq ft approx.) has been built for the students.
- 20. BIT off campus Jaipur added Cadence Software for VLSI lab in ECE Department, Equipment for new electrical engineering Labs in EEE Department, MATLAB Software for Engineering & Applied Science Departments, 30 computers for new MATLAB laboratory, 7 LCD Projectors for class room presentations
- 21. BIT off campus Noida procured for the DepartmentAnimation &Multimedia20 Workstations and 13 Computers

2.3 MOUs / COLLABORATIONS

- Department of Applied Chemistry collaborated with Kagoshima University in the area of Antiviral Drug Discovery
- MOU has been signed on 28th December 2013 between BIT Mesra Kolkata Campus and M/s Edgate Technologies Pvt. Limited which is the University Program Partner of Texas Instruments.
- AICTE and BSNL have signed a MOU to provide Employability Enhancement Training program.

Department of ECE is a part of this training program. 75 students are taking regular training under this program

- Department of EEE has signed MOU with Texas Instruments USA for research and academic collaboration.
- Department of EEE has signed MOU with University of Padova, Italy for Research and Academic Collaboration
 - As per MOU between 'Centre for wind energy technology (C-WET)', Chennai, Ministry of New and Renewable Rnergy (MNRE), Govt. of India and BIT, Deoghar Campus, the solar radiation resource assessment station (SARA Station) has been installed at roof top of the Institute for the accurate measurement of complete solar and meteorological parameters.
- Department of Management signed MOU with Fabrice Étienne, Consul General of France,
 Kolkata in February 2014

2.4 CONSULTANCY

- Dr. Indrajit Roy has been consultant of Gujrat Mineral Development Corporation for Slope Stability of Dumps & Highwall of Surkha-north Lignite mine during May, 2013 to October, 2013, Essar-Hindalco for Stability of Dumps & Highwall of Mahan virgin mine during Jan, 2013 to May, 2013, Visa group of companies for Geo-technical investigations of Fatehpur virgin mine during Dec, 2012 to June, 2013, Western Coalfield Limited for Safety of Gondegaon opencast mine during Nov, 2012 to June, 2013, Western Coalfield Limited for Safe Working of Umrer opencast mine during Jan, 2013 to May, 2013, Western Coalfield Limited for Slope Stability Study of Chinda opencast mine during Feb, 2013 to May, 2013, CMPDI for Physico-mechanical properties of waste rock during Dec, 2012 to June, 2013 and Lanco Ltd for Mine development of Gare-Pelma during April, 2013- March, 2014
- Mr. Koushik Paul was consultant to Department of Drinking Water and Sanitation, Ministry of Rural Development, GOI for monitoring work for special monitoring (NLM) of two projects during April,2013(14.4-27.4.13)
- Department of Mechanical Engineering was consultant to Minor Irrigation Jharkahnd, CUJ Ranchi, JP, HCL for Testing during July'13 – Jan'14
- Department of Mechanical Engineering was consultant to CUJ Ranchi for Training during 07.09.2013 - 07.10.2013
- Department of Mechanical Engineering was consultant to NIFFT, Hatia for Training during23.11.2013 – 20.12.2013, was consultant to CUJ Ranchi during04.03.2014 – 14.03.2014 and was consultant to JEREDA for Energy Survey during March 2013 Onwards
- Department of Architecture was consultant to Government of Jharkhand for Development of Pahari Mandir, Ranchi, Jharkhand
- Department of Remote Sensing was consultant to International Center for Integrated Mountain

Development (ICIMOD), Kathmandu, Nepal for proposal writing during 3 months (19th June 2013 to 16th September 2013)

 Dr.Kirti Avishek was consultant to ENV DAS for Operation and Maintenance of drinking water supply and pipelines in Jharkhand for the period Jan 2014 to April 2014

2.5 NEW PROGRAMMES / REVISIONS

During 2013-14, following programmes have been introduced / revised at the main campus and other off campuses:

- BIT off campus Allahabad started new courses on Master of Business Administration and Master of Technology in Computer Science
- The Syllabus of B.Sc. Animation & Multimedia Hons. Programme was revised in MO 2013 at BIT off campus Jaipur
- Department of ECE revised the course on Microwave Engineering for BE and shifted this course from VII to V Semester program
- Department of ECE developed Micro Electro Mechanical Systems (MEMS) design laboratory
- M. Tech. in Biomedical Instrumentation under Center of Biomedical Instrumentation,
 Department of Electrical & Electronics Engineering has been started during 2013-14
- The Department of Information Technology introduced a new course M.Tech. Information Technology.
- Syllabi revised for various subjects of M.Sc. Applied Physics course
- Syllabi revised for various subjects of Integrated M.Sc. Physics course
- Following programs (as per the syllabus of BIT Mesra) have been launched at BIT off shore campus Ras- Al- Khaimah during the year:
 - o Diploma in Mechanical Engineering
 - o B.E in Mechanical Engineering
 - o B.Com
- Department of Chemical Engineering & Technology started Integrated MSc (Food Technology)
- BIT off campus Lalpur started Master of Tourism Management (MTM)
- BIT off campus Patna started MBA, BBA, BBE, BCA, M.Tech in Computer Science, M.E. in Wireless Communication, Integrated M.Sc. Physics and Mathematics.
- BIT off campus Noida revised course curriculum of M.Tech (CS) Full Time, BBA, BCA and BBE

2.6 VISITS TO UNIVERSITIES / INSTITUTES / RESEARCH LABORATORIES / INDUSTRIES FOR CONFERENCE,

WORKSHOPS ETC. IN INDIA & ABROAD

A total of 11 faculty members visited various Institutes and R & D organizations in India and Abroad to deliver lectures and for Research Collaborations.

3. CAMPUS PLACEMENTS

The Campus Recruitment during 2013-14 again reflected the faith of industries on the quality of BIT students. As many as 69 recruiters from Investment Bankers to Consulting Organizations, Automobile to Heavy Engineering and from Infrastructure to IT Services & Product companies, have visited the campus and recruited from the BIT talent pool. The process generated 1008 offers with several students receiving multiple offers. The average salary for the BE students has moved from INR 6.04 lacs last year to a new high of INR 6.9 lacs per annum this year with the highest compensation of INR 20.5 lacs by Indian recruiter and US\$ 1.09 lac as an International offer.

4. TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME PHASE -II

Birla Institute of Technology, Mesra, Ranchi has been selected for support under TEQIP-II. Centre of excellence on Bioresources and Bioprospecting has been established from funds made available by TEQIP.

TEQIP - II facilitated the following infrastructural development:

- New laboratories such as Solar energy lab Department of Mechanical Engineering,
 Manufacturing Simulation lab Department of Mechanical Engineering and Air lab —
 Environmental science & engineering
- Upgradation of Existing laboratory facilities such as Power Electronics Lab EEE, Control system
 lab -EEE, Plasma lab Physics
- Procuring Learning resources such as STRUDS+ ERS-GRS: Civil Engineering, LabView: Space engineering and rocketry and ANSYS HFSS: ECE
- Library facility by purchasing ProQuest Dissertation & Theses Full Text Collection Part B (Science & Technology) with 5 year subscription.

TEQIP-II has also taken care of Faculty and Staff Development (FSD), Institutional Management Capacity Enhancement, Industry Institute Interaction, Financial support to economically poor students

5. VISIT BY NBA, UGC TEAM AND PERSONNEL FROM OTHER ORGANISATIONS

5.1 VISIT OF EMINENT PERSONALITIES

More than 25 eminent personalities visited BIT and it's off campuses to share their expertise with teachers and students. Some of them are

- 1. Dr. Naresh C. Bal, Ohio State University, USA visited then Deptment of Bio Technology for seminar on June 24, 2013
- Dr. Kundan Ingale, Application Specialist of VLife Sciences Technologies Pvt. Ltd. visited then Deptment of Bio Technology to deliver a lecture on "Bioinformatics specially protein ligand, protein peptide and protein-protein interaction" on October 05, 2013
- 3. Mr. Adya Bihari, Manager, Miltech Machinery Pvt. Ltd visited then Deptment of Bio Technology to deliver a lecture on "Different Bioprocess layouts special reference to modern rice mills",
- 4. Mr. K. Durga Prasad, Endeavour Enterprises, Hyderabad visited then Deptment of Bio Technology to deliver a Lecture on "Application of Biolistic Particle Technology for development of transgenics" on October 28, 2013
- 5. Mr. Alakh Prasad, President & CEO, Quadrogen Power Systems Inc., Vancouver, BC, Canada, visited Dept. of Bio Technology To deliver a Lecture on "Quadrogen-a case study" on December 06, 2013
- 6. Prof. P. Ghosh, Executive Director, BISR, Jaipur visited Dept. of Bio Technology For the meeting of Advisory Board of CoE, TEQIP-II, Department of Biotechnology on December 07, 2013
- 7. Shri M. M. Bhardwaj ,Chairman, mPower Green Energy Ltd., Ex Managing Director of Rajasthan Electronics & Instruments Limited (REIL) and Hindustan Salts Limited (HSL), Govt. of India visited BIT, Jaipur for inauguration of new common computer centre upgraded with high end Computer Systems, Fast data & Internet Access, Digital books and online research journals on April 10, 2013
- 8. Mr. Pankaj Pandey,Unit Head, Ericsson India Ltd., Jaipur visited BIT, Jaipur as Chief Guest in Induction programme organized for new BE students on August 7, 2013
- 9. Dr. C.P. Ravi Kumar ,Technical Director, Texas Instruments visited BIT, Jaipur and Delivered Invited lecture on "Embedded Systems & IT Applications on August 27, 2013
- Prof. Scott Yam, Associate Dean, Queen's University, Canada visited BIT, Jaipur for Presentation on Higher Studies in Engineering at Queen's University on September 4, 2013
- 11. Dr. Surendra Pal,Renowned Space Scientist and president IETE, Mr. Gyan Prakash, Director, FICCI, Rajasthan, Mr. Sanjay Kumar, Senior GM, BSNL and Chairman IETE, Jaipur Chapter, Mrs. Alpana Agarwal, Senior GM, BSNL visited BIT, Jaipur for Inauguration of IETE student Chapter, CSI student chapter and Technical clubs on October 23, 2013
- 12. Mr. Rajat Ojha,CEO- The Awesome Game Studio, San Francisco, USA visited BIT, Jaipur for Conducting Workshop on Digital Games on January 16, 2014
- 13. Mr. Abhishek Ghoshal ,A well known Music Director & Singer, Tathastu Studio, Mumbai visited BIT, Jaipur for Invited lecture and interactive session on the role of Music in the Animated Films on March 6, 2014
- 14. Prof. Phil Geary and Dr Vikrant Kishore, The Faculty of Science and Information Technology, University of Newcastle visited Department of mechanical Engineering for discussion on MoU for higher education during June'2013

- 15. Dr. Ranya Fadlalla Abdalla, Assistant Professor in Geomatics, Sudan University of Science and Technology, Khartoum, Sudan visited the Department of Remote Sensing as a Senior Visiting Fellow of the C V Raman Fellowship Programmefor the African Researchers during November-December, 2013.
- 16. Mr. Sanjay Nayak, Co Founder and Chief Executve Officer, Tejas Networks, An alumani of ECE Deptt (1981 Batch), BIT Mesra visited Department of ECE to deliver a talk on "Building a Hightech Product Company from India—The Tejas Story" on 25th Oct., 2013
- 17. ManasChhabra, Senior Design Engineer, NMSG, Freescale Semiconductor, Noida, India visited Department of ECE to deliver a talk on "Network and packet Data transfer protocol" on 24th Oct., 2013
- 18. Prof.(Dr.) Mini Thomas (UGC Nominee) visited Department of EEE for Project evaluation and selection of project fellow of UGC-SAP project during February, 2014
- 19. Prof.(Dr.) N. K. Jain (UGC Nominee) visited Department of EEE for Project evaluation and selection of project fellow of UGC-SAP project during February, 2014
- 20. Dr. A. K. Pandey, Additional Chief Secretary cum Principle Secretary Department of Science and Technology, Govt. of Jharkhand visited BITOC Deoghar to inaugurate the Annual Techno-Cultural "Utthaan-2014" fest of the Institute during February, 2014
- Dr. Surendra Pal, President of the Institution of Electronics and Telecommunication Engineers (IETE) visited BITOC Deoghar to inaugurateIETE Students' Chapter at BIT, Deoghar during July, 2013
- 22. Prof. M. L. Gupta, Vice-President of IETE visited BITOC Deoghar to inaugurateIETE Students' Chapter at BIT, Deoghar, as the Guest of Honor
- 23. Expert Committee from "Council of Architecture" India visited BIT off shore campus Ras-Al-Khaimah for Approval of B Arch Program offered at this center in Nivember 2013 and approval accorded by the Council for three years, up to 2015-16
- 24. Dr. R.K. Gupta, Director, ASDAG, Advanced Systems Laboratory, DRDO, Hyderabad delivered a lecture on "Aerospace Design of Missiles" in the Department of Space Engg. & Rocketry on January 23, 2013.
- 25. Dr. P.S Dhinwa Scientist G, SAC ISRO Ahmadabad delivered lecture on 25th & 26th April 2013 in the Departent of Remote sensing
- 26. Dr. Vinod Bothale, Group Director NRSC, ISRO Hyderabad give expert lecture on Bhuvan data access on 27th April 2013 in the Department of Remote Sensing.
- 27. Mr. Manas Chabra, Senior Design Engineer Free scale semiconductor pvt. Ltd. on 6.05.2013 visited Department of ECE for laboratory experiments development

6. AWARD / DISTINCTION / FELLOWSHIP / MEMBERSHIP / HONOURS RECEIVED

FACULTY

- 1. Dr. D. Prasad has been awarded One year Post-Doctoral fellowship by Ministry of University and Research (MiUR), Italy (Jan'14 Dec'14)
- 2. Dr. R. Poddar was Visiting Fellow, Schools of Medicine, Stanford University, USA (Sept 20 -25, 2013)
- 3. Dr. R. Bandopadhyay became Advisor, National Academy of Sciences, India Jharkhand Chapter
- 4. Dr. Ramesh Chandra won AMI Platinum Jubilee Best Poster Award, Biotechnology education in India and its future (IABE 001), 54th annual conference of AMI- 2013, MDU Rohtak, India, Nov 17-20, 2013
- Roopali Sharma received "Indo-Nepal Gold Star Award" in recognition of sterling merit, excellent performance & outstanding contribution in the field of Economics. The award was given by Economic Growth Society of India at Kathmandu, Nepal on April 20, 2013
- 6. Dr Swagata Payra received Research Fellowship award to work at Météo-France (French Meterological Department), France
- 7. Dr Sunita Verma was invited for Early Career Scientist participation in Stratospheric Sulfur and its Role in Climate (SSiRC) at Atlanata, USA.
- 8. Dr. Vibhuti Pandya became One of the Jury Member in the Jaipur International Film Festival Awards 2014
- 9. Mr. Vivek Sharma became one of the Jury Member in the Jaipur International Film Festival Awards 2014.
- 10. Dr. Anand Kumar Srivastava received "ISCA Best Poster Presentation Award -2014" in Physical Sciences during 101st Indian Science Congress, University of Jammu, 3-7 February 2014 and received "Bharat Shiksha Ratan Award 2014" for Academic Excellence, conferred by GSHEG, Delhi during National Seminar on 'Individual Achievement and National Development' at New Delhi, 10th February 2014
- 11. Prof.BN Sinha of Dept. of Pharmaceutical Sciences & Technology has been nominated as Chairman of Continuing Education for Pharmacy Educators (CEPE) under Pharmacy Council of India.
- 12. Dr. Rafique Ul Ishlam was awarded Postdoctoral Fellow by University of Johannesburg, South Africa during September 2012 December 2013
- 13. Dr. A.K.Roy and Dr. Kaushik Kumar won Best Paper award at ICEMS 2013 for Paper titled "Comparison of design validation of a mixed flow pump impeller blade using CATIA and ANSYS".
- 14. Dr. Nilanchal Patel was appointed as Editor of Journal of Earth Sciences and Climate Change, USA, Indo-American Journal of Agricultural and Veterinary Sciences, USA, Journal of

Agricultural Sciences and Applications (JASA), Spain, AMBIENCIA, Brazil, and as Member on Editorial Board of Advances in Applied Research, Scientific Committee, 5th International Workshop of the EARSeL Special Interest Group "Geological Applications" Remote Sensing and Geology "Surveying the GEOsphere", 19-20 June 2014 Warsaw, Poland. Dr. Patel visited the University of Poitiers, Poitiers (France) as Visiting Scholar in October 2013.

- 15. Dr. A.P. Krishna was invited to serve as a Member on the Abjudication Committee for Partnership Development Seed Grant (PDSG) between India and Canada, SICI/CIDA University of Calgary, Canada (2013-2014)
- 16. Dr. C. Jeganathan was appointed as Editor-in-Chief for an International Journal of Advancement in Remote Sensing, GIS and Geography (IJARSGG), was invited to write a consultancy project proposal over Hindu-Kush-Himalaya by International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal. Visited ICIMOD twice under this project to present and defend the proposal before the international expert committee members, awarded NASA-SERVIR research project (50,000\$) by ICIMOD to execute a Project related to monitoring and understanding vegetation dynamics over Hindu-Kush-Himalaya.
- 17. Dr. V. S. Rathore was Reviewer of Journals: 1. Journal of Earth System Science, Indian Academy of Sciences, & Springer and 2. International Journal of Advancement in Remote Sensing, GIS and Geography (IJARSGG)
- 18. Dr. Abhisek Santra appointed as Editor in the Editorial Board of International Journal of Advancement in Remote Sensing, GIS and Geography (IJARSGG) and became Reviewer of an international journal "Positioning", Wuhan University, China
- 19. Dr. Vijay Nath won Best Paper Award in International Conference, CCSN, Organized by Deptt of ECE, PIET, Raurkela, Odissa, 24th Nov, 20132013
- 20. Prof. T. Ghose was invited Speaker in IEEE sponsored international conference on Advances in Electrical Engineering at IUB, in Dhaka, Bangladesh and delivered talk on Power System Deregulation----Indian Experience on 20th of December, 2013 and was Session chair in IEEE sponsored conference at kolkata on 2nd February, 2014
- 21. Prof. D. K. Mohanta became Editor, Electrical Power Components & Systems (Taylor & Francis Publications), Member, IEEE PES RRPA subcommittee, Member of Working Group for IEEE P2030.4™ Guide for Control and Automation Installations Applied to the Electric Power Infrastructure(Guide for Smart Grid Interoperability of Energy Technology and Information Technology Operation with the Electric Power System and End-Use Applications, and Loads).
- 22. Dr. Ritesh Kumar Keshri organized special session on "Electric Traction Drives for Road Vehicles" in 39th IEEE Industrial Electronics Conference-2013, November 10-13, 2013 at Vienna, Austria, Chaired special session on "Electric Traction Drives for Road Vehicles" in 39th IEEE Industrial Electronics Conference-2013, November 10-13, 2013 at Vienna, Austria.
- 23. Amit Kumar Gorai of Department of CEE received Raman Post-doctoral Fellowship

- 24. Kirti Avishek received Research Fellow, IEMP-UNEP, China
- 25. R. Naresh Kumar became Adjunct Lecturer, Edith Cowan University, Australia
- 26. Dr. Soubhik Chakraborty received National Award For Teaching Excellence by Indus Foundation
- 27. Dr.Soubhik Chakraborty received Best Academic Researcher Award 2013 by Association of Scientists, Developers and Faculties
- 28. Dr. S. Padhi felicitated by P.G. Sacred Heart College for the contributions in the development in Differential Equations, sponsored by UGC
- 29. Dr. B.K.Mishra became Editor in Chief of the Journal "International Journal of Mathematical Modeling and Computing, became Guest Editor (2013) for Computer Virus: Theory, Model and Methods (Special Issue of Discrete Dynamics and Nature and Society, Hindawi Publications).
- 30. Dr. R.N.Gupta received Best Pharmaceutical Professional of the Year by Indian Association of Pharmaceutical Scientist and Technologist on 17th January 2014
- 31. Dr. Nibha Mishra received ELSC Fellowship for Post-Doctoral Studies in Brain Sciences in Hebrew University, Jerusalem, Israel from Jan 2014-2016
- 32. Dr.Arijit Basu received Post-Doc fellowship of Planning and Budgetary commission, Govt. of Israel from Oct 2013 to Sept 2016.
- 33. Dr. I.Banerjee received Career Award for Young Teachers (CAYT, AICTE)
- 34. Dr. S. Konar became Senior Associate, ICTP, Italy, 2007-2014
- 35. Dr. J. K. Prasad became Vice- President, Fluid Mechanic & Fluid Power Society of India and became Member of Core Group, Aerospace Division, IE(I)
- 36. Dr. Mahendra Kumar nominated Neutral AIU Observer for National/Zonal
 - University Games for the Kho-Kho Game session 2013-14 Organized by VBSPU Jaunpur. (U.P) and nominated as Technical Expert by I.Q.R.S for audit in TATA Steel Sports Department from 10th February to 11th February 2014.
- 37. Ar. Anamika Nandan Won First Prize by writing a paper on "Vaastu" organized by J.K.White Cement
- 38. Dr. Shruti Kohli received Best paper award at International workshop on Machine Learning and Text Analytics held at Soth Asian University, New Delhi

STUDENTS

 Ms. A. Sharan (B.E. Biotechnology 2011 Batch) selected as a MITACS Globalink research intern 2014 to work under the guidance of Dr. Jerald Lalman, Department of Civil and Environmental Engineering, University of Windsor, Ontario, Canada for a period of 12 weeks

- 2. Mr. C. Banerjee (Ph.D. scholar) received Young Scientist Award, Association of Microbiologist of India (AMI 2013)
- 3. Ms. A.J. Bauer (B.E. Biotechnology, under student exchange programme MO-13) AMI Platinum Jubilee Best Poster Award, Biotransformation of p-coumaric acid to value added compounds by bacterial isolates (EMBD 030), 54th annual conference of AMI- 2013, MDU Rohtak, India, Nov 17-20, 2013
- 4. Ms. P. Gupta (Ph.D. scholar)received AMI Best Poster Award forSouthern ocean bacterial community: biodiversity and characterization of culturable bacteria (IMET 178) in54th annual conference of AMI- 2013, MDU Rohtak, India, Nov 17-20, 2013
- 5. Ms. R. Mishra (Ph.D. scholar)received AMI Platinum Jubilee Best Poster Award for Isolation and purification of α -D-Mannosidase from Hyophila nymaniana (Fleish.) Menzel (IMET 181) in 54th annual conference of AMI- 2013, MDU Rohtak, India, Nov 17-20, 2013
- 6. Dipendra Adhikari, Roll No. BE/10076/2012 has been selected for the Paramansha Yogananda Scholarship for Professional Course Students.
- 7. Hansjeet Duggal, Shuchi Sharma ,Rishabh Banshkar (Students of B.Sc. A&M) awarded in Sikhnet Film Festival, New Jersey, USA in Year 2013 for an animated Short Film "Dhannjanni"
- 8. Lakshay Arora (BE-ECE-8th Semester) was selected for participation in National Athlete Championship held in Sports University Patiala in December 2013
- 9. Praveen Kumar (BE-ECE-8th Semester) won "Best Oral Presentation Award" for the research paper in National Seminar and Science Model Exhibition on the topic "Innovations in Science and Technology for Inclusive Development" organized in collaboration Indian Science Congress Association, on January,16th & 17th, 2014
- 10. A film "Ketli" (on Education is the right of every child) made by Rahul Gaur, Asim Bera, Sanjay Tillani, Mayank Babbar, Hitesh Singhani (Students of B.Sc. A&M) nominated in the Jaipur International Film Festival 2014.
- 11. An animated short film "Bagula Bhagat" made by Vivek Gupta, Prashant Grover, Rasika Chandle, Himanshu Shekhar, Paras Bhatnagar, Harun Rashid, Devesh Goswami, Arpit Khandelwal (Students of B.Sc. A&M), was nominated for the screening in the Jaipur International Film Festival 2014.
- 12. An animated short film "Aish-Aram" made Supriya Ranawat, Padmini Murthy, Jai Soni, Karan Dogra, Sakshi Shukla, (Students of B.Sc. A&M) was screened in the Jaipur International Film Festival 2014.
- 13. A short film "Biscuit" made by Ankush Nayak, Sakshi Tomar, Bulbul Bhansali, Riya Pandya, Umesh Chandra Pant, Sugandha Mangla, Asim Bera (Students of B.Sc. A&M) was screened in the Jaipur International Film Festival 2014.
- 14. A short film "Solution" made by Himanshu Sharma , Devesh Goswami Sanjay Tillani, Manash

Mani, (Students of B.Sc. A&M) was screened in the Jaipur International Film Festival 2014.

- 15. Ms. Farah Hamdan Al Humaidi –BBA 6th (BIT Muscat) Semester won Business Administration Category of Ernst & Young Student Excellence Award 2013
- 16. Samreen Sami, Syeda Assiya Mariam and Zuha Mohammed Zubair Won First prize under Electrical Engineering Category for the project entitled "Design of Safe Intelligent Water Level Monitoring System Used in Dams" in the Third National Symposium of Engineering Final Year Projects at University of Nizwa, (NSEFYP) on 12th May 2013
- 17. Aneesa Nizar, Afreen Mohd Ashraf and Kanhaiya Pradeep Deshpande Won prize under Electrical Engineering category for their project entitled "Automatic Vehicle Accident Detection in the Third National Symposium of Engineering Final Year Projects at University of Nizwa, (NSEFYP) on 12th May 2013
- 18. Femitha Nazeer and Anoop Murali Won prize under Chemical Engineering Category for the project entitled: Extraction and Study of Antibacterial and Antifungal Activity of Clove Oil." in the Third National Symposium of Engineering Final Year Projects at University of Nizwa, (NSEFYP) on 12th May 2013
- 19. S. De Silva and four others won NOKIA APP Discover Oman Award
- 20. Ms. Harpriya Chakraborty, PhD scholar has been awarded Italian Government Scholarship 2013-2014 for period of 9 months (1-1-2014 to 30-9-14) to pursue a jointly supervised research programme on 'Computational simulation studies on structural and functional aspect of protein Calsequestrin Casq 1'
- 21. Mr. Anand Kumar konreddy, Ph. D. scholar, Awarded a postdoctoral associate position at Drug Discovery Group, College of Pharmacy, University of Georgia, Athens, USA
- 22. Sambharant Srivastava (ME/MEC/10014/2012) won Best Paper award at ICEMS 2013 for Paper titled "Comparison of design validation of a mixed flow pump impeller blade using CATIA and ANSYS".
- 23. Saikat Roy (2010 batch) won All India first prize in 10th Birla White 'Yuvaratna 2014', for excellence in design— Project: Design of a corporate office complex for a conglomerate, providing a suitable work environment
- 24. Abhilasha Bakhla (2010 batch),. Prapti Jha (2010 batch), Harsh Wardhan (2010 batch) and Saurabh Priyadarshi (2010 batch) won All India 2nd prize for INSDAG Architecture Award 2013: design of G+8 Super Specialty Cardiac Hospital at Kolkata
- 25. Karan Dhawan (2012 batch) won the second prize for photography competition at 18th National Youth Festival at Ludhiana, Punjab from 12th- 16th January, 2014
- 26. Somnath Mukherjee (2012 batch) won the third prize for painting competition at 18th National Youth Festival at Ludhiana, Punjab from 12th- 16th January, 2014
- 27. Amit Kumar (2011 batch) and Sarvesh Singh (2012 Batch) were Runners-Up at the international business-plan event- IDEAS'13, held from 14th- 17th march, 2013at IIT Kanpur

- 28. Sanyukta Mohta (2012 Batch) won Certificate of Merit in All India essay writing Event organized by Shri Ram Chandra Mission in collaboration with United Nations Information Centre for India.
- 29. Students of Department of Architecture were2nd overall Winners in competetion hosted by College of Architecture Muradabad
- 30. Akshay Jalan and Tarun Karuturi secured ranks within Top 7 at ICICI Trinity Program(The Competition is still going on among these 7) 19 Dec'13
- 31. Mr.Ashish Ranjan, (1st), Mr.Shashi Bhusan Vinit((1st), Mr.Sandeep Kumar(1st), Mr.Prakash Kumar(1st), Mr.Sushant Agarwal(2nd), Mr.Vikrant Nanda(2nd), Mr.Shrey ,Khanna(2nd), Mr.Rohit Kausal(2nd), Mr.Anand Kumar Sing(2nd), Mr.Abhishek Gaurav(3rd), Mr.Manish Kumar Pandey(3rd), Mr.Shasahn Ranu(3rd), Mr.Prashant Gupta(3rd) secured rank within top three at Texas India Innovation Challenge: India Analog Design Contest organized by Department of EEE, BIT Mesra during Feb 17-19,2014
- 32. Mr.Utkarsh, Dipayan, Ritika, Mr.Abhishek and Ramakrishna won Best paper award in 21st IEI convocation and student convocation organized by IEI Kerala, 19-20 Oct., 2013
- 33. Mr.Abhinav Akash(1st),Miss. Avantika(2nd) secured top 2 position in Zonal Electromagetic Olympiad Camp at Kolkata and received prize in Indian antenna Week held at Aurangabad, 3-7 June,13
- 34. Abhay Shankar awarded Cargill Global Scholarship-2013, in recognition of superior academic achievement and leadership potential. He was also selected to attend Global Leadership Seminar 2014 to be held at Minneapolis, USA
- 35. Miss Samridhi, Research Scholar won 2nd Best Poster Presentation in 2nd International Conference by IAPST held at Jadavpur University, Kolkata during January, 17th-19th 2014
- 36. Surbhi Mishra was awarded the first prize of excellence for poster presentation entitled "molecular modelling studies of novel 1, 2-diarylimidazoles as possible nortis with broad spectrum properties", at national Seminar on Challenges, Opportunities and futuristic trend in Pharmacy Education at IIT, BHU held on 3rd 4th March 2014
- 37. Mr. Vijay Chatterjee ,JRF under ,Prof. P. K. Barhai was awarded Commonwealth Split-Site Fellowship,Opted for the same at University of Bristol, UK, from Dec 2012 Dec 2013
- 38. A group of final year EEE students, Riyaz Basheer, Abin Thomas, Rinjo Daniel, Irfan Yusuf won Best Presentation Award at "International Conference on Innovative trends in Science Engineering and Management" held in Dubai

7. SEMINARS / SYMPOSIA / SHORT TERM COURSES ORGANIZED

The Institute and its Extension / International Centres organized as many as 68 Seminars / Symposia / Workshops. Some of them are:

1. Department of Bio Technology organised One day brainstorming session on interdisciplinary Microbiology AMI, Jharkhand Chapter, and BIT Mesra on Sept 28,2013

- Centre of Excellence for Climatology organised Training program on-Weather, Climate, Meteorological Hazards and Disasters over Jharkhand region during June 27-29,2013.
- 3. Department of Applied Chemistry organised workshop on Software in Chemical Science Education and Research (SCR 2013) on 3-10-2013
- 4. Department of Remote Sensing organised 11th EDUSAT (Satellite Based Distance Education) Course on "Basics of Remote Sensing, GIS and GPS" during August 5th to November 4th 2013 sponsored by Indian Institute of Remote Sensing (IIRS, ISRO, Dehradun)
- 5. Department of Remote Sensing organised 12th EDUSAT (Satellite Based Distance Education) Course on "Microwave (SAR) Remote Sensing for Natural Resources" from3rd Feb 2014 to 29th March 2014 sponsored by Indian Institute of Remote Sensing (IIRS, ISRO, Dehradun)
- 6. Department of ECE organised Two week workshop on "Signal &Systems" NMEICT at BIT Mesra sponsored by MHRD from 02.01.14 to 12.01.14
- 7. Department of ECE organised Workshop on "MicroElectro Mechanical Systems (MEMS)" on 12.12.2013
- 8. Department of ECE organised Workshop on "Concepts in Wireless Communication" from 02.12.2013 to 07.12.2013
- 9. Department of ECE organised NMEICT workshop on "Signals and Systems" at IIT Kharagpur from 30.09.2013 to 04.10.13
- 10. Department of ECE organised Workshop on "EM Simulation and antenna design using FEKO tool sponsored by Ni2designs from 10.05.13 to 11.05.2013.
- 11. Department of EEE organised Short Term Course on Power Converter and Applications sponsored by DIT, NaMPET, GOI during July 4-6, 2013.
- 12. Department of EEE organised Special session on "Electric Traction Drives for Road Vehicles" in 39th IEEE Industrial Electronics Conference-2013, November 10-13, 2013 at Vienna, Austria sponsored by IEEE, USA during November 10-13,2013
- 13. Department of EEE organised IETE National Student Congress sponsored by IETE, Delhi during February, 1-2 2014
- 14. Department of EEE organised Texas India Innovation Challenge: Analog Design Contest [College level] sponsored by Texas Instruments India University Program during February, 17-19 2014
- 15. Department of EEE organised Workshop on Microcontroller Applications sponsored by TEQIP Phase-II during January 6-13, 2014
- 16. BITOC Deoghar organized IEEE International Conference on Awareness Science & Technology iCAST 2013) during November 2-4, 2013
- 17. BITOC Deoghar organizedPrediction with Social Networks: Role of Fuzzy and Soft Computing

Agents, 2013 IFSA World Congress NAFIPS Annual Meeting Edmonton, Canada during June 24-28, 2013

- 18. BITOC Deoghar organizedNational Workshop on Recent Trends in Manufacturing (RTM'13) (Jointly organized with Dept. Of Mechanical Engineering) on 28.10.2013.
- 19. Department of Information Technology organised National Conference in Libraries & Information Services (ETLIS 2014) in collaboration with Jharkhand Information & Library Association, Ranchi in association with International Research and Development Association, Library Professionals Association and Lords Publishing House during February 22-23, 2014
- 20. Department of Management organised National Seminar on Importance of Foreign Language (French) in Management Education and International Trade on September 9, 2013.
- 21. Department of Pharmaceutical Science organised Short Term course on Newer Perspectives in Ethnopharmacological Research from 27th May 2013 to June 10, 2013.
- 22. Department of Pharmaceutical Science organised Short Term course on Recent Innovations in Drug Delivery: Addressing the Bioavailability Problem from June 11, 2013 to June 24, 2013.
- 23. Department of Pharmaceutical Science organised Short Term course on Systematic Approaches to Rational Drug Designing for Discovery and Development of Medicinals from 25th June 2013 to 8th July, 2013
- 24. BIT off-shore campus Ras-Al- Khaimah organized "National Conference on Emerging Technologies-2013", organized by the Engineering Departments and held at the college campus on 26th May 2013.
- 25. Department of Production Engineering organized One Week Short Term Training Program on, Applications of Artificial Intelligence Techniques In Engineering and Research during 23-27, September, 2013
- 26. Department of Production Engineering organized workshop on Sixth Sense Technology during 5-6th October,2013
- 27. Department of Production Engineering organized Institutional (Internal) Academic Workshop on 20th April,2013
- 28. TEQIP facilitated in organising
 - One day Institutional (internal) academic workshop on 20.04.13
 - Training programme on AutoCAD from 13.05.13 to 20.05.13
 - Training of technical staff on various Conventional/CNC/Non-Conventional Machines in mini tool room from 10.06.13 to 9.06.13
 - Training programme on Basic MATLAB from 24.06.13 to 01.07.13

- Training programme (office staff) on Computer fundamentals, Operating System, MS
 Office and Internet browsing from 17.06.13 to 27.06.13
- Half day IIT-NPTEL Workshop on 12.7.2013
- Workshop on Basic Pedagogy on 13.08.13
- Technical Presentation-cum-Interaction Session on "Advances in Material Testing,
 Materialographic Sample Preparation & Coating Thickness Measurement etc' on 20.08.13

29. BIT off campus Patna organised

- Electronic System Design and Manufacturing (ESDM)' Workshop on 7th July, 2013
- EDP for Finance and Non Finance during 28-06-2013 30-06-2013

30. BIT off campus Noida organized

- Faculty Development Programme on "Research Issues and Simulation Tools in Wireless Technologies from 23rd September' 2013 to 27th September' 2013
- Drawing and Painting Workshop from 21st February' 2014 to 22nd February' 2014
- Workshop on Visual Effects on 16th January'2014

31. BIT off-shore campus Muscat organized 33 workshops. Few of them are as follows

- Trends in Integrated Circuit Technology on 17.4.13
- Sports Economics and Management: What are the peculiarities in comparison with other sectors on 24.4.13
- Nanoscience and nanobilogy Prospects and Relevance on 19.12.13
- Nanomedicine to fight cancer- Todays focus on 26.12.13
- Green Marketing: Way Ahead to Sustainability on 02.01.14
- Smart Grids and Smart Energy Consumers on 13.03.14
- Facts about Lipids & Cardiovascular Disease on 20.03.14

8. CSR & STUDENTS' ACTIVITIES

The students showcased their talents and responsibilities by organising and participating in various programmes of social, cultural and technical in nature.

Few of them are listed here

 A 7-day workshop for the underprivileged students was carried out by the ACM student's chapter from the 23rd January, 2014 to 29th January ,2014

- The social cause that was highlighted in Bitotsav, organized from 23rd to 26th February 2014, was Thalassemia and a 'Bitotsav Marathon for Fight against Thalasemia & Safe Blood' was organised in January 2014 to spread awareness against Thalassemia, an inherited blood disorder.
- The month of August marked the start of the News & Publication Society's bi-monthly newsletter 'BIT by BIT'.
- A variety of technical workshops were held throughout the year by various technical clubs and societies in the Institute. Some of these included a PLC SCADA workshop by IETE, various coding workshops including C, C++, Linux and Python by ACM, an Embedded Systems workshop by Robolution, a B-Plan workshop by EDC, a Photoshop workshop by IEEE, a Microcontrollers workshop by EEESOC, and an Artificial Intelligence workshop by the Deptment of Production Engineering, among many others.
- PANTHEON was organized from 19th to 22nd September 2013,
- The students of BIT off campus Jaipur on the occasion of International Women's Day organised a Marathon on the theme of "Run for Women Pride" on 8th March 2014.

NSS ACTIVITIES

Apart from all the fun through various fests and events, the NSS students carried out their social responsibilities from time to time throughout the year through their work in the nearby villages and schemes of employment and ensuring proper health of the families in the villages. They along with the Rotaract and Leo clubs also organised blood donation camp for Thalassemia, Anaemia and other ailments concerned with blood disorders.

9. NATIONAL AND INTERNATIONAL EXCHANGE PROGRAMMES WITH UNIVERSITIES / RESEARCH ORGANIZATIONS:

- Ms. Amelie Jacqueline Bauer of Mannheim University of Applied Sciences, Germany was selected for the student exchange programme for the monsoon semester 2013-14.
- Thomas H. Petersen, a Master student from the Department of Development and Planning, University of Aalborg, Denmark spent one semester in MO-2013 in the Department of Remote Sensing for completing part of his Masters' programme
- Debojit Dey of Department of ECE has performed part of his ME thesis at Shivpur Engineering College, Kolkata..
- Vineet Singh of Department of ECE has performed part of his ME thesis work at IIT Kanpur in June 2013.
- Arpita Sen of Department of ECE is performing part of her PhD thesis at Jadavpur University,
 Kolkata.

- Chandan of Department of ECE is performing part of his ME thesis work at IIT Kharagpur.
- Mr. Rupesh Kumar Jha of M.E. 2nd year student, Department of EEE has visited Department of Electrical Engineering University of Padova for part of his M.E. project work under the collaboration programme between Department of Electrical & Electronics Engineering and University of Padova.
- The following students of M. Tech Nano Science and Nano Technology are doing their final year project work at National Institutes and Laboratories:
 - a) Atul Kumar Sinha at RRCAT, Indore, through BARC, Mumbai
 - b) Shubham Agarwal at CSIR NAL, Bangalore
 - c) Abhishek Kumar at NML, Jamshedpur
 - d) Anirban Chatterjee at NML, Jamshedpur
 - 10. SPORTS ACTIVITIES

Various sports activities were held in the Institute during the period.

- Inter University Badminton (East Zone) Tournament (M&W) 2013-14 was organized at BIT Mesra from 05.11.2013 to 10.11.2013 in which 28 teams participated.
- 28th Annual Athletic meet 2013-14 31st January to 02nd February 2014. Mr. Chetan Kumar of production Engg. declared Individual Championship amongst Men & Miss. Apurva Nidhi of Computer Science in women.
- On 15th August 2013 Football match played between SAI Morhabadi Ranchi and Institute Team at sports complex.
- 22nd Chetan Devraj Memorial East Zone Technical Institute/College Cricket
 - Tournament 2013-14 from 18.02.2014 to 22.02.2014 in which NIFFT, Hatia, Ranchi won the championship.
- Institute Football Team participated in 'SPARDHA' festival organized by BHU Varanasi
- Mr. Lakshay Arora, BE/4123/10, ECE, of BIT Extension Centre, Jaipur participated in All India Inter University Athletic meet 2013-14 Organized by Punjabi University Patiala.

Apart from these inter hostel football, basketball, volleyball and cross country race were also organised.

11. ALUMNI EVENTS

The Alumni Relations Group made a concerted effort to increase the engagement with the alumni spread all over the world by way of fortifying the alumni databases and organisation of alumni Reunions this year.

Prominent alumni events organized during the year 2013-14 were:

Reunions

- o The 1959-63 batch of Alumni organized their "Golden Jubilee Reunion" at the BIT Mesra Campus from the 24th-26th of October 2013.
- o Silver Jubilee Alumni Meet of the MBA batch of 1986-88, was organized during December 24th 25th, 2013.
- o The 1984-88 batch organized their "Silver Jubilee Reunion" at Ranchi with some activities at the Mesra Campus on 26th & 27th of December 2013.
- o The 1963-69 batch organized their "Golden Jubilee Reunion" at the BIT Mesra Campus during 17th -19th February 2014.
- o The 1964-69 batch organized their "Golden Jubilee Reunion" at Ranchi with a day's activity at the Mesra Campus on 22nd February, 2014.

Alumni Lecture Series

The first lecture of the series was delivered by our Distinguished Alumni, Shri Sanjay Nayak, Chief Executive Officer & Managing Director, Tejas Network. This was organized on 25th October 2013.

12. AWARD OF DEGREES

During 24th convocation held on 9th April 2014 a total of 3183 students were awarded Degrees and Diplomas in various disciplines, out of which 61 scholars were awarded Ph.D. Degree, 1008 Post Graduate Degree, 1962 Graduate Degree and 152 students were awarded Post Matriculation 3 years Diploma.

INTRODUCTION



The Main Building at BIT, Mesra, Ranchi

The Institute was established as an All India Institute of Technical Education 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 new universities 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 programme 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 technological 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

B. I. T. Mesra is a "Deemed University" under Sec. 3 of the U. G. C. act 1986. Itfunctions under the overall supervision, direction and control of a high powered Board of Governors, comprising representatives of the Ministry of Education, Government of India, the U.G.C, 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 R&D building at BIT, Mesra, Ranchi

The Technical Council (Academic Council) decides the academic policy of the Institute. It controls and approves the curriculum, the courses and the examination results. It appoints committees like Regulation Committee for Under – Graduate and Post – Graduate Courses, Semester Programme Coordination Committee, Admission Committee, Scholarship Committee, Students Welfare Committee etc. and Departmental Board of Studies to look into 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 Technical Council (Academic Council). The members of the Technical Council (Academic Council) have been enlisted Annexure – V.

The Finance Committee gives financial advice to the Institute in matters relating to building work. The composition of these committees have been given in Annexure –III & IV

THE MAIN CAMPUS, MESRA, RANCHI

The main campus of the Institute is fully residential and is spread over in 780 acres. The main building of the Institute itself covers an area of 30,000 sq. mtrs. and accommodates the various research and training laboratories, administrative offices and class rooms.

The workshop annexe has built up area of 4,000 sq. mtrs. The laboratories and offices of the Department of Space Engineering & Rocketry are situated for securities reasons in a sub – Campus, about half a kilometer away from the main building. The campus is self contained amidst well laid lawns, 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 spirit to support the continuing education programme for working Engineers and professionals.

Inst	itute Building	(Sq. Mtrs.)
•	Main building & Administration block	3700
•	Class room & laboratory, Drawing halls, Staff room's etc	19300
•	Library block	2600

= ANNUAL REPORT ====================================		2013 - 14 ====
•	Mini – Auditorium	450
•	Space Engg.& Rocketry block (Including Explosive, Fuel cell	
	& 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
•	Biotechnology Centre	3477
•	Polymer Engineering	744
•	Lecture Theatre – I	1143
•	Lecture Theatre – II	1535
•	Hotel Management Building	2835
•	Pharmacy Building	3220
•	Golden Jubilee Auditorium	3280
Resi	dential Complex	
•	Staff quarters in different categories	422
•	Residential complex for supporting services	
	Guards, Dairy Shopkeepers, Washer man etc.	116
Oth	ers	
•	Consumer's co-operative stores	375 Sq. Mtrs.
•	NCC Block	400 Sq. Mtrs.
•	Rifle Firing Range	1 No.



NCC Parade ground



1 No.

Research Scholars' hostel

Boys' hostel

GUEST HOUSES

The Institute maintains two Guesthouses with a total number 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 are organised at Golden Jubilee Auditorium having capacity of about 3000 persons.





Staff Quarter

The Golden Jubilee Auditorium

GAMES & SPORTS COMPLEX

The Institute has elaborate sports facilities for Indoor as well as Outdoor games. These are as follows:

•	Gymnasium including Multi – Gym	1
•	Stadium for Track & Fields for Sports/ Athletics	1
•	Cricket ground including net	2
•	Football ground	2
•	Hockey ground	2
•	Basket Ball courts	4
•	Volley Ball courts	6
•	Tennis courts	6
•	Badminton courts (three indoor & five outdoor)	8
•	Kho – Kho ground	1
•	Kabaddi ground	1



Health Centre

DISPENSARY - CUM - HEALTH CENTRE

Facilities Available

O.P.D Services : 8 A.M to 12 .00 Noon 4.00 P.M. to 8.00 P.M.

Emergency Services : Round the clock

• Total No. beds : 12 (Male -8, Female – 4)

• X – ray :

• E. C.G :

Oxygen Facilities

Suction Machine Facility

Medical Officers : 04

Pharmacists : 04

• Dressers : 01

X – ray Technician : 01

• Pathological Technician : 01

• Staff Nurse : 01

Visiting Physician

- Physiotherapy
- Dentistry
- Pediatric Clinic
- Homeopathic Clinic
- Eye & Skin Clinic

- Anti Natal Clinic
- Ambulance Facilities
- Pathological Lab Facility
- Immunization
- Blood donation camp, Eye camp, Gynaecologycal camp are organized at frequent intervals.
- During emergency patients are referred either to RIMS or to any private Nursing Homes depending upon the situation as per necessity and convenience of the patient / attendants of patients
- Permanent faculties, staff members and students are covered by Group Mediclam Policy in case of hospitalization
- Proposed Ultrasound machine facilities & ICU facility, isllation ward & Pathological Lab
- Community Health services are also carried out by organizing Medical camp in villages.
 National Health Services like Pulse Polio immunization, TB, Leprosy, Blindness eradication programmesare organized regularly.



Shopping Centre

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 to day sundry needs.

HOSTEL FACILITIES FOR STUDENTS

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

HOSTEL ACCOMMODATION

HOSTEL NO.	NO.OF ROOMS	NO. OF STUDENTS
	BOYS' HOSTEL	
1.	136	130
2.	136	130
3.	156	149
4.	151	142
5.	333	310
6.	295	282
7.	308	301
10.	485	760
11.	485	487
12.	228	222
13.	228	219
	GIRLS' HOSTEL	
8.	260	517
9.	. 336	
GRAND TOTAL	3537	4316

Research Scholar Hostel

112 Rooms

ANNUAL REPORT	ついてマニ ′	17	
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ACADEMIC PROGRAMMES

Institute is offering a number of programmes, introduced at different point of times, as detailed below.

BIT MESRA Campus

Programme	Year of Introduction of the Courses	Duration of the Course	Intake Capacity
Bachelor of Engineering Degree Courses			
Electrical & Electronics Engineering	1955	4 Years	60
Mechanical Engineering	1955	do	90
Civil Engineering	1957	do	60
Electronics & Communication	1964	do	120
Production Engineering	1964	do	30
Computer Science	1983	do	120
Polymer Engineering	1995	do	30
Information Technology	2001	do	60
Biotechnology	2002	do	60
Pharmacy	1972	do	60
Architecture	1993	5 Years	40
Hotel management & Catering Technology	2002	4 Years	60
Master of Engineering Degree courses			
Electrical Specialization 1. Control system 2. Power system	1964	2Years	24
Mechanical Specialization 1. Heat Power Engineering 2. Design of Mech. Equipment	1964	2Years	12
Civil Specialization 1. Soil Mechanics 2. Structure & Foundation Engineeing	1964	2Years	24

Programme	Year of Introduction of the Courses	Duration of the Course	Intake Capacity
Electrical & Communication Engineering Specialization 1. Instrumentation 2. Microwave	1965	2Years	24
Space Engineering &Rocketry Specialization 1. Rocket Propulsion 2. Aerodynamics	1965	2Years	24
Computer Aided Design & Drafting Specialization 1. Comp. Aided Analysis & Design 2. Tribology	1999	2Years	18
Automated Manufacturing System	1996	2Years	25
Software Engineering	2000	2Years	15
Quality Engineering & Management	2002	2Years	25
Polymer	2003	2Years	18
Master of Technology Programme			
Remote Sensing	1997	2 Years	18
Fuel & Combustion	2002	2Years	25
Computer Science	1994	2Years	16
Scientific Computing	2002	2Years	16
New Material & Processing Technology	2002	2Years	18
Environmental Science & Engineering	2002	2Years	18
Master of Pharmacy Specialization 1. Pharm. Chemistry 2. Pharmaceutics 3. Pharmacology 4. Pharmacognosy 5. Clinical Research 6. Quality Assurance & Regulatory Affairs	1983 1983 2004 2002 2010 2010	2 years	108 + 8(QIP)
Master of Urban Planning	2006	2Year	12
Master of Science Programme	menaulimana manereraa menanggan menanggan seringgan seringgan seringgan seringgan seringgan seringgan seringga		n Secondon and a second a second and a second a second and a second a second and a second and a second and a

Biomedical Instrumentation	1992	2 Years	20
Information Science	1993	2Years	20
Bio Informatics	2006	2Years	30
Geo Informatics	2006	2Years	10
Business Management Specialization 1. Marketing 2. Finance 3. System 4. Human Resource	1980	2 Years	120
Master of Computer Application	1984	3 Years	60
Bachlor of Food Processing Tecgnology	2009	3 Years	30
Integrated M.Sc.	2011	5 Years	60
Integrated Ph.D.	2012	5 Years	15

CONTINUING EDUCATION (PART TIME) POST – GRADUATE PROGRAMME

Part time Post Graduate programmes, at three levels, are being offered at different off campuses to enable working Engineers to update their knowledge.

- Certificate of Merit after Completing 6 units.
- Diploma after completing 12 units.
- Degree after completing 20 units.

Courses / Programmes Offered at Other Campuses

Courses / Programmes	Allhabad	Deoghar	Jaipur	Kolkata	Lalpur	NOIDA	Patna	Muscat	RAK
BBA	*		*	*	*	*		*	*
BCA	*		*	*	*	*		*	
BBE						*			
B.Sc.(A&M)			*			*			
МВА	*		*	*	*	*		*	*
MCA	*		*	*	*	*			
MAD			*			*			
M.Tech.(CS)	*			*		*			
MBA (PT)	*					*			

Courses / Programmes	Allhabad	Deoghar	Jaipur	Kolkata	Lalpur	NOIDA	Patna	Muscat	RAK
M.Tech (CS) (PT)	*		and an annual section of the section	*	*	*			944-73-4-manuary (1944-1944-1944-1944-1944-1944-1944-1944
ME(WC)				*					
ME(WC)(PT)				*					
M.Tech.(BT)				*					
IMBA					*				
IMCA					*				
MIT	<u></u>				*				
MTM	Contraction of the Contraction o				*				
BE		*	*				*	*	*
EMBA								*	*
BCA(Hn.)								*	
BBA(Hn.)								*	
lEngg.									*
B.ARCH.							*		*
B.COM					·				*
Dip.Engg.	1								*
I.M.Sc.							*		

PROGRAMMES LEADING TO DOCTOR OF PHILOSOPHY

The Institute offers research programmes leading to Ph. D. degree in all disciplines.

STUDENTS ENROLMENT

During the academic year 2013 – 2014, a total of 10656 students were registered in various courses. The programme – wise enrolment is given below.

SI.No.	Course	No. of Students
1	Bachelor of Engineering	5313
2	Bachelor of Architecture	277
3	Bachelor of Pharmacy	188
4	Bachelor of Hotel Management & Cat. Tech.	99 .
5	Bachelor of Computer Application	372

Sl.No.	Course	No. of Students
6	Bachelor of Business Administration	386
7	BBE	40
8	IMBA	700
9	IMCA	316
10	I.M.Sc.(Chemistry)	27
11	I.M.Sc.(Maths)	59
12	I.M.Sc.(Physics)	46
13	B. Sc. (A & M)	191
14	IMBE	12
15	B.Sc.(Food Technology)	5
16	Master of Business Administration	647
17	Master of Computer Applications	783
18	Master of Pharmacy	113
19	Master of Engineering	395
20	Master of Technology	398
21	M.Sc.(Applied Chemistry)	15
22	M.Sc.(Applied Physics)	14
23	M. Sc. (Mathematics)	4
24	M. Sc.(Bio Medical Instrumentation)	1
25	M. Sc. (IT)	25
26	M. Sc. (Bio-informatics)	20
27	M. Sc. (Geo-Informatics)	10
28	M.Sc. (Animation & Design)	21
29	MUP	10
30	Master of Tourism Management	8
31	IMH	2
32	Ph.D.	159
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Total	10656

ADMISSION DURING 2013 – 2014

During the academic year 2013-14, total number of students admitted at BIT main campus was 1490. The branch wise breackup is given below.

Sl. No.	Programmes offered	Sanctioned Seats	Session 2013-14
			Net admissions after withdrawals§
	A. Undergraduate Prograr	nmes:	
	B.E. in Biotechnology	60	34
	B.E. in Chemical Engineering	60	57
	B.E. in Chemical Engineering (Plastic & Polymer)	60	60
	B.E. in Civil Engineering	60	64
1	B.E. in Computer Science	120	135
Т	B.E. in Electrical & Electronics Engineering	60	66
	B.E. in Electronics & Communication Engineering	120	135
	B.E. in Information Technology	60	59
	B.E. in Mechanical Engineering	90	104
	B.E. in Production Engineering	30	31
	Total	720	745*
2	B. Arch	40	41*
3	B. Pharmacy	60	59
4	внмст	60	38
5	B.Sc. Food Processing Technology	40	not advertise
	Total	200	138
	B. MBA & MCA Program	mes:	
6	МВА	120	77(seats offered 90)
7	MCA	60	58
	Total	180	135
	C. M.E. Programmes		3
8	Automated Manufacturing Systems	25	20
9	Chemical Engineering	18	2
10	Civil	24	6
11	Computer Aided Analysis & Design — CAAD	18	11
12	Electrical	42	38
13	Electronics & Communication	42	40

	1		
14	Mechanical	24	21
15	Quality Engineering & Management	25	
16	Software Engineering	15	14
17	Space Engineering & Rocketry	24	20
	Total	257	172
	D. Pharmaceutical Sciences & T	Technology	
18	M.Pharm. in (P'Ceutics, P, Chem, P'cology, P'cognosy, CR, QARA)	96	63
19	MS Clinical Research & Pharmacovigilance	18	-
20	PG Diploma in Bio-analytical Techniques	30	-
21	PG Diploma in Clinical Research	30	-
22	M. Pharm under QIP \$	8	
	Total	182	63
	E. M.Tech Programme	s:	
23	Bio-Medical Instrumentation	18	10
24	Biotechnology	18	18
25	Computer Science	16	17
26	Energy Technology	18	15
27	Environmental Science & Engineering	18	15
28	Fuels & Combustion	25	not advertised
29	Information Security	18	15
30	InformationTechnology	18	15
31	Nano Science & Technology	18	10
32	New Material & Processing Technology	18	-
33	Polymer Science & Technology	15	
34	Remote Sensing	18	15
35	Scientific Computing	16	3
	Total	198	133
	F. M.Sc. Programme	S	
36	Applied Chemistry	15	13
37	Applied Mathematics	15	4
38	Applied Physics	15	11
39	M.Sc. Bioinformatics	20	12
·		 	· · · · · · · · · · · · · · · · · · ·

		· · · · · · · · · · · · · · · · · · ·	·
40	M.Sc. Biomedical Instrumentation	20	-
41	M.Sc. Geoinformatics	20	-
42	M.Sc. Information Science	20	-
	Total	125	40
43	G. Master of Urban Planning (MUP) programme	12	4
	H. Integrated M.Sc. Progra	ımmes	
44	Chemistry	20	15
45	Mathematics and Computing	20	21
46	Physics	20	24
	Total	60	60
47	I. Integrated M.Tech-Ph.D. programme	10	-
	Total Admissions	1944	1490

^{*} including students admitted under EBC/OBC category of Jharkhand State and NRI/PIO/GOI etc.

^{\$} Admitted through AICTE- QIP, interviews conducted at National level

[§] Net number of admissions after withdrawals as on 31 Aug 2013

ADMISSION IN Ph.D. PROGRAMME

During the session 2013-2014, total number of research scholars admitted in Engineering Science, Pharmacy and Management was 159. The details are given below

Sl.No.	Roll No.	Name	Title		
		Department of Applied Ch	nemistry		
1	Ph.D/AC/10001/2013	Mr. Binitendra Naath Mongal	Synthesis, Characterization and Electrochemical & Photophysical Study of Polypyridyl based Ruthenium dyes		
2	Ph.D/AC/10002/2013	Mr. Kartick Prasad Dey	Synthesis and characterization of graft copolymers of Barley and its applications		
3	Ph.D/AC/10003/2013	Ms. Anuradha Kumari	Preparation, Characterization and Dielectric Properties of Polymer Ceramic Nanocomposites		
4	Ph.D/AC/10051/2013	Ms. Arti Mahto	Fate of some Environmental Pollutants and development of suitable remedial measures		
5	Ph.D/AC/10052/2013	Mr. Siddhartha Samanta	Synthesis, characterization and doping of processable polyphenylenediamine		
6	Ph.D/AC/10053/2013	Ms. Farhana Rozy	Diversity Oriented Synthesis from Pyranone Analogs as Possible Antiviral Agents		
7	Ph.D/AC/10054/2013	Ramakrishanam Raju S	DAC meeting underway		
		epartment of Applied Ma	thematics		
8	Ph.D/AM/10001/2013	Mr. Sunil Pramanik	Mathematics Models and Simulation on The Attack of Malicious Threates in Mobile Networks		
9	Ph.D/AM/10002/2013	Kumari Jyotsna	Mathematic Models on the Dispersion, Effect and Remedies of Environmental Air pollution		
10	Ph.D/AM/10003/2013	Anju Chaurasia	Numerical Simulation and Applications for Boundary Value Problems		
11	Ph.D/AM/10004/2013	Abhijit Vibhas	Optimization Techniques in Energy Economics		
12	Ph.D/AM/10051/2013	Shailendra Kumar (BITOC, Allahabad)	DAC meeting underway		
		Department of Applied I	Physics		
13	Ph.D/AP/10001/2013	Mr. Nalin Prashant Poddar	Development and characterization of binary metal oxide thin films using magnetron sputtering		

Sl.No.	Roll No.	Name	Title
14	Ph.D/AP/10002/2013	Mr. Sarit Kumar Ghosh	Synthesis, Dielectric and Optical Properties of Rare Earth Doped Barium Titanate Zirconate Relaxor Ceramics
15	Ph.D/AP/10003/2013	Inpasalini M.S.	Fabrication and Characterization of magnetically doped semiconducting mesoscopic quantum dots for possible spintronic applications
16	Ph.D/AP/10004/2013	Ms. Sonali Biswas	Studies on some CMR materials and their composites
17	Ph.D/AP/10051/2013	Mr. Amit Mishra	Development of Manganese oxide nanostructures for water splitting application
18	Ph.D/AP/10052/2013	Mr.Avishek Satapathy	Structural, optical and dielectric properties of some rare earth doped barium zirconate
19	Ph.D/AP/10053/2013	Mr. Parthasarathi Mohanty	Studies on Few Microwave Dielectric Ceramics
20	Ph.D/AP/10054/2013	Ms. Pritam Yadav	Structural, optical and microwave dielectric properties of some alkanine earth tungstate
		Department of Archite	ecture
21	Ph.D/AR/10001/2013	Mr. Umesh Chandra Mishra	Comprehensive Affordable Housing by Efficient Utilization of land, a Natural Resource
	Depa	artment of Chemical Engg.	& Technology
22	Ph.D/CHP/10001/2013	Mr. Jagesh Kumar Ranjan	Development of Interpenetrating Polymer Network based Biocomposites
23	Ph.D/CHP/10051/2013	Sayantani Basu	Studies on Dehydration of Glycerol via Catalytic Reactive Distillation
24	Ph.D/CHP/10052/2013	Magar Subhash Bhausaheb	Valorization of Glycerol via Solid- Acid Catalyzed Esterification and Etherification Processes
	Department	of Civil & Environmental	Science & Engineering
25	Ph.D/ESE/10001/2013	Mr. Subhra Sekhar Chakraborty	Evaluation of impact of municipal landfill leachate on water quality and combined processes for leachate treatment
26	Ph.D/ESE/10002/2013	Mrs. Shweta Singh	
27	Ph.D/CE/10051/2013	Mr. Ratnesh Goutam	Forecasting of Evapotranspiration Using Time Series Modelling
28	Ph.D/CE/10052/2013	Mr. Mani Kumar (BITOC, Patna)	DAC meeting underway

SI.No.	Roll No.	Name	Title	
	Depa	rtment of Electrical & Elec	ctronics Engg.	
29	Ph.D/EE/10001/2013	Mr. Praveen Chandra Behani	DAC meeting underway	
30	Ph.D/EE/10002/2013	Mr. Avanish Kumar	DAC meeting underway	
31	Ph.D/EE/10003/2013	Mr. Vivek Kushwaha	Real-Time Fault Diagnosis of an Induction Motor using Vibration Signature Analsis	
32	Ph.D/EE/10004/2013	Mr. Rajeev Kumar Chauhan	Multistage Planning of Distribution System Network	
33	Ph.D/EE/10005/2013	Shradha Kishore	DAC meeting underway	
34	Ph.D/EE/10006/2013	Kumar Nikhil	Model Order Reduction Using Krylov Subspace Method	
35	Ph.D/EE/10051/2013	Mr. Manish Kumar	DAC meeting underway	
36	Ph.D/EE/10052/2013	Mr. Deep Shekhar Acharya	DAC meeting underway	
	Departme	ent of Electronics and Com	munication Engg.	
37	Ph.D/EC/10001/2013	Mr. Vikash Kumar	Design of Circuits for RF Energy Harvesting Applications	
38	Ph.D/EC/10002/2013	Mr. Amresh Kumar	Robust design of Nanoscale circuit	
39	Ph.D/EC/10003/2013	Mr. Prashant Kumar Singh	Design and Development of printed radial stub filter for wireless communication	
40	Ph.D/EC/10004/2013	Ms. Arumita Biswas	Design and Development of Antenna for LTE Application	
41	Ph.D/EC/10005/2013	Md. Maqubool Hosain	Design and Development of Compact Filter Antenna for Wireless Devices	
42	Ph.D/EC/10006/2013	Mr. Peeyush Prabhakar	Design of Energy efficient Sensor Network for wireless communication	
43	Ph.D/EC/10007/2013	Mr. Battu Sreenivasa Rao	Low power Visual Sensor Network for wireless communication	
44	Ph.D/EC/10008/2013	Mr. Anirban Bhowmick	Continuous Speech Recognition in Noisy Environment	
45	Ph.D/EC/10009/2013	Mr. Chandramauleshwar Roy	Design of Low power Semiconductor Memory	
46	Ph.D/EC/10010/2013	Mr. Ramtanu Mukherjee		
47	Ph.D/EC/10051/2013	Mr. Ashutosh Pranav	Study & Design of Ultra Low Power Smart VLSI System for Cardiac Pacemaker	
48	Ph.D/EC/10052/2013	Mr. Mukesh Kumar Choudhary	Effects of Music Signal in Bioscience	

SI.No.	Roll No.	Name	Title		
49	Ph.D/EC/10053/2013	Mr. Atul Prakash	Optimization of Physical Domain Design for VLSI		
50	Ph.D/EC/10054/2013	Ms. Manisha Guduri	Ultralow Power Design of Nanoscale Circuits		
51	Ph.D/EC/10055/2013	Mr. Deo Kumar	Design of Wireless Sensor Network using Network Coding		
52	Ph.D/EC/10056/2013	Mr. Sumanta Bhattacharyya	Real Time BSS algorithm for EEG Signal Analysis		
53	Ph.D/EC/10057/2013	Ms. Madhu Kumari Ray	Studies of Ultra Low Power VLSI System for NEMS Sensors		
54	Ph.D/EC/10058/2013	Mr. Ricky Mohanty	Intelligent Speech Recognition System		
55	Ph.D/EC/10059/2013	Mr. Ajit Kumar	High Speed MIMO Optical Wireless Communication with visible LED		
56	Ph.D/EC/10060/2013	Mr. Saurabh Sarkar	Feature Extraction for Musician Classification		
57	Ph.D/EC/10061/2013	Mr. Durga Mahato	Development of Real Time Thought Recognition System		
58	Ph.D/EC/10062/2013	Mr. Manu Naik	Development of Interactive Control Panel for Physically Impaired Person		
59	Ph.D/EC/10063/2013	Mr. Santashraya Prasad	RF Nanoscale Device Modeling		
		Department of Biotechr	nology		
60	Ph.D/BT/10001/2013	Ms. Annie Jessica Toppo	In vitro production of cholinesterase inhibitors from selected medicinal plants		
61	Ph.D/BT/10002/2013	Ms. Shweta Singh	Isolation identification and characterization of secondary metabolites derived from hairy roots of Phlogacanthus thyrisflorus Nees		
62	Ph.D/BT/10003/2013	Ms. Vibha Yadav	DAC meeting underway		
63	Ph.D/BT/10004/2013	Ms. Aditi Pandey	Synthesis and Characterization of Ceramic and Composites for Orthopedic Applications		
64	Ph.D/BT/10005/2013	Mr. Pravin Kumar	In silico approach towards improvement of vanillin biosynthesis		
65	Ph.D/BT/10006/2013	Mr. Gourav Kumar	Role of chemical constituents from medicinally important plants of Jharkhand on cancerous cell lines		
66	Ph.D/BT/10007/2013	Ms. Kriti Akansha	Process development for decolourization and degradation of azo dyes by microorganisms		
67	Ph.D/BT/10008/2013	Ms. Foziya Khan	Bioprospecting of Mushrooms of Ranchi District		

Sl.No.	Roll No.	Name	Title			
68	Ph.D/BT/10009/2013	Suchismita Majumdar (BITOC, Kolkata)	DAC meeting underway			
69	Ph.D/BT/100010/2013	Ms. Maneesha Pandey	Bioprocess development for ferulic acid production from agro-residues by fungi			
70	Ph.D/BT/10051/2013	Mr. Rakesh Kumar	Specific DNA detection using Isothermal Amplification and Lateral flow assay			
	<u>De</u>	partment of Computer Sci	ence Engg.			
71	71 Ph.D/CS/10001/2013 Mr. Prakash Kumar Singh Sentiment Analysis on Web Docume					
72	Ph.D/CS/10002/2013	Mr. Arun Kumar Shukla	Content-Based Analysis of Biometric Dataset for Information Retrieval			
73	Ph.D/CS/10003/2013	Mr. Navin Trivedi	Multi-Objective Based Analysis of Gene Expression Data for Knowledge Extraction			
74	Ph.D/CS/10004/2013	Mr. Arbind Kumar Choudhary	Application of Fuzzy Logic Modelling for the evaluation of ERP Project efficiency in Infrastructure Sector of Oman".			
75	Ph.D/CS/10005/2013	Mr. Raja Ram Dutta	A Graph Database Model and its Application in Web Mining			
76	Ph.D/CS/10006/2013	Ms. Sunita	A study of Designing and Modeling Location Management Strategies using Wireless Technologies			
77	Ph.D/CS/10007/2013	Mr. Amit Kumar Keshri	Implementation of Pattern Recognition Techniques and Overview of its application for Document Retrieval			
78	Ph.D/CS/10051/2013	Ms. Sweta Srivastava	Biologically inspired traffic optimization system			
79	Ph.D/CS/10052/2013	Ms. Lakshmi Lalitha Kallam	A Study in Similarity Evaluation and Clustering of Textual Documents using Evolutionary Algorithms and Heuristic Techniques			
80	Ph.D/CS/10053/2013	Ms. Pushp Kala Kumari	IT Project Management Using Optimization Techniques			
81	Ph.D/CS/10054/2013	Mr. Dilip Kumar Choubey	Soft Computing approaches for diabetes diagnosis			
82	Ph.D/CS/10055/2013	Mr. Manish Kumar (BITOC, Lalpur)	DAC meeting underway			
83	Ph.D/CS/10056/2013	Mr. Vivek Srivastava (BITOC, Allahabad)	DAC meeting underway			
84	Ph.D/CS/10057/2013	Ms. Aparna Shukla (BITOC, Allahabad)	DAC meeting underway			

Sl.No.	Roll No.	Name	Title		
85	Ph.D/CS/10058/2013	Mr. Ashutosh Shukla (BITOC, Allahabad)	DAC meeting underway		
86	Ph.D/CS/10059/2013	Mr. Pushp Raj Tripathi (BITOC, Allahabad)	DAC meeting underway		
87	Ph.D/CS/10060/2013	Mr. Manish Kumar Mehrotra (BITOC, Allahabad)	DAC meeting underway		
88	Ph.D/CS/10061/2013	Mr. Sudhir Sharma (BITOC, Jaipur)	DAC meeting underway		
89	Ph.D/CS/10062/2013	Ms. Sonia Saini (BITOC, Noida)	DAC meeting underway		
90	Ph.D/CS/10063/2013	Mr. Vijay Shankar Gupta (BITOC, Noida)	DAC meeting underway		
91	Ph.D/CS/10064/2013	Ms. Prena Agarwal (BITOC, Noida)	DAC meeting underway		
92	Ph.D/CS/10065/2013	Mr. Mridul Paul	SLA Monitoring and Provisioning of Services in Cloud Computing		
	De	epartment of Information	Technology		
93	Ph.D/IT/10001/2013	Mrs. Pratibha Jha	Identifying & Measuring the Success Factors for the Deployment of Knowledge Management System by using Fuzzy Based Methods in Organization		
94	Ph.D/IT/10002/2013	Mr. Priodyuti Pradha	Data Storage Security in Cloud Computing		
95	Ph.D/IT/10003/2013	Mr. Santosh Kumar	Evolutionary Computational Approaches for Medical Data Mining		
96	Ph.D/IT/10004/2013	Mr. Basant Sah	Enhancement, Efficient and Secure Information Hiding using Image Steganography & Data Compression Technique		
97	Ph.D/IT/10005/2013	Mr. Amitabh Kumar Manglam	A Scientometric Analysis of the Science and technology Publication in Jharkhand (Year 2000 onwards)		
98	Ph.D/IT/10006/2013	Mr. Subhabrata Sengupta	Development of Content Based Image/ Video Retrieval System		
99	Ph.D/IT/10051/2013	Mrs. Pooja	An Optimized Meta-heuristic approach for Job Scheduling		
100	Ph.D/IT/10052/2013	Mr. H. Parthasarathi Patra	A Software Measurement and Estimation: An Empirical and Analytical Approach		

SI.No.	Roll No.	Name	Title
101	Ph.D/IT/10053/2013	Mr. Aamir Juanaid Ahmad	Using Semantic Web Tools and Technologies For Creating More Effective Modern Social Networking Websites
102	Ph.D/IT/10054/2013	Mr. Chougule Archana Bhavso	DAC meeting underway
103	Ph.D/IT/10055/2013	Mr. Amit Kumar	Designing Efficient Hybrid Classification System
104	Ph.D/IT/10056/2013	Mr. Amit Kumar	Measuring the Quality of Software System: A Cognitive Approach
105	Ph.D/IT/10057/2013	Mr. Vaibhav Shukla	Design and Analysis of Contention Resolution Techniques in Optimal Networks
106	Ph.D/IT/10058/2013	Mr. Dharamveer Kumar Yadav	Object Oriented Software Testing
107	Ph.D/IT/10059/2013	Mr. Ranjan Kumar	Optimization of Resource Provisioning Cost and Balancing Energy Consumption in Cloud Computing
	D	epartment of Mechanical E	Engineering
108	Ph.D/ME/10001/2013	Mr. Prakhar Jindal	Film Cooling Effectivness in Liquid Propellant Engines
109	Ph.D/ME/10002/2013	Mr. Kuldeep Gupta	Study of Mechanical & Tribological Properties of Epoxy based Functionally graded Green Composites
110	Ph.D/ME/10051/2013	Mr. Lalit Singh Bisht	COP Optimization of Solar based Vapour absorption System using LiBr-Water
111	Ph.D/ME/10052/2013	Mr. Sanatan Prasad	Unsteady Axi-symmetric Freezing and Melting of Bath Material onto a Low Melting Temperature Cylindrical Solid Additive
		Department of Manage	ement
112	Ph.D/MB/10001/2013	Mr. Santosh Kumar Pattnayak	Synergising Business Process Management with Enterprise Resource Planning for Supply Chain Management
113	Ph.D/MB/10002/2013	Mr. Vivek Srivastava	Retention Strategy and Growth –A Comparative Study of Top Private Sector Insurance Companies in India
114	Ph.D/MB/10003/2013	Mr. Tirthankar Pal	Managing Brand Equity for Online Retail through Online Media
115	Ph.D/MB/10004/2013	Shuvashree Mustafi (BITOC, Kolkata)	DAC meeting underway

Sl.No.	Roll No.	Name	Title	
116	Ph.D/MB/10005/2013	Mr. Jigyasu Kumar	Employee Motivation: Focus on Age and Gender Specific Factor in Rashtriya Ispat Nigam Limited – A Large Size Manufacturing Company	
117	Ph.D/MB/10006/2013	Mr. Rajeev Ranjan	Role of Micro Small and Medium Enterprises in Development of Indian Economy	
118	Ph.D/MB/10007/2013	Mr. Shahid Akhter Ansari	Role of Microfinance for Development of Urban and Rural Poor and Its Impact on Indian Economy	
119	Ph.D/MB/10008/2013	Mr. Neeraj Kumar	Impact of Organized Retail on Unorganized Retailing : An Empirical Study of Eastern India	
120	Ph.D/MB/10009/2013	Mr. Neeraj Kumar	A Study on Employees Occupational stress under Modern Banking Practices	
121	Ph.D/MB/10010/2013	Mr. Amit Kumar Dubey	Impact of Country of Origin of goods and services on buying behaviour of consumers : An analytical study on consumers of Uttar Pradesh in India	
122	Ph.D/MB/10011/2013	Ms. Rakhi Singh	A study of Sustainability of Public Sector Undertakings (PSUs) with Special Reference to Disinvestment Policy	
123	Ph.D/MB/10012/2013	Mr. Ravi Pratap Singh	Manpower assessment and its effectiveness for banking industry with special reference to "Bank of India	
124	Ph.D/MB/10013/2013	Mr. Saitab Sinha	Assessment of Employability of Engineering Graduates of India	
125	Ph.D/MB/10014/2013	Mr. Shankhajeet Kumar Singh (BITOC, Lalpur)	DAC meeting underway	
126	Ph.D/MB/10015/2013	Mr. Vivek Prabhakar (BITOC, Lalpur)	DAC meeting underway	
127	Ph.D/MB/10016/2013	Ms. Swati Minz (BITOC, Lalpur)	A study of work life balance of women in Jharkhand "A case study of women police in Ranchi, Jharkhand	
128	Ph.D/MB/10051/2013	Mr. Kunal(BITOC, Lalpur)		
129	Ph.D/MB/10052/2013	Ms. Sumona Das (BITOC, Lalpur)	DAC meeting underway	
130	Ph.D/MB/10053/2013	Mr. Farhan Alam (BITOC, Lalpur)	DAC meeting underway	
131	Ph.D/MB/10054/2013	Mr. Gopaljee Tiwari (BITOC, Lalpur)	DAC meeting underway	

Sl.No.	Roll No.	Name	Title 1: 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
132	Ph.D/MB/10055/2013	Mr. Himanshu Bhushan (BITOC, Lalpur)	DAC meeting underway		
133	Ph.D/MB/10056/2013	Mr. Nishant Prakash (BITOC, Lalpur)	DAC meeting underway		
134	Ph.D/MB/10057/2013	Mr. Satyam Kumar (BITOC, Lalpur)	DAC meeting underway		
135	Ph.D/MB/10058/2013	Mr. Debadatta Chand (BITOC, Patna)	DAC meeting underway		
136	Ph.D/MB/10059/2013	Mr. Arti Kumari (BITOC, Noida)	DAC meeting underway		
137	Ph.D/MB/10060/2013	Ms. Ruchika (BITOC, Noida)	DAC meeting underway		
138	Ph.D/MB/10061/2013	Ms. Sunaina Kothari (BITOC, Noida)	DAC meeting underway		
139	Ph.D/MB/10062/2013	Ms. Simmi Dhyani (BITOC, Noida)	DAC meeting underway		
140	Ph.D/MB/10063/2013	Sujit Kispotta (BITOC, Noida)	DAC meeting underway		
141	Ph.D/MB/10064/2013	Ms. Nandini Singh (BITOC, Noida)	DAC meeting underway		
142	Ph.D/MB/10065/2013	Mr. Rajiv Kumar (BITOC, Noida)	DAC meeting underway		
143	Ph.D/MB/10067/2013	Ananya Goswami	Empowerment of Women Entrepreneurs with Information and Communication Technology (ICT): A Study in West Bengal		
	De	partment of Production E	ngineering		
144	Ph.D/PE/10001/2013	Mr. Sabir Kumar	Logistic and Control of Production System		
145	Ph.D/PE/10051/2013	Ms. Neha Verma	Sustainable Competitive advantage by implementing lean, six sigma and green technology - A case study on Indian industry		
146	Ph.D/PE/10052/2013	Mr. Ram Babu Verma	Development of Robust Frame Work to Increase Competitiveness in Tool & Die Manufacturing with respect to MSME Tool Rooms		
147	Ph.D/PE/10053/2013	Mr. Rajeev Kant	Design and Performance Evaluation of Cellular Manufacturing System in Lean Environment		
148	Ph.D/PE/10054/2013	Mr. Anulal Mahto	Work Design for competitive Advantage in Manufacturing Environment		

2013 - 14

Sl.No.	Roll No.	Name	Title			
149	Ph.D/PE/10055/2013	Mr. Tapan Kumar Baug	DAC meeting underway			
		(BITOC, Deoghar)				
	Department of Pharmaceutical Sciences & Technology					
150	Ph.D/PH/10001/2013	Mr. Prem Prakash	DAC meeting underway			
151	Ph.D/PH/10002/2013	Mr. N. Paramakrishnan	DAC meeting underway			
152	Ph.D/PH/10003/2013	Ms. Debalina Das	DAC meeting underway			
153	Ph.D/PH/10051/2013	Ms. Bina Kumari Mehta	DAC meeting underway			
154	Ph.D/PH/10052/2013	Mr. Rohit Singh	DAC meeting underway			
155	Ph.D/PH/10053/2013	Mohd. Usman Mohd Siddique	DAC meeting underway			
		Department of Remote S	ensing			
156	Ph.D/RS/10051/2013	Ms. Rucha Ramchandra	Impact assessment of climate change on			
		Joshi	biodiversity of part of Sahyadri ranges in			
***************************************			Maharashtra: a geoinformatic approach			
157	Ph.D/RS/10052/2013	Mr. Saptarshi Mondal	Mapping terrace agriculture and			
			modeling the associated uncertainty			
			using remote sensing and GIS			
158	Ph.D/RS/10053/2013	Mr. Harshit Ranjan	Modelling grassland dynamics in			
		THE PARTY NAMED IN THE PARTY NAM	Northern states of India using time series			
			satellite data			
159	Ph.D/RS/10054/2013	Mr. Praveen Kumar	Forest biomass mapping using multi-			
	**************************************	Among any other services	frequency and multi-polarisation SAR			
			data coupled with optical data			

CONVOCATION, RESULTS, DEGREES / DIPLOMA AWARDED

Upon the recommendation of the Board of Governors, all those who have fulfilled the requirements of their respective programmes during 2013-14, have been awarded Degree / Diploma in 24th convocation held on 9th April 2014.

BIRLA INSTITUTE OF TECHNOLOGY, MESRA-835215, RANCHI 24 th Convocation - 09 April 2014					
Doctor of Philosophy	Engineering	14			
Doctor of Philosophy	Management	16			
Doctor of Philosophy	Pharmacy	9			
Doctor of Philosophy	Science	11			
Doctor of Philosophy	Technology	11			
	Total	61			

2	Post-G	raduate Degrees	ID	I	11	Total
	Master of Animation Design			4	.	9
	Master of Business Admir	nistration	107	99	9	215
	Master of Computer Appl	ications	204	148	3	355
	Master of Engineering	Automated Manufacturing System	6	6		12
	Master of Engineering	Civil	<u> </u>	8		8
	Master of Engineering	Computer Aided Analysis & Design	5	2	—	7
	Master of Engineering	Electrical	15	20	2	37
	Master of Engineering	Electronics & Communication	27	9		36
	Master of Engineering	Mechanical	8	1		9
	Master of Engineering	Quality Engineering & Management	1	2	_	3
	Master of Engineering	Software	12	3		15
	Master of Engineering	Space Engineering & Rocketry	12	10		22
	Master of Pharmacy		45	10		55
	Master of Science	Applied Chemistry	_	1	1	2
	Master of Science	Applied Physics	1	1		2
	Master of Science	Bioinformatics	8	8	1	17
	Master of Science	Biomedical Instrumentation	1	4		5
	Master of Science	Clinical Research	2	1	_	3
	Master of Science	Geoinformatics	9	1		10
	Master of Science	Information Science	4	4		8
	Master of Science	Information Technology	16	16		32
	Master of Technology	Biotechnology	11	5		16
	Master of Technology	Computer Science	37	31	4	72
	Master of Technology	Energy Technology	5	-	_	5
	Master of Technology	Environmental Science & Engineering	5	6		11
	Master of Technology	Information Security	14		—	14
	Master of Technology	Nano Science & Technology	7	1	_	8
	Master of Technology	Polymer Science & Technology	3	<u> </u>	1	4
	Master of Technology	Remote Sensing	9	1		10
	Master of Urban Planning	3	1	5		6
					Total	1008
3	Under-	Graduate Degrees	ID	1	11	Total
	Bachelor of Architecture		25	11	_	36
	Bachelor of Business Adn	Bachelor of Business Administration		116	7	375
	Bachelor of Business Adn	ninistration (Business Economics)	20	24	4	48

				I	
Bachelor of Computer Applications		213	105		327
Bachelor of Engineering	Biotechnology	14	7	1	22
Bachelor of Engineering	Chemical & Polymer	10	2		12
Bachelor of Engineering	Civil	54	32	1	87
Bachelor of Engineering	Computer Science	143	76	6	225
Bachelor of Engineering	Electrical & Electronics	92	64	10	166
Bachelor of Engineering	Electronics & Communication	193	78	3	274
Bachelor of Engineering	Information Technology	31	11		42
Bachelor of Engineering	Mechanical	86	57	2	145
Bachelor of Engineering	Polymer	_	1		1
Bachelor of Engineering	Production	21	15		36
Bachelor of Hotel Managen	nent & Catering Technology	3	15	3	21
Bachelor of Pharmacy		28	7	2	37
Bachelor of Science	Animation & Multimedia (Hons.)	8	3	_	11
Bachelor of Science	Animation & Multimedia	23	31	1	55
Bachelor of Science	Food Processing Technology	3			3
Bachelor of Science	Medical Laboratory Technology	14	13	8	35
Bachelor of Technology	Electrical & Electronics	4	2		6
				Total	1964
ļ ī	Diploma	ID	1	11	Total
Diploma in Technology	Automobile Engineering	12	15		27
Diploma in Technology	Computer Science	14	13	3	30
Diploma in Technology	Eelectrical & Electronics	19	8		27
	Engineering				
Diploma in Technology	Electronics Engineering	14	9	1	24
Diploma in Technology	Manufacturing Engineering	6	14		20
Diploma in Technology	Mechanical	13	11		24
				Total	152
			Gra	and Total	3185
	Bachelor of Engineering Bachelor of Science Bachelor of Technology Diploma in Technology	Bachelor of Engineering Chemical & Polymer Bachelor of Engineering Civil Bachelor of Engineering Computer Science Bachelor of Engineering Electrical & Electronics Bachelor of Engineering Electronics & Communication Bachelor of Engineering Information Technology Bachelor of Engineering Mechanical Bachelor of Engineering Polymer Bachelor of Engineering Production Bachelor of Hotel Management & Catering Technology Bachelor of Science Animation & Multimedia (Hons.) Bachelor of Science Animation & Multimedia Bachelor of Science Food Processing Technology Bachelor of Science Medical Laboratory Technology Bachelor of Technology Electrical & Electronics Diploma Diploma in Technology Computer Science Engineering Diploma in Technology Electronics Engineering Diploma in Technology Manufacturing Engineering	Bachelor of Engineering Biotechnology 14 Bachelor of Engineering Chemical & Polymer 10 Bachelor of Engineering Civil 54 Bachelor of Engineering Computer Science 143 Bachelor of Engineering Electrical & Electronics 92 Bachelor of Engineering Electronics & Communication 193 Bachelor of Engineering Information Technology 31 Bachelor of Engineering Mechanical 86 Bachelor of Engineering Polymer — Bachelor of Engineering Production 21 Bachelor of Hotel Management & Catering Technology 3 Bachelor of Science Animation & Multimedia (Hons.) 8 Bachelor of Science Animation & Multimedia 23 Bachelor of Science Food Processing Technology 3 Bachelor of Science Medical Laboratory Technology 14 Bachelor of Technology Electrical & Electronics 4 Diploma in Technology Computer Science 14 Diploma in Technology Electrical & Electronics 19 Engineering Diploma in Technology Electrical & Electronics 19 Engineering Diploma in Technology Electronics Engineering 14 Diploma in Technology Manufacturing Engineering 6	Bachelor of Engineering Biotechnology 14 7 Bachelor of Engineering Chemical & Polymer 10 2 Bachelor of Engineering Civil 54 32 Bachelor of Engineering Computer Science 143 76 Bachelor of Engineering Electrical & Electronics 92 64 Bachelor of Engineering Electronics & Communication 193 78 Bachelor of Engineering Information Technology 31 11 Bachelor of Engineering Mechanical 86 57 Bachelor of Engineering Polymer — 1 Bachelor of Engineering Production 21 15 Bachelor of Hotel Management & Catering Technology 3 15 Bachelor of Science Animation & Multimedia (Hons.) 8 3 Bachelor of Science Animation & Multimedia (23 31 Bachelor of Science Food Processing Technology 3 — Bachelor of Science Medical Laboratory Technology 14 13 Bachelor of Technology Electrical & Electronics 4 2 Diploma in Technology Computer Science 14 13 Diploma in Technology Electrical & Electronics 19 8 Engineering Diploma in Technology Electrical & Electronics 19 8 Engineering Diploma in Technology Electrical & Electronics 19 8 Engineering Diploma in Technology Manufacturing Engineering 6 14 Diploma in Technology Manufacturing Engineering 6 14 Diploma in Technology Mechanical 13 11	Bachelor of Engineering Biotechnology 14 7 1 Bachelor of Engineering Chemical & Polymer 10 2 — Bachelor of Engineering Civil 54 32 1 Bachelor of Engineering Computer Science 143 76 6 Bachelor of Engineering Electrical & Electronics 92 64 10 Bachelor of Engineering Electronics & Communication 193 78 3 Bachelor of Engineering Information Technology 31 11 — Bachelor of Engineering Mechanical 86 57 2 Bachelor of Engineering Polymer — 1 — Bachelor of Engineering Production 21 15 — Bachelor of Hotel Management & Catering Technology 3 15 3 Bachelor of Pharmacy 28 7 2 Bachelor of Science Animation & Multimedia (Hons.) 8 3 — Bachelor of Science Animation & Multimedia 23 31 1 Bachelor of Science Food Processing Technology 3 — — Bachelor of Science Hedical Laboratory Technology 14 13 8 Bachelor of Technology Electrical & Electronics 4 2 — Diploma in Technology Computer Science 14 13 3 Diploma in Technology Electrical & Electronics 19 8 — Diploma in Technology Electrical & Electronics 19 8 — Diploma in Technology Electrical & Electronics 19 8 — Engineering Diploma in Technology Electrical & Electronics 19 8 — Engineering Diploma in Technology Manufacturing Engineering 6 14 — Diploma in Technology Manufacturing Engineering 6 14 — Diploma in Technology Mechanical 13 11 —

SUMMARY OF FACULTY STRENGTH

SI. No.	Category	Number
1.	Professor	60
2.	Associate Professor	91
3.	Assistant Professor	426
4.	Associate Lecturer	79
5.	Scientific Officer	8
6.	Teaching cum Research Fellow	16
7.	Others	30
	Total	710

DEPARTMENT OF ARCHITECTURE

SI. No.	Name	Designation
1	Dr. Manjari Chakraborty	Professor & Head
2.	Dr. Debajyoti Biswas	Professor [on deputation]
3.	Dr. Satyaki Sarkar	Associate Professor
4.	Mrs. Ritu Agarwal	Assistant Professor
5.	Mrs. Smriti Mishra	Assistant Professor
6.	Mr. Janmejoy Gupta	Assistant Professor
7.	Mr. Bimal Chandra Roy	Assistant Professor
8.	Dr. S.K. Pandey	Assistant Professor
9.	Mr. Rajan Chandra Sinha	Assistant Professor
10.	Mr. Anuj Toppo	Assistant Professor
11.	Mrs. Anamika Nandan	Assistant Professor
12.	Ms. Sangita	Associate Lecturer
13.	Mr. Md. Danish	Assistant Professor
14.	Mr. Mrinal Pathak	Associate Lecturer
15.	Mrs. Swetambara Verma	TCRF

DEPARTMENT OF BIOENGINEERING

Sl. No.	Name	Designation
1	Dr. Kunal Mukhopadhyay	Professor & Head
2	Dr.(Ms.) P. Padmanabhan	Professor
3	Dr. Ramesh Chandra	Associate Professor
4	Dr. D. M. Pandey	Associate Professor
5	Dr Rakesh Kumar Sinha	Associate Professor
6	Dr. V. K. Nigam	Associate Professor
7	Dr. Rajib Bandopadhyay	Assistant Professor
8	Mr Surendra Kumar	Assistant Professor
9	Dr. Manish Kumar	Assistant Professor
10	Dr. Raju Poddar	Assistant Professor
11	Dr. Shashwati Ghosh Sachan	Assistant Professor
12	Dr. Ashish Sachan	Assistant Professor
13	Dr. Sheela Chandra	Assistant Professor
14	Mr. Santosh Kumar Jha	Assistant Professor
15	Dr. Debabrata Garai	Assistant Professor
16	Dr. Avneesh Pareek	Assistant Professor
17	Ms. Koel Mukherjee	Assistant Professor
18	Dr. Subha Rani Sharma	Assistant Professor
19	Dr. Hare Ram Singh	Assistant Professor
20	Dr. Dinesh Prasad	Assistant Professor

21	Dr Yogender Aggarwal	Assistant Professor	
22	Mr. S. Goswami	Scientist	
23	Mr Supriyo Kumar Das	Associate Lecturer	
24	Dr Anjana Dwivedi	Associate Lecturer	
25	Ms. Sneha Singh	Associate Lecturer	
26	Dr. Shankaracharya	Associate Lecturer	

DEPARTMENT OF CHEMICAL ENGINEERING & TECHNOLOGY

SI. No.	Name	Designation
1	Dr.(Mrs.) M.Mukherjee	Professor
2	Dr. Gautam Sarkhel	Associate Professor & Head
3	Dr.(Mrs.) S. Goswami	Associate Professor
4	Dr. Akhil Sen	Associate Professor
5	Dr. Arup Choudhury	Assistant Professor
7	Dr. G.T.Mohanraj	Assistant Professor
8	Mr.S.Jana	Assistant Professor
9	Mr.P. Dutta	Assistant Professor
10	Ms Debashree Ghose	Assistant Professor
11	Mr. J. Sudeepan	Assistant Professor
12	Dr. A.N. Mishra	Assistant Professor
13	Dr. Raghu Raj Pandya	Assistant Professor
14	Dr. Jhansi L Mamila	Assistant Professor

LIST OF SCIENTIFIC OFFICERS IN CENTRE FOR FOOD TECHNOLOGY

SI. No.	Name	Designation
1	Mr. M. P. Chopra	Senior Scientific officer
2	Mr. Amit Kumar Tiwari	Food Technologist

DEPARTMENT OF CHEMISTRY

SI. No.	Name	Designation
1.	Dr. J.P. Pandey	Associate Professor & Head
	Dr.(Mrs.) Usha Jha	Professor
2	Dr. Bimal Verma	Associate Professor
4	Dr. Ashoke Sharon	Associate Professor
5	Dr.(Mrs.) Chandralata Bal	Assistant Professor
6	Dr. Rafique-Ul-Islam	Assistant Professor
7	Dr. Subhendu Naskar	Assistant Professor
8	Dr. Deep Shikha	Assistant Professor
9	Dr.(Mrs.) Sumit Mishra	Assistant Professor
10	Dr.Gautam Sen	Assistant Professor

11	Mr. Rahul	Assistant Professor	***************************************
12	Dr.Sushanta Sinha Mahapatra	Assistant Professor	
13	Dr.(Ms.)Poulomi Roy	Assistant Professor	
14	Dr.Barnali Dasgupta Ghose	Assistant Professor	
15	Dr.Pradip Kar	Assistant Professor	
16	Dr. Gyan Kumar Agrwal	Assistant Professor	

DEPARTMENT OF CIVIL & ENVIRONMENTAL ENGINEERING

SI. No.	Name	Designation
1	Dr. Gopal Pathak	HOD and Professor
2	Dr. Balram Singh	Professor
3	Dr. Anand Kumar Sinha	Professor
4	Dr. Sudeshna Chakravarty	Professor
5	Dr. Arun Kumar	Associate Professor
6	Dr. Indrajit Roy	Associate Professor
7	Dr. Birendra Kumar Singh	Associate Professor
8	Dr.(Mrs.) Bindhu Lal	Associate Professor
9	Dr. Siddhartha Sengupta	Associate Professor
10	Dr. Jitu Kujur	Assistant Professor
11	Mr. Koushik Paul	Assistant Professor
12	Dr. Amit Kumar Gorai	Assistant Professor
13	Dr.Kirti Avishek	Assistant Professor
14	Dr. R.Naresh Kumar	Assistant Professor
15	Dr. Sukalyan Chakraborty	Assistant Professor
16	Dr. Tanushree Bhattacharya	Assistant Professor
17	Mr. Jawed Iqbal	Associate Lecturer
18	Mrs. Neeta Kumari	Associate Lecturer

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

SI. No.	Name	Designation
1.	Dr. G. Sahoo	Professor
2.	Dr. Sandip Dutta	Associate Professor & Head
3.	Dr. D. K. Mallick	Associate Professor
4.	Dr. (Mrs.) Aruna Jain	Associate Professor
5.	Dr. Bhaskar Karn	Associate Professor
6.	Dr. V. K. Jha	Associate Professor
7.	Dr. K. S. Patnaik	Associate Professor
8.	Dr. A. A. Somsundara	Associate Professor
9.	Dr. B. K. Sarkar	Assistant Professor

10.	Mr. S. K. Chatterjee	Assistant Professor
11.	Mr. Partha Paul	Assistant Professor
12.	Mr. I. Mukherjee	Assistant Professor
13.	Dr. K. Rajnish	Assistant Professor
14.	Mrs. Itu Snigdh	Assistant Professor
15.	Mr. Ritesh Jha	Assistant Professor
16.	Mr. I. D. Ram	Assistant Professor
17.	Dr. Abhijit Mustafi	Assistant Professor
18.	Dr. Anup Kumar Keshri	Assistant Professor
19.	Mr. K. K. Senapati	Assistant Professor
20.	Mrs. Amritanjali	Assistant Professor
21.	Dr. (Mrs.) Sanchita Paul	Assistant Professor
22.	Mrs. Shruti Garg	Assistant Professor
23.	Dr. Sudip Kumar Sahana	Assistant Professor
24.	Mr. 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.	Ms. Shamama Anwar	Assistant Professor
29.	Mr. Kalyan Samanta	Assistant Professor
30.	Mr. S. Mohapatra	Assistant Professor
31.	Mrs. D. Mustafi	Associate Lecturer
32.	Mr. Niraj Kumar Singh	Research cum Teaching Fellow
33.	Mr. Amit Prakash	Research cum Teaching Fellow
34.	Mr. Sumit Srivasatava	Research cum Teaching Fellow
35.	Ms Tanushree Roy	Research cum Teaching Fellow

Department of Electronics & Communication Engineering

SI. No.	Name	Designation
1	Prof. R. Sukesh Kumar	Professor
2	Dr.(Mrs.) Nisha Gupta	Professor
3	Prof. S. K. Ghorai	Professor
4	Dr.(Mrs.) V. R. Gupta	Professor and Head
5	Mr. K. K. Masand	Associate professor
6	Mr. B. B. Pal	Associate professor
7	Dr. Sanjay Kumar	Associate professor
8	Dr. S. S. Solanki	Associate professor
9	Dr. Mahesh Chandra	Associate professor
10	Dr.(Mrs.) Neela Chattoraj	Associate professor

11	Dr. R. K. Lal	Associate professor
12	Mr. Kartik Mahto	Assistant professor
13	Mr. Vishal H. Shah	Assistant professor
14	Dr. Sanjeet Kumar	Assistant professor
15	Mr. Janardan Sahay	Assistant professor
16	Mr. S. K. Dash	Assistant professor
17	Mr. Somnath Sengupa	Assistant professor
18	Mr. Gajendra Kant Mishra	Assistant professor
19	Mr. S. S. Tripathy	Assistant professor
20	Mr. Pryinak Saxena	Assistant professor
21	Dr. A. Islam	Assistant professor
22	Dr. Dileep Kumar Upadhyay	Assistant professor
23	Dr. Manoj Mukul	Assistant professor
24	Dr. Vijay Nath	Assistant professor
25	Dr. S. S. Sahu (presently on leave)	Assistant professor
26	Dr. A. K. Tiwary	Assistant professor
27	Mrs. S. M. Annapurna	Assistant professor
28	Ms. Swati Prasad	Assistant professor
29	Mrs. P. P. Das	Assistant professor
30	Dr. Soumya Sidhishwari	Associate lecturer
31	Mr. R. K. Sinha	Associate lecturer
32	Mr. Santashraya Prasad	Associate lecturer

Department of Electrical & Electronics Engineering

Sl. No.	Name	Designation
1.	Prof. Ranjan Kishore Narayan	Professor
2.	Dr. Tirthadip Ghose	Professor & Dean (Sponsored Research)
3.	Dr. Rakesh Chandra Jha	Professor & Head
4.	Dr. Dusmanta Kumar Mohanta	Professor
5.	Dr.(Mrs.) Nutan Lata Nath	Associate Professor
6.	Dr. Parshuram Thakura	Associate Professor
7.	Dr. Vijaya Laxmi	Associate Professor
8.	Dr. Sarbani Roy Chakraborty	Associate Professor
9.	Mr. Prem Prakash	Assistant Professor
10.	Mr. Abinash Prasad	Assistant Professor
11.	Dr. Prabhat Kumar Upadhyay	Assistant Professor
12.	Dr. Sudhanshu Kumar Mishra	Assistant Professor
13.	Dr. Shantanu Kumar Pradhan	Assistant Professor
14.	Dr. Ritesh Kumar Keshri	Assistant Professor
15.	Mrs. Debomita Ghosh	Assistant Professor

16.	Mr. Gauri Shanker Gupta	Assistant Professor	
17.	Ms. Aparna Gautam	Assistant Professor	
18.	Mr. Brij Mohan Prasad	Assistant Professor	
19.	Mrs. Sushma Suryaprakash Kamlu	Associate Lecturer	
20.	Mr. Nirbhar Neogi	Visiting Faculty	

Department of Hotel Management and Catering Technology

SI. No.	Name	Designation
1.	Mr. Praveen Srivastava	Assistant Professor& I/C
2.	Dr. Abhinav Kr. Shandilya	Assistant Professor
3.	Dr. Amit Saran	Assistant Professor
4.	Ms. Rajeshwari Chatterjee	Assistant Professor
5.	Mr. Gautam Shandilya	Assistant Professor
6.	Mr. Abhisek Jana	Assistant Professor
7.	Mr. Sanjiv Srivastava	Assistant Professor
8.	Mr. Nishikant Kumar	Assistant Professor
9.	Ms. Pratima Ekka	Associate Lecturer
10.	Mr. Pranjal Kumar	Associate Lecturer

Department of Management

SI. No.	Name	Designation
1	Dr. U Baul	Professor& Head
2	Dr. S.K. Bose	Professor& Dean ,EA&AR
3	Dr. Mrs. Manju Bhagat	Professor
4	Dr. Mrs. Shradha Shivani	Professor
5	Dr. R. N. Bhagat	Professor
6	Prof. S.C. Mishra	Associate Professor
7	Dr. Supriyo Roy	Associate Professor
8	Dr. P.C. Jha	Asistant Professor
9	Dr. D.K. Chand	Asistant Professor
10	Mr. S. K. Singh	Asistant Professor
11	Dr. A. Ghosh	Asistant Professor
12	Dr. R.K. Pandey	Asistant Professor
13	Dr. J.B. David	Asistant Professor
14	Mr. A. Kumar	Asistant Professor
15	Mrs. S. Srivastava	Asistant Professor
16	Mr. A. Verma	Asistant Professor
17	Dr R. Jha	Asistant Professor
18	Mrs. S.P. Dash	Associate Lecturer

ANNUAL REPORT	2013 -	- 14	
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19	Mr. A. Pd. Sinha	Associate Lecturer
20	Mr. S. Kr. Mishra	Associate Lecturer

Department of Mathematics

Sl. No.	Name	Designation
1.	Dr. S. K. Jain	Professor & Head
2.	Dr. S. K. Chakraborty	Professor
3.	Dr. B. K. Mishra	Professor Dean , Students' Welfare
4.	Dr. S. S. Roy	Associate Professor
5.	Dr. S. Padhi	Associate Professor
6.	Dr. S. Chakraborty	Associate Professor
7.	Dr. (Ms.) A. P. Ghorai	Associate Professor
8.	Dr. P. Kaur	Assistant Professor
9.	Dr. Abhinav Tandon	Assistant Professor
10.	Dr. (Ms.) Swati Pande	Associate Lecturer

Department of Mechanical Engineering

Sl. No.	Name	Designation
1	Dr. Arbind Kumar I	Professor
2	Dr. Arbind Kumar II	Professor & Head
3	Dr. A.K Ray	Professor
4	Dr. R.P.Sharma	Associate Professor
5	Dr. A.K.Roy	Associate Professor
6	Dr. Rajeev Kumar	Associate Professor
7	Sri S.K.Sinha	Associate Professor
8	Dr. Kaushik Kumar	Associate Professor
9	Dr. J. Singh	Associate Professor
10.	Dr. D.P.Mishra	Associate Professor
11.	Dr. D.B.Lata (On Lien)	Associate Professor
12.	Mrs. Richa Pandey	Assistant Professor
13.	Sri S.K.Dhiman	Assistant Professor
14.	Sri P. Mishra	Assistant Professor
15.	Sri B.S. Choudhary	Assistant Professor
16.	Sri O. P. Pandey	Assistant Professor
17.	Sri B. K. Prabhakar	Assistant Professor
18.	Sri Sujeet Kr. Mishra	Assistant Professor
19.	Sri Abhijit Nag	Assistant Professor
20.	Dr. Dhaneshwar Mahto	Assistant Professor
21.	Sri Arun Dayal Udai (Study Leave)	Assistant Professor

22.	Sri Shankha Bhaduri	Assistant Professor
23.	Sri L.S.Brar	Teach. cum. Res. Fellow
24.	Sri A.Bhowmik	Scientific Officer

Department of Pharmaceutical Sciences & Technology

Sl. No.	Name	Designation
1	Dr. D. Sasmal	Professor
2	Dr. P.R.P. Verma	Professor
3	Dr. B.N. Sinha	Professor & Head
4	Dr. S. Samanta	Professor
5	Dr. S. Jha	Professor
6	Dr. R. N. Gupta	Professor
7	Mrs. S. G. Panpalia	Associate Professor
8	Dr. (Ms.) S. Ganguly	Associate Professor
9	Dr. Jayaram Kumar	Associate Professor
10	Dr. (Mrs.) P. Mitra Mazumder	Associate Professor
11	Dr.(Mrs.)S. M. Verma	Associate Professor
12	Mr. Ashok Pattanaik	Assistant Professor
13	Dr. J. Venkatesan	Assistant Professor
14	Dr. Manik	Assistant Professor
15	Dr. A. Basu	Assistant Professor on Study Leave
16	Dr. N. Mishra	Assistant Professor on Study Leave
17	Dr. S.P. Pattanayak	Assistant Professor on Study Leave
18	Dr. A. Dev	Assistant Professor
19	Mr. B. Sarkar	Assistant Professor
20	Dr. T. Bal	Assistant Professor
21	Dr. A. Pandey	Assistant Professor
22	Dr. Neelima Sharma	Assistant Professor
23	Dr. Sandeep Kumar Singh	Assistant Professor
24	Dr. Animesh Ghosh	Assistant Professor
25	Dr.Uma Ranjan Lal	Assistant Professor
26	Dr.Sugato Banerjee	Assistant Professor
27	Dr. Kishanta Pradhan	Assistant Professor

Department of Physics

SI. No	. Name	Designation
1.	Dr D Jairath	Professor
2.	Dr S. Konar	Professor & Head
3.	Dr (Mrs) S Keshri	Professor

4.	Dr. S K Sinha	Associate Professor
5.	Dr. S K Rout	Associate Professor
6.	Dr S K Mahapatra	Associate Professor
7.	Dr I Banerjee	Associate Professor
8.	Dr S Mukherjee	Assistant Professor
9.	Dr K Bose	Assistant Professor
10.	Dr M Mishra	Assistant Professor
11.	Dr Sanat K Mukherjee	Assistant Professor
12.	Dr (Mrs) Ela Sina	Assistant Professor
13.	Dr R Sharma	Assistant Professor
14.	Mr M K Sinha	Senior Scientific Officer
15.	Dr AshwiniRanade	Assistant Professor
16.	Dr. Nishi Srivastav	Assistant Professor

Department of Physical Education and Sports

Sl. No.	Name	Designation
1.	Dr. Mahendra Kumar	Assistant Professor

Department of Production Engineering

Sl. No.	Name	Designation
1.	Dr. Vinay Sharma	Professor & Head
2.	Dr. B.K. Singh	Professor & Dean, PG & R
3.	Mr. A. K. Thakur	Associate Professor
4.	Dr. Sanjay Kumar Jha	Associate Professor
5.	Dr. Ritesh Kumar Singh	Associate Professor
6.	Dr. L.N. Pattanaik	Associate Professor
7.	Dr. Vijay Pandey	Associate Professor
8.	Dr. S. C. Srivastava	Associate Professor
9.	Dr. Joyjeet Ghose	Associate Professor
10.	Dr. Rajeev Agrawal	Assistant Professor
11.	Mr. Binay Kumar	Assistant Professor
12.	Dr. Somak Datta	Assistant Professor

Department of Remote Sensing

SI. No	Name Designation	
1.	Dr. Akhouri Pramod Krishna	Professor and Head
2.	Dr. Nilanchal Patel	Professor
3.	Dr. C. Jeganathan	Professor
4.	Dr. V.S. Rathore	Assistant Professor

5	Mrs. R.N.K. Sharma	Assistant Professor
6.	Mr. S. Chelliah	Assistant Professor
7.	Dr. Mili Ghosh	Assistant Professor
8.	Dr. Abhisek Santra	Assistant Professor

Department of Space Engineering & Rocketry

Sl. No.	Name	Designation
1.	Dr. J. K. Prasad	Professor and Head
2.	Dr. P. C. Joshi	Professor
3.	Dr. Mohan Varma*	Professor
4.	Dr. Sudip Das**	Assoc. Professor
5.	Mr. Priyank Kumar	Assistant Professor

^{*}On deputation at Muscat International Centre

OFF CAMPUS: Allahabad

SI. No.	Name	Designation
1.	Dr. Rampal Singh	Professor & Director
2.	Dr. S.Kanungo	Assistant Professor
3.	Dr. R.S.Pandey	Assistant Professor
4.	Mrs. A.Kushwaha	Assistant Professor
5.	Shri S.C.Pandey	Assistant Professor
6.	Shri K.N.Mishra	Assistant Professor
7.	Shri A.K.Keshri	Assistant Professor
8.	Dr. P.C.Srivastava	Assistant Professor
9.	Shri R. Mishra	Assistant Professor
10.	Mrs. A. Shukla	Associate Lecturer
11.	Shri Hareshwar Prasad	Associate Lecturer
12	Shri N. Trivedi	Associate Lecturer
13.	Dr. Adhip Kumar Mahanty	Assistant Professor
14.	Dr. Sunil Kumar Pandey	Assistant Professor
15.	Dr. Ashish Mohan Dubey	Assistant Professor
16.	Dr. NidhiTiwari	Associate Lecturer
17.	Shri Shambhu Sharan Kumar	Assistant Professor

^{**} On Study leave

OFF CAMPUS: DEOGHAR

Sl.No.	Name	Designation
	DEPARTMENT OF ELECTRONICS & COMM	
1.	Dr. Mainak Mukhopadhyay	Assistant Professor & I/C
2.	Mr. Babu Lal Shahu	Assistant Professor
3.	Mrs. Sutapa Mondal	Assistant Professor
4.	Mr. Sridhar Chintala	Assistant Professor
5.	Mr. Mahendra Kumar Das	Associate Lecturer
6.	Mr. Chinmay Chakraborty	Assistant Professor
7.	Mr. Akash Kumar Gupta	Assistant Professor
8.	Mr. Shashikant Kumar	Teaching Assistant cum JRF
	DEPARTMENT OF ELECTRICAL & ELECT	
9.	Mr. Piyush Kumar Ojha	Assistant Professor & I/C
10.	Mr. Pankaj Mishra	Assistant Professor
11.	Mr. Prabhat Kumar Ranjan	Assistant Professor
12.	Mr. Srihari Gude	Assistant Professor
13.	Mr. Deep Shekhar Acharya	Assistant Professor
14.	Mr. Surendra Kumar Mahto	Associate Lecturer
	DEPARTMENT OF COMPUTER SCIEN	CE & ENGINEERING
15.	Dr. Soumya Banerjee	Associate Professor and I/C
16.	Mr. Balaram Mondal	Assistant Professor
17.	Mr. RajaRam Dutta	Assistant Professor
18.	Mr. S.K.Borat	Associate Lecturer
19.	Mr. Nishi Kant Kumar	Associate Lecturer
20.	Mr. Saswata Mukherjee	Associate Lecturer
21.	Mrs. Neena Jha	Associate Lecturer
22.	Mrs. S. Paul	Teaching Assistant cum JRF
	DEPARTMENT OF MECHANICAL	ENGINEERING
23.	Dr. A. Chakraborty	Associate Professor and I/C
24.	Mr. R. Upadhyay	Assistant Professor
25.	Mr. Ashutosh Kumar	Assistant Professor
26.	Mr. S. Rao Gopisetti	Assistant Professor
27.	Mr. S. Kumar	Teaching cum RF
	DEPARTMENT OF ELECTRICAL & ELECTI	RONICS ENGINEERING
28.	Mr. Prafulla Kumar Manoharan	Assistant Professor & I/C
29.	Dr. Bappa Acherjee	Assistant Professor
30.	Mr. Abhishek Kumar Singh	Assistant Professor
31.	Mr. Anil Kumar Sharma	Assistant Professor
32.	Mr. Randhir Kumar	Assistant Professor
33.	Mr. Sanjiv Kumar Tiwari	Assistant Professor

	DEPARTMENT OF PHY	SICS
34.	Dr. Ratan Kumar Paul	Associate Professor & I/C
35.	Dr. Soumen Karmakar	Assistant Professor
36.	Dr. Ram Krishna Sarkar	Assistant Professor
37.	Dr. M. K. Dutta	Assistant Professor
	DEPARTMENT OF CHEM	IISTRY
38.	Prof. (Dr.) P. K. Srivastava	Professor and Head I/C
39.	Dr. A. C. Singh	Assistant Professor
40.	Dr. S. S. Majhi	Assistant Professor
41.	Dr. (Mrs.) A. Sharma	Teaching Assistant
	DEPARTMENT OF MATHE	MATICS
42.	Dr. Ranjan Chattaraj	Assistant Professor and I/C
43.	Dr. Amit Kumar	Assistant Professor
44.	Dr. Bishnu Kumar	Assistant Professor
	DEPARTMENT OF MANAGEMENT	& HUMANITIES
45.	Dr. S. G. Hazra	Assistant Professor
46.	Mrs. M. Jha	Associate Lecturer
47.	Mrs. A. Srivastava	Associate Lecturer
48.	Mrs. A. Banerjee	Associate Lecturer

OFF CAMPUS: JAIPUR

Sl. No.	Name	Designation
1	Dr. Abhinav Dinesh	Director
	DEPARTMENT OF COMPUTE	R SCIENCE
2	Dr.(Mrs.) Madhavi Sinha	Associate professor
3	Dr. Shripal Vijayvargiya	Associate professor
4	Mr. P.K. Sharma	Assistant Professor
5	Dr. Bimalendu Pathak	Assistant Professor
6	Dr. Vishwambhar Pathak	Assistant Professor
7	Dr. Piyush Gupta	Assistant Professor
8	Mr. Madan Mohan Agarwal	Assistant Professor
9	Mr. Vivek Gaur	Assistant Professor
10	Mr. Subhash Chand Gupta	Assistant Professor
11	Dr. (Mrs.) Archana Bhatnagar	Assistant Professor
12	Mrs. Seema Gaur	Assistant Professor
13	Mrs. Anju Sharma	Assistant Professor
14	Mr. Santosh Kumar Sharma	Assistant Professor
15	Mr. Santhosh Kumar Agarwal	Associate Lecturer

	DEPARTMENT OF ELECTRONICS	& COMMUNICATION ENGINEERING
16	Dr. Jankiballabh Sharma	Assistant Professor
17	Mr. Deepak Chaturvedi	Assistant Professor
18	Mrs. Jyoti Sharma	Assistant Professor
19	Mr. Gaurav Jain	Assistant Professor
20	Mr. Snehanshu Shekhar	Assistant Professor
21	Mr. Puneet Sharma	Associate Lecturer
22	Mr. Jitendra Kumar Saini	Associate Lecturer
23	Mrs. Kanika Joshi	Teaching cum Research Associate
	DEPARTMENT OF ELECTRICAL	. & ELECTRONICS ENGINEERING
24	Mr. Prashant Singh Rathore	Assistant Professor
25	Mrs. Aparajita Pandey	Assistant Professor
26	Mr. Surya Lal Mishra	Senior Scientific Officer (Also having
		teaching assignment)
27	Mr. Alok Pandey	Sr. System Manager
		(Also having teaching assignment)
28	Dr. B. M. Karan	Visiting Professor
		OF MANAGEMENT
29	Dr. Roopali Sharma	Associate professor
30	Dr. Ritu Arora	Assistant Professor
31	Mrs. Pankaj Sharma	Assistant Professor
32	Dr. Pramod Bubna	Asst. Registrar (Presently having teaching assignment)
33	Mr. Priyanshu Sharma	Associate Lecturer
34	Mrs. Purvi Mathur	Associate Lecturer
	DEPARTMENT OF ANI	MATION & MULTIMEDIA
35	Dr. Vibhuti Pandya	Assistant Professor
36	Mr. Gautam Kumar Goswami	Assistant Professor
37	Mr. Manish Kumar	Associate Lecturer
38	Dr. (Mrs.) Rishika Sharma	Associate Lecturer
39	Mrs. Neeraja Sharma	Scientific Officer (Presently having teaching assignment)
	DEPARTMENT	OF CHEMISTRY
40	Dr. S.K. Sharma	Professor
41	Dr. (Mrs) Ranjana Agarwal	Assistant Professor
42	Dr. (Mrs.) Rajni Agrawal	Jr. Scientific Officer
		(Presently having teaching assignment)
40		NT OF PHYSICS
43	Dr. Dheeraj Bhardwaj	Assistant Professor
44	Dr. Anand Kumar Srivastava	Assistant Professor
45	Mr. Ravindra Kumar	Associate Lecturer

	DEPARTMENT OF MATHEMATICS					
46	Dr. Anuj Kumar Jhankal	Assistant Professor				
47	Dr. Gurminder Singh Malhotra	Assistant Professor				
48	Dr. Indra Kumar Dadheech	Assistant Professor				
49	Dr. (Mrs.) Bhawna Agarwal	Assistant Professor				
	DEPARTMENT OF M	IECHANICAL ENGINEERING				
50	Mr. Vikas Sangwan	Assistant Professor				
51	Mr. Abinash Pankaj	Scientific Officer (Also having teaching assignment)				
	DEPARTMEN	IT OF HUMANITIES				
52	Mrs. Ritu Pareek	Associate Lecturer (English Literature)				
	DEPARTMENT	OF BIOENGINEERING				
53	Dr. M. Krishna Mohan	Professor (Presently Deputed to BISR, Jaipur)				
54	Mr. P.S.Solanki	Asst. Professor (Presently Deputed to BISR, Jaipur)				
55	Dr. R.K. Gothwal	Asst. Professor (Presently Deputed to BISR, Jaipur)				
56	Mrs. Shivani Chandra	Associate Lecturer (Presently Deputed to BISR, Jaipur)				
St. Build. A	DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING					
57	Mrs. Nidhi Singh	Associate Lecturer				

OFF CAMPUS: KOLKATA

SI. No.	Name	Designation
1	Dr. R. T. Goswami	In Charge
2	Prof. Subho Chaudhuri	Associate Professor
3	Dr. Srabani Mukhopadhyaya	Associate Professor
4	Dr. Ajanta Das (nee De Sarkar)	Associate Professor
5	Dr. Bharat Gupta	Associate Professor
6	Dr. Sraboni Dutta	Associate Professor
7	Dr. Sanchita Ghosh	Assistant Professor
8	Dr. Ambar Dutta	Assistant Professor
9	Dr. Ruchira Mukherjee	Assistant Professor
10	Dr. Sandip Kumar Sengupta	Assistant Professor
11	Prof. Tanmoy Banerjee	Assistant Professor
12	Prof. Rohit Kamal Chatterjee	Assistant Professor
13	Prof. Soumendra Bhattacharjee	Assistant Professor
14	Prof. Siba Mitra	Assistant Professor

15	Prof. Abhijit Kundu	Adjunct Professor
16	Prof. Ranadeep Mukherjee	Associate Lecturer
17	Prof. Soumya Ray	Associate Lecturer
18	Prof. Khalid Ashraf	Associate Lecturer
19	Prof. Sohini Ghosh	Associate Lecturer
20	Ms. Keka Das	Associate Lecturer

OFF CAMPUS: LALPUR

DEPARTMENT OF MANAGEMENT				
SI. No.	Name	Designation		
1.	Dr. A.N. Jha	Professor In-Charge		
2.	Ms. Anupama Sahai	Assistant Professor		
3.	Mr. Arun Kr. Singh	Assistant Professor		
4.	Dr. Pranab Kumar	Associate Professor		
5.	Dr. Somnath Mukherjee	Assistant Professor		
6.	Dr. S.N. Sahdeo	Assistant Professor		
7.	Dr. Ashutosh Mishra	Assistant Professor		
8.	Dr. Syed Anis Haider	Assistant Professor		
9.	Mr. Amitabh Chandan	Assistant Professor		
10.	Dr. A.R. Srivastava	Assistant Professor		
11.	Ms. Mili Dutta	Assistant Professor		
12.	Mr. J.Bhagat	Associate Lecturer		
13.	Mr. Soumitro Chakravarty	Associate Lecturer		
14.	Mr. Satrajeet Choudhury	Associate Lecturer		
15.	Dr. Avinash Sinha	Associate Lecturer		
16.	Ms. Swati Priyadarshani	Associate Lecturer		
	DEPARTMENT OF COMPUTER	SCIENCE & ENGINEERING		
17.	Dr. Vandana Bhattacherjee	Professor & Academic Coordinator		
18.	Dr. Amrita Priyam	Associate Professor		
19.	Dr. N.K. Singh	Assistant Professor		
20.	Mrs. Onima Tigga	Assistant Professor		
21.	Mr. N.P. Tiwari	Assistant Professor		
22.	Ms. Jaya Pal	Assistant Professor		
23.	Mr. Sanjay Kumar	Assistant Professor		
24.	Mr. Amar Kumar	Assistant Professor		
25.	Dr. Partha Sarthi Bishnu	Assistant Professor		
26.	Mr. Binod Kumar Sharma	Assistant Professor		
27.	Mr. D.K. Mishra	Associate Lecturer		
28.	Dr. Umesh Prasad	Associate Lecturer		
29.	Mr. Kuntal Mukherjee	Asst. Professor		

OFF CAMPUS: NOIDA

S.No.	Name	Designation
	DEPARTMENT OF COMPUT	ER SCIENCE
1.	Mrs. S. Mallika	Assistant Professor
2.	Dr. Peeyush Tewari	Associate Professor
3.	Dr. S.P. Singh	Assistant Professor
4.	Dr. (Mrs.) Ila Sahay	Associate Professor
5.	Mr. Anil Kumar	Assistant Professor
6.	Mr. Pankaj Gupta	Assistant Professor
7.	Mrs. Mrinalini Mehta	Assistant Professor
8.	Mrs. Vibha Kaw	Assistant Professor
9.	Mrs. Soma Sircar	Assistant Professor
10.	Dr. (Mrs.) Shruti Kohli	Assistant Professor
11.	Mr. Aruna Malik	Assistant Professor
12.	Mr. Rayees Ahmed	Assistant Professor
13.	Mrs. Sheetal Dhir	Assistant Professor
14.	Mrs. Pramila Joshi	Assistant Professor
15.	Mrs. Muntaha Ahmad	Assistant Professor
16.	Mrs. Smitha Jha	Assistant Professor
17.	Mr. Anurag Joshi	Assistant Professor
18.	Mrs. Priti Sharma	Assistant Professor
19.	Ms. Charu Wahi	Assistant Professor
20.	Mrs. Seema Sharma	Assistant Professor
21.	Mrs. Lipika Jha	Associate Lecturer
22.	Mr. Rakesh Singh	Associate Lecturer
23.	Dr. B.B Sagar	Assistant Professor
	DEPARTMENT OF MANA	AGEMENT
24.	Dr. Munish Makkad	Professor
25.	Dr. (Mrs.) Asha Prasad	Professor
26.	Dr. (Mrs.) Vandna Sharma	Associate Professor
27.	Mrs. Rachana Pratik	Assistant Professor
28.	Dr. Abhishek Singh	Assistant Professor
29.	Dr. (Mrs.) Meenakshi Sharma	Assistant Professor
30.	Ms. Harpreet Charanjit	Assistant Professor
31.	Mrs. Ritu Jain	Assistant Professor
32.	Mrs. Preety Bajaj	Assistant Professor
33.	Dr. Arun Mittal	Assistant Professor
34.	Dr. K.B. Singh	Assistant Professor
35.	Dr. (Ms.) Monika Bisht	Assistant Professor
36.	Dr. (Mrs.) Suparna Dutta	Assistant Professor

DEPARTMENT OF ANIMATION & MULTIMEDIA		
37.	Mr. Kiran A. Shetti	Sr. Animation Trainer
38.	Mr. Lalit Mohan Bhatt	Editor
39.	Mr. Rahul Dora	Tech. Superintendent
40.	Mr. Partha Acharya	Faculty
41.	Mr. Niket Mehta	Assistant Professor
42.	Mr. Das Mohan Singh	Designer (Backgr.Layout)
43.	Mr. Aroop Kerketta	Faculty
44.	Mr. Obed H. Longvah	Cinematographer
45.	Mr. Manoj Kumar	Animator

OFF CAMPUS: PATNA

SI No.	Name	Designation	
1.	Prof. (Dr.) S.L. Gupta	Director	
2.	Prof. (Dr.) S.P. Lal	Deputy Director	
	DEAPRTMENT C	OF CHEMISTRY	
3.	Dr. Kaushlendra Sharma	Assistant Professor & In- Charge	
4.	Dr. Rakesh Kumar	Assistant Professor	
5.	Ms. Anubha Singh	Assistant Professor	
	DEAPRTMENT OF	MATHEMATICS	
6.	Dr. Trishna Paul	Associate Professor & In- Charge	
7.	Dr. Rajnish Kumar	Assistant Professor	
8.	Dr. Premlata Singh	Assistant Professor	
	DEAPRTMENT OF PHYSICS		
9.	Dr. S.K. Sinha	Associate Professor & In- Charge	
10.	Dr. Binay Bhushan	Assistant Professor	
11.	Dr. Kamala Pati Tiwary	Assistant Professor	
12.	Ms. Paramjit Kour	Associate Lecturer	
	DEPARTMENT OF	ACHITECTURE	
13.	Dr. A. K. Singh	Associate Professor & In- Charge	
14.	Ms. Anamika Nandan	Assistant Professor	
15.	Mr. Abhiroop Das	Assistant Professor	
16.	Mr. Danish	Assistant Professor	
	DEPARTMENT OF B	IOENGINEERING	
17	Prof. A.S.Vidyarthi	Professor & Head	
	DEPARTMENT OF CIVIL AND ENV	/IRONMENTAL ENGINEERING	
18.	Prof. R R Sahay	Professor & In- Charge	
19.	Mr. Anish	Assistant Professor	
20.	Miss Bandana Mahto	Assistant Professor	
21.	Mr. Syed Tabin Rushad	Assistant Professor	

22.	Ms. Subha Sinha	Assistant Professor	
23.	Mr. Bishwas Narayan Singh	Associate Lecturer	
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING			
24.	Dr. Kanhaya Lal	Assistant Professor & In- Charge	
25.	Ms. Sheel Shalini	Assistant Professor & Co-ordinator BCA	
26.	Mr. Shridhar Kumar	Assistant Professor & Co-ordinator BBE, BBA	
27.	Mr. Ashish Ranjan	Assistant Professor	
28.	Mr. Samant Saurav	Assistant Professor	
29.	Mr. Upendra Kumar	Assistant Professor	
30.	Mr. Adnan Mahmood	Associate Lecturer	
31.	Mr. Madhup Kumar	Associate Lecturer	
32.	Mr. Raghav Mallik	Associate Lecturer	
33.	Ms. Smita Srivastava	Associate Lecturer	
34.	Ms. Smita Pallavi	Jr. Teaching Cum-Research Fellow	
	DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING		
35.	Mr. Shahiruddin	Assistant Professor & In- Charge	
36.	Mr. Atul Kumar Pandey	Assistant Professor	
37.	Ms. Megha Dadel	Assistant Professor	
38.	Mr. Priyadarshi Suraj	Assistant Professor	
39.	Miss Poonam Priyadarshini	Assistant Professor	
40.	Mr. Prashant Kumar	Assistant Professor	
41.	Mr. Ritesh Kumar Badhai	Assistant Professor	
42.	Ms. Shipra	Assistant Professor	
43.	Mr. Sudhanshu Verma	Assistant Professor	
44.	Mr. Shiv Kumar Choubey	Teaching Cum Research Fellow	
45.	Mr. Abu Nazar Ghazali	Teaching Cum Research Fellow	
46.	Ms. Sweta Kumari	Teaching Cum-Research Fellow	
	DEPARTMENT OF ELECTRICAL	& ELECTRONICS ENGINEERING	
47.	Dr. Nirmala Soren	Assistant Professor & In- Charge	
48.	Mr. Sanjay Kumar I	Assistant Professor	
49.	Mr. Kumar Nikhil	Assistant Professor	
50.	Mr. Mayank Singh	Assistant Professor	
51.	Miss Swati	Assistant Professor	
52.	Mr. Sanjay Kumar - II	Associate Lecturer	
53.	Mr. Raj Kumar Mishra	Associate Lecturer	
54.	Ms. Shradha Kishore	Teaching-Cum-Research Fellow	
	DEPARTMENT OF MEC	CHNICAL ENGINEERING	
55.	Mr. Girish Pathak	Assistant Professor & In- Charge	
56.	Mr. Amit Kumar	Assistant Professor	

57.	Mr. Anand Kumar	Assistant Professor
58.	Md. Ashique Hassan	Assistant Professor
59.	Mr. Chandan Kumar	Assistant Professor
60.	Mr. Ravi Shankar Anand	Assistant Professor
61.	Mr. Soumen Mandal	Assistant Professor
62.	Mr. Sudipta Kishore Pradhan	Assistant Professor
	DEPARTMENT	OF MANAGEMENT
63.	Dr. Vijay Agrawal	Associate Professor & In- Charge
64.	Dr. Amit Raghuvanshi	Assistant Professor
65.	Md. Iftekhar Ahmad	Assistant Professor
66.	Dr. Mahua Ghosal	Assistant Professor
67.	Ms. Sweta	Associate Lecturer
	DEPARTMENT OF PR	RODUCTION ENGINEEING
68.	Mr. Kapildeo Prasad	Assistant Professor
69.	Mr. Prashant Prakash	Assistant Professor
70.	Mr. Thakur Abhinav Amar	Assistant Professor
71.	Mr. Vijay Kr. Mandal	Associate Lecturer
	DEPARTMENT OF PHYS	ICAL EDUCATION & SPORTS
72.	Mr. Suresh Singh Yadav	Associate Lecturer
73.	Ms. Somali Fouzdar	Superintendent
	DEAPRTMENT C	F REMOTE SENSING
74.	Dr. Abhishek Santra	Assistant Professor
	DEPARTMENT	OF CREATIVE ARTS
75.	Mr. K.C.Bajpai	Visiting Professor
76.	Ms. S. Bajpai	Visiting Professor

OFF-SHORE CAMPUS: MUSCAT

Sl. No.	Name	Designation
DEPARTMENT OF MANAGEMENT		
1	Dr. Ganesh Prasad Mishra	Associate Professor
2	Dr. Prashant Rastogi	Associate Professor
3	Mr. Jyoti K Chandel	Assistant Professor
4	Mr. Mithun Srivastava	Assistant Professor
5	Mr. Sayeed Aulia	Assistant Professor
6	Dr. Niraj Mishra	Assistant Professor
7	Mr. Sushil Kumar	Assistant Professor
8	Dr. A. Prakash	Assistant Professor
9	Dr. Soofi Asra Mubeen	Assistant Professor
10	Dr. Arvind Hans	Assistant Professor
11	Mrs. Kusum Lata Mishra	Associate Lecturer

12	Mr. Sultan Khan	Lecturer
13	Mr. Prashant Kumar Singh	Assistant. Professor
14	Ms. Sameena Begum	Assistant Professor
15	Ms. Srilekha Goveas	Assistant Professor
16	Dr. Seema Varshney	Assistant Professor
17	Dr. Nupur Sen	Assistant Professor
18	Ms. Blossom Christina	Assistant Professor
19	Ms. Neelufer Aslam	Assistant Professor
	DEPARTMENT OF COMPUTER SCIENC	E & ENGINEERING
20	Ms. P. Vijaya	Assistant Professor
21	Mr. Satish Chander	Assistant. Professor
22	Mr. Sanjay Kumar	Assistant Professor
23	Mr. Arbind Kumar Choudhary	Assistant Professor
24	Mr. Shahid Ali	Assistant Professor
25	Mr. Sounak Paul	Assistant Professor
26	Ms. Vallikannu R. M.	Assistant Professor
27	Ms. S. B. Sinymol	Assistant Professor
28	Ms. Alycia Edwin	Assistant Professor
29	Ms. Akrati Kaul	Assistant Professor
30	Ms. Anu Manchanda	Assistant Professor
31	Ms. Cimi Thomas	Assistant Professor
32	Ms. Nabila Saif Al-Ghenami	Lecturer
33	Ms. Salwa Ali Al-Busaidi	Comp. Lab Instructor
34	Ms. Houda Al-Quwaitai	Comp.Lab Asst. Teacher
35	Ms. Kothar Salim Al-Rawahi	Comp. Lab Instructor
	DEPARTMENT OF ELECTRONICS & COMMU	INICATION ENGINEERING
36	Dr. Alok K Kushwaha	Professor
37	Mr. Vikash Sharma	Lecturer (Selection Grade)
38	Mr. Akhilesh Roy	Assistant Professor
39	Mr. Rajeev Ranjan	Assistant Professor
40	Dr. Rajeev Kumar	Assistant Professor
41	Ms. Anasuya Patil	Assistant Professor
42	Ms. Smitha Felix	Assistant Professor
43	Mrs. Priya C Rajan	Assistant Professor
	DEPARTMENT OF ELECTRICAL I	ENGINEERING
44	Dr. Mohd Mohatram	Assistant Professor
45	Mrs. Seema Arora	Assistant Professor
	DEPARTMENT OF MECHANICAL	ENGINEERING
46	Mr. Praveen James Sanga	Assistant Professor
47	Mr. Kuldeep Gupta	Assistant Professor

	DEPARTMENT OF MATHEMATICS		
48	Dr. Prabal Datta	Assistant Professor	
49	Mr. Umair Ujala	Assistant Professor	
	DEPARTMENT OF BIOTECHNOLOGY ENGINEERING		
50	Dr. Sadaf Zahra	Assistant Professor	
51	Ms. Atiya Tabassum	Assistant Professor	
52	Mr. David Mandepudi	Assistant Professor	
53	Ms. Sharmila Queenthy	Assistant Professor	
54	Ms. Akhila Rajan	Assistant Professor	
	DEPARTM	IENT OF ENGLISH	
55	Ms. Indrani Basu	Assistant Professor	
56	Mr. David Manohar	Assistant Professor	
57	Ms. Smita Prasad	Assistant Professor	
58	Mr. Roby Varghese	Associate Lecturer	
59	Ms. Sara Al-Hedabbi	Teaching Assistant	
60	Mr. Issa Al Saad	Lecturer	
61	Ms. Shamsa Said Al Saidi	Teacher - English	
62	Ms. Umaima Al Kiyumi	Teacher - English	
63	Mr. El Amin El Nur	Associate Lecturer	

OFF-SHORE CAMPUS: RAS AL KHIMAH

S. No.	Name	Designation	
1	Dr. DJ Biswas	Professor & Director	
	DEPARTMENT OF AR	CHITECTURE	
2	Ms. Gayathri Viswanathan	Associate Professor	
3	Mrs. Bhavna Modi	Assistant Professor	
4	Ms. Vyjyantha	Part-time Faculty	
5	Ms. Vidhya Mohanan	Part-time Faculty	
	DEPARTMENT OF SCIENCE		
6	Mrs. Vijayalaxmi	Assistant Professor	
7	Dr. Suja	Part-time Faculty	
	DEPARTMENT OF ELECTRICAL & EL	ECTRONICS ENGINEERING	
8	Mrs. Reshma Gopi	Assistant Professor	
9	Mrs. Chetna Nagpal	Assistant Professor	
10	Mrs. Linju Josh	Part-time Faculty	
	DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING		
11	Mrs. Deepthy Manikantan	Assistant Professor	
12	Mrs. Annie Therese Edwis	Assistant Professor	
13	Ms. Megha Suhash	Assistant Professor	

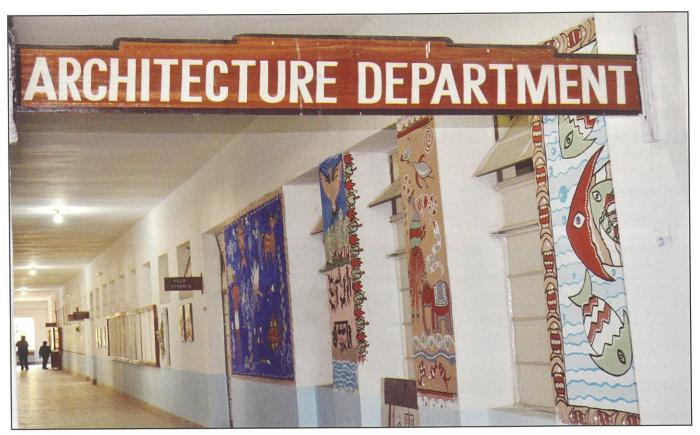
14	Mrs. Arun Jesu Julie	Part-time Faculty		
	DEPARTMENT OF COMI	PUTER SCIENCE & ENGINEERING		
15	Mr. Siva Suryanarayana	Assistant Professor		
16	Mrs. Archana Pandita	Assistant Professor		
17	Mrs. Deepa Suresh	Assistant Professor		
18	Ms. Arshiya Shubani	Part-time Faculty		
	DEPARTMENT OF MECHANICAL ENGINEERING			
19	Mr. Irfan Sheikh	Assistant Professor		
20	Mrs. Shimna Shafeeq	Part-time Faculty		
	DEPARTMENT OF MANAGEMENT			
21	Mr. Soofi Anwar	Assistant Professor		
22	Mrs. Rhoda Alexander	Assistant Professor		
23	Mrs. Sonali Jagath	Assistant Professor		
24	Mr. Nikhil V.P.	Assistant Professor		
25	Mr. Sreedharan	Part-time Faculty		
26	Mrs. Namitha	Part-time Faculty		
	LANGUAGE			
27	Mrs. Shanti Rajan	Part-time Faculty		
28	Ms. Martina Daniel	Part-time Faculty		

UNIVERSITY POLYTECHNIC

SI. No.	Name	Designation
1.	Mr. Devendra Kumar Jain	Director
2.	Mr. Ramkesh	Assistant Professor
3.	Dr. B. N. Sanyal	Assistant Professor
4.	Mr. Manish Oraon	Assistant Professor
5.	Mr. Pradeep Toppo	Assistant Professor
6.	Mrs. Meena Singh	Assistant Professor
7.	Mr. Ramnish Sinha	Assistant Professor
8.	Mr. Abhay Kumar	Assistant Professor
9.	Mr. G. M. Ansari	Assistant Professor
10.	Mr. Rajendra Mahto	Assistant Professor
11.	Dr. Satish Kumar	Lecturer
12.	Dr. (Mrs.) Sandhya Rani	Lecturer
13.	Dr. (Mrs.) Sumana	Lecturer
14.	Dr. T. K. Parashar	Lecturer
15.	Mrs. Neeru Singh	Lecturer
16.	Mrs. Rekha Kumari	Lecturer
17.	Mr. Manoj Kumar	Lecturer

18.	Mr. Mohd. Neyaz Ahsan	Lecturer
19.	Mr. Chanchal Mishra	Lecturer
20.	Mr. Rakesh	Associate Lecturer
21.	Mr. N. K. Mukherjee	Associate Lecturer
22.	Mr. Niraj Kumar	Associate Lecturer
23.	Ms. Nirupam	Associate Lecturer
24.	Mr. Maqubool Hossain	Associate Lecturer
25.	Mr. Narendra Kumar Singh	Physical Training Instructor
26.	Mr. Sanjay Jha	Teaching Assistant
27.	Mr. P. R. Mahto	Teaching Assistant
28.	Mr. Shankar Kumar	Teaching Assistant

DEPARTMENT OF ARCHITECTURE



Lobby of Department of Architecture

The Department of Architecture was established in BIT Mesra in the year 1993. Architecture is primarily the art and science of designing spaces for serving the multifarious activities of human beings and for meeting their specific needs in a meaningful built environment. Architecture calls for originality, creativity, conceptualization, perception, aesthetic values and a holistic judgment of people, places, objects and events. Imparting these values, our fifteen batches of architecture students have graduated till now and they have found gainful employment in planning, design and construction sector. Many of our students have opted for higher studies in India and abroad in the disciplines of Urban Design, City Planning, Landscape Architecture, Conservation and Construction Management. Our students have also opted for diversified fields such as Visual Design, Product Design, Fashion Design, Management and Software Development related with architecture.

The Department has attained a rare feat of being the first ever Department of Architecture in the country to be awarded research grants under the Department Research Support (DRS) level of the Special Assistance Programme (SAP) of University Grants Commission (UGC). The Department acquired latest computers and software with the help of this support and involved in quality research now.

The Department has started offering the Master in Urban Planning degree course from January 2007 with a maximum intake capacity of 12. The intake includes students with degrees of B.Arch., B.E./B.Tech.(Civil Engineering), M.A. in Geography, Sociology or Economics. The students have gained fruitful employment in planning organizations, in teaching, and other related activities.

The Department has been ranked among the top ten best Architecture Departments as per the survey conducted by the Outlook. Since last three years.

The Department is the first in the country as an Architecture Department to publish an internationally refereed bi-annual research journal named ABACUS since August 2006. Eleven issues of the journal have been published.

The Department offers following courses-

UG Course : 5-Year B. Arch degree course in Architecture

• PG Course : 2-year Master in Urban Planning degree course.

Doctoral degree in Architecture and Planning

SPONSORED PROJECTS

ONGOING PROJECTS

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)
1	Redevelopment of Ranchi Hill and Pahari Mandir, Ranchi	Dr. Manjari Chakraborty	Govt. of Jharkhand	December 2010	16.00

SEMINAR / CONFERENCES / SHORT – TERM COURSES CONDUCTED BY THE DEPARTMENT/CAMPUS

SI. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short - term Courses
1	One Day workshop on Inspection Reforms – Experts' Training Programme at Jadavpur University, Kolkata, WB	Dr. Manjari Chakraborty	Council of Architecture, India	Feb. 15, 2014
2	One day workshop on ITDP by Shreya Gadepalli Regional Director – India	Dr. Manjari Chakraborty	ITDP	Feb. 25 , 2014
3	One day workshop on Social Housing by Dr. S. Chattopadhyay, IIT Kharagpur	Mrs Smriti Mishra	BIT Mesra	October 5, 2013
4	Two day workshop on Medical Architecture by Ar. Kunal Bhattachrya	Dr. Manjari Chakraborty	BIT Mesra	Sept. 24 – 25, 2013
5	One day workshop on Structure Queries by Dr. S.P. Bhattacharya, IIT Kharagpur	Dr. Manjari Chakraborty	BIT Mesra	Oct.01, 2013
6	One day workshop on Architectural Thesis by Ar. S. Chakraborty Architect Planner CMPDI	Mrs Smriti Mishra	BIT Mesra	Sept.14, 2013

7	One day workshop on 'To Conceive a Design' by Ar. Asit Mandal	Dr. Manjari Chakraborty	BIT Mesra	July 27,2013
8	Interactive Session on "Photography" by Mr. Jitendra Marathe	Mr. Mrinal Pathak	BIT Mesra	July 11, 2013
9	"Best of waste"A workshop on installation of waste materials to make usefull product	Mr.Mrinal kr.Pathak	BiT Mesra	Jan 27, 2014
10	Pencil Rendoring and colour rendering with different perspective angles, by Sh. Tarak Shankar.	Mr.Mrinal kr.Pathak	BIT Mesra	Jan 30, 2014 & Feb 20, 2014
11	Workshop on Clay modelling, by Mr.Anjiit Nayak	Mr.Mrinal kr.Pathak	BIT Mesra	March 26, 2014
12	Workshop on space saving Furniture by Mr.Mrinal k. Pathak	Mr.Mrinal kr.Pathak	BIT Mesra	April 3, 2014

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

SI. No.	Name of the Faculty	Title of the Conference/Seminar	Funding Agency	Organizers	Venue	Date
1	Dr. M. Chakraborty	Training the trainers for CoA Expert Committee visits-2014	Council of Architecture, India	Council of Architecture, India	IDEAS College, Nagpur	Jan 7, 2014
2	Dr. Manjari Chakraborty as resource person	Orientation Program for Architecture faculty at Punjab Technical University, Mohali. Delivered lecture on" Effective Teaching in Architecture"	Punjab Technical University, Mohali	Punjab Technical University, Mohali	Punjab Technical University, Mohali	Sept. 14 -15, 2013

3.	Prof. Smriti Mishra	Weather, Climate, Meteorological Hazards & Disasters over Jharkhand Region	Centre of Excellence in Climatology BIT Mesra, Ranchi & Dept. of Agril. Meteorology & Physics, Birsa Agriculture University	Centre of Excellence in Climatology BIT Mesra, Ranchi & Dept. of Agril. Meteorology & Physics, Birsa Agriculture University	Ranchi	2013
4	Prof. Smriti Mishra	"Inspection Reforms- Experts" Training Programme'	Council of Architecture, India	Council of Architecture, India	Jadavpur University, Kolkata	Feb 15, 2014
5	Prof. Smriti Mishra	Green Building Awareness under the National Mission on Education through ICT	MHRD, Govt. of India	IIT Bombay in association with Team Shunya	Mumbai	2013

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. Roy, B. C., Sarkar, S. Mandal, N.R., Natural Resource Abundance and Economic Performance A Literature Review, Current Urban Studies, December 2013, Vol.1 No.4,148-155
- 2. Chandra, G., Chakraborty, M., Sustainable Design for Urban Water Management: A Case Study for Ground Water in U. P., India, GSTF Journal of Engineering and Technology, 2013
- 3. Pandey, S. Pradhan R.P., Financial Development, Social Development and Economic Growth: The Causal Nexus in Asia, Decision, 2013, 40 (1-2), 69-83.
- 4. Pandey, S. Pradhan R.P., The Link Between Telecommunication Infrastructure and Economic Growth in 34 OECD Countries, International Journal of Technology, Policy and Management, 2013, Vol. 13, No. 3, 278-293.
- 5. Pandey, S. Pradhan R.P., More penetration More growth? A Panel Co-integration Analysis for the OECD Countries, International Journal of Public Policy, 2013, Vol. 9, No. 4/5/6, 371-388.
- 6. Pandey, S. Pradhan R.P., Internet Growth Nexus: Evidence from Cross Country Panel Data, Applied Economics, 2013, Vol. 20, No. 16, 1511-1515
- 7. Pandey, S. Pradhan R.P., The Dynamics of Financial Depth and Economic Growth: Empirical Evidence from Middle East and North African Countries, International Research Journal of Finance and Economics, 2013, Vol. 112, No. 2, 172-180.
- 8. Roy, B. C., Sarkar, S. Mandal, N.R Pandey, S., Role of Institutions in Economic Performance: an Empirical Study of interstate Differences in Indian States with reference to Jharkhand, European Scientific Journal, April 2014, Vol.10, No.10, 313 -335.

- 9. Roy, B. C., Sarkar, S. Mandal, N.R, The Link between Institutions and Industrial Development: an Empirical Study of Indian States, International Journal of Engineering, Business and Enterprise Application. March May 2014, Vol (1), 6-12.
- 10. Panda, S. Chakraborty, M. Misra S.K., The importance of Urban Sustainability Index to measure the sustainable development, ABACUS, a bi-annual International refereed journal on Architecture, Conservation and Urban Studies. Spring 2013, Volume 8 No 1, 50-56

PUBLISHED IN NATIONAL JOURNALS

1. Chakraborty, M. On Architecture: Education, Profession, Scope, All About Architecture, education in India, Annual Edition 2013, Vol. 2, 21

Book:

Single Authored: Chakraborty M, Designing Better Architecture Education, COPAL Publication, 2014, ISBN: 9788 1924 73390

DEPARTMENTAL STUDENTS' ACTIVITIES

S. No.	Name of the Activity	Students' co ordinator, if any	Date/Duration
1	ZONASA at MET Moradabad	Kushal Jain	October 14 – 16, 2013
2.	NASA at JNTU Hydrabad	Kushal Jain	January 25 – 28 ,2014
2.	Students' Academic Tour to South India	Sashikant & Shivani Gawekad	January 28 – February 9 , 2014

BOARD OF STUDIES(UG/PG)

Dr. Manjari Chakraborty, Prof. & Head, Department of Architecture.

Dr. N.R. Mandal, Professor, Department of Architecture. (resigned on Nov 2013)

Dr. Gopal Pathak, Prof. & Head, Department of Environmental Engineering.

Head of Department, Department of Civil Engineering.

Head of Department, Department of Remote Sensing.

EXTERNAL (ANY TWO)

Prof. B.K. Sengupta, Professor, Department of Architecture, IIT Kharagpur.

Prof. S. S. Roy, Professor, Department of Architecture, CET Bhubaneswar.

Mr. Amit De, Deputy General Manager, Architecture Division, MECON, Ranchi.

Mr. Rajiv Chadda, Professional Architect, Ranchi.

DEPARTMENTAL ACADEMIC COMMITTEE

Dr. Manjari Chakraborty, Prof. & Head, Department of Architecture

Dr. N.R. Mandal, Professor, Department of Architecture. (resigned on Nov 2013)

Dr. Satyaki Sarkar, Associate Prof., Department of Architecture

Dr. Gopal Pathak, Prof. & Head, Department of Civil & Environmental Engineering

Dr. Utpal Baul, Prof. & Head, Department of Management

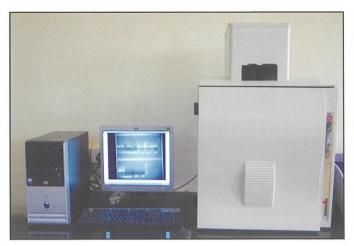
Other important information.

CREATIVE WORKSHOP

ToDevelop different creative skill in student and make them competent enough to excel in the creative field like Architecture, Department organized several sessions of Creative Workshop:

2013 - 14

DEPARTMENT OF BIO ENGINEERING





Gel Documentation System

Ultra Performance Liquid Chromatography

The Department has received magnificent financial supports from both Union and State Government for establishing state-of-the-art facility for academic and research activities since its inception in the year 2002. A Centre of Excellence in Bioresources and Bioprospecting has been awarded to the Department in May 2013, sponsored by TEQIP-II. Well planned Department building situated on the bank of Suvernarekha River has attracted almost every visitor of the Institute. The visitors included government officials, diplomats, technocrats, scientists and industrialists, and have recognized the Department as centre of excellence for research based academics and expressed their desires to participate and propel the scientific and technological endeavor with BIT. The Centre for Biomedical Instrumentation has been merged recently with the Department of Biotechnology and named as Department of Bio-Engineering.

The Department's unique culture, in which the staffs & students are treated as assets and stakeholder of the scientific achievement, provides a congenial environment to apply multidimensional approaches to solve the scientific problems. Students of this Department are well placed in company jobs and also admitted in MS and Ph.D. programmes of foreign Institutions.

Presently, B.E. Biotechnology, M. Sc. Bioinformatics, M. Tech Biotechnology, M. Tech Bio-Medical Instrumentation are the courses offered by the Department. M.Sc. Biotechnology is to commence from July 2014. Ten students enrolled in the Ph.D. programme in various fields of biotechnology such as Genomics, Proteomics and Transcriptomics, Industrial biotechnology, product development and biotechnology management in the Department and five candidates have submitted Ph.D. thesis in this year. Three scholars have completed their Ph.D. viva voce. The Ph.D. degree was awarded to four scholars. Seven students completed their projects on Bioinformatics at BTISnet Centre (DBT, GOI, New Delhi) of the Department. Mettler Toledo pH/ORP system, Orbital Shaker, Ultra water purification system, Ultra low deep freezer (-86° C), Spectrophotometer with kinetics, Non refrigerated Centrifuge & thermo mixer, and Gel dryer have been recently added to the list of instrumentation facility in the Department.

SPONSORED PROJECTS

ONGOING PROJECTS

SI. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Establishment of Bioinformatics Centre under BTIS Net scheme	Dr. K. Mukhopadhyay (Coordinator) Dr. R. Poddar (Co-Coordinator)	DBT	February 2004 BT/BI/04 /065/04	68.0	Feb 2005 to Mar 2017
2	To understand the nature of diversity in lac insects of Kerria spp. in India and the nature of insect x host interaction	(Network Project) Dr. A. S. Vidyarthi (Co- Investigator) Dr. K. Mukhopadhyay (Co-Investigator) Dr. B. N. Sinha (Dept. of Pharm Sciences)-Co Investigaror	NAIP, ICAR	NAIP/Comp- 4/C3007/ 2008-09 Dt. 10.01.2009	BIT Share 66.50	Apr 2009 to Mar 2014
3	Process optimization for bioemulsifier production by microorganisms	Dr. A. Sachan (PI)	UGC	40-160/2011 (SR) Dt. 22.06.11	5.01	Jul 2011 to Jul 2014
4	Identification, characterization and molecular documentation of non-marine water chlorophycean microalgal biodiversity of Chota Nagpur Plateau	Dr. A. Pareek (PI) Dr. A. S. Vidyarthi (Co-P.I.)	UGC	40-171/2011 (SR) Dt. 22.06.11	8.678	Jul 2011 to Jul 2014
5	Development of recombinant human Growth Colony Stimulating Factor	Dr. M. Kumar (PI)	UGC	40-186/2011 (SR) Dt. 05.07.2011	10.328	Jul 2011 to Jul 2014

6	Discovery, annotation, validation and characterization	Dr. K. Mukhopadhyay (Project Co-	DBT	Dt. 06.05.2012 BT/PR3925/	BIT Share: 24.6	May 2012 to Apr 2015
	of SNPs in Wheat (Triticum aestivum L.) and haplotype structure determination using Next-Generation Sequencing Data	ordinator) Dr. M. Kumar (Co-PI) Dr. R. Poddar (Co-PI) Multi-Institutional R&D Project Collaborators: CCSU Meerut		BID /7/384/2011		
7	Studies on biotechnological potential of halophilic alkaline proteases	Dr V.K. Nigam (PI) Dr. M. K. Mohan (Co-PI) Dr. A. S. Vidyarthi (Co-PI)	UGC	41-504/ 2012(SR) 17.07.2012	7.52	July 2012 to June 2015
8	Process Optimization for gold nanoparticle production by microorganisms	Ms. Sneha Singh (PI) Dr. A. S. Vidyarthi (Co-PI)	UGC (Minor Research Project)	41-1336/ 2012 (SR) 08.08.2012	1.5	July 2012 to June 2014
9	Molecular cloning and heterologous expression of Antheraea mylitta cocoonase	Dr. D. M. Pandey (PI) Dr. K. Mukhopadhyay (Co-PI) Collaborators: CTRTI, Ranchi	DBT	BT/PR5375/ PBD/19/ 233/ 2012 10/6/2013	14.36	
10	A RNAi approach to induce parthenocarpy in Trichosanthes dioica Roxb. by regulating phytohormones	Dr. D. Prasad	UGC BSR	01.04.2013	6.0	April 2013 to March 2016
11	Exploiting agricultural wastes for harnessing a value- added product ferulic acid	Dr. A. Sachan	DST - SERB	SERB SR/ FT/LS- 46/2012 Dt. 12/12/2012	19.4	Feb 2013 to March 2016
12	Biosynthesis of fungal secondary metabolite Lovastatin	Dr. V. K. Nigam (PI) Dr. A. S. Vidyarthi (Co-PI)	AICTE	20/AICTE/ RIFD/RPS (Policy-1) 24/2012-13 28/11/2012	10.5	Nov 2012 to Oct 2015
13	Determination of Mental Workload and Fatigue under different degrees of Mental Task	Dr. Y. Aggarwal	UGC (Start- Up)	20-5 (19) /2012 (BSR)	6.0	2013 to 2016

PROJECTS COMPLETED

SI. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Date of compl- etion of the Project
1	Functional genomics approach towards validation of biologically important consensus promoter motifs in rice (Oryza sativa L.) under submergence	Dr. D. M. Pandey (PI)	UGC	37-113/2009 (SR) Dt. 19.12.2009	12.35	July 2013
2	Production of Natural Flavour Compounds from Ferulic Acid by Microbial Transformation	Dr. S. Ghosh (Sachan) (P.I.) Dr. A. S. Vidyarthi (Co- P.I.)	UGC	37-115/2009 (SR) Dt. 19.12.2009	10.3	Jul 2013
3	The culture of local mosses for production of glycosylation enzymes for use in in vitro post translational modification of mammalian proteins expressed in prokaryotes	Dr. R. Chandra (P.I.)	UGC	37-116/ 2009 (SR) Dt. 19.12.2009	12.31	Jul 2013
4	Indigenous development of 1µm swept source optical coherence tomography (SSOCT) setup for noninvasive imaging of posterior segment of animal eye	Dr. R. Poddar (P.I.) Co-PI: Dr. P. Venkatesh [AIIMS, Delhi] Dr. P. K Barhai Dr. K. Bose	DST	June 2010 [No.IDP/MED /2010/10]	25	Sep 2013
5	Electroen- cephalogram and Electrooculogram based Hand-Eye Coordination System for Hybrid Brain- Computer Interface	Dr. Y. Aggarwal	UGC (MRP)	40-470/2011 Dt. July 2011	1.10	Jul 2013

SEMINAR / CONFERENCES / SHORT – TERM COURSES CONDUCTED BY THE DEPARTMENT/CAMPUS

SI. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses
1	One day brainstorming	Dr R. Bandopadhyay	AMI, Jharkhand	September 28,
	session on interdisciplinary	Dr R. Chandra	Chapter, and BIT	2013
	Microbiology	Dr K. Mukhopadhyay	Mesra	

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Dr S. Chandra, Dr V.K. Nigam, Dr S. Ghosh Sachan	Basic pedagogy Training Programme	TEQIP	TEQIP, BIT Mesra	BIT Mesra	Aug 23- 26, 2013
2	Ms. K. Mukherjee	International Conference on "Recent advances on Computational Drug design".	TEQIP, BIT Mesra	IISc Bangalore.	Bangalore	Sept 16- 17, 2013.
3	Dr R. Bandopadhyay, Ms. K. Mukherjee	Workshop on Software in Chemical Science Education & Research (SCR 2013)	TEQIP sponsored (In house)	Dept of Applied Chemistry, BIT	BIT Mesra	Oct 03, 2013
4	Dr. D. M. Pandey	7th International Rice Genetics Symposium-2013 (RG7)	Registration, Accommodation and Partial Travel Grant provided by RG7 Organizers	International Rice Research Institute, Manila, Philippines	Dusit Thani Hotel, Manila, Philippines	Nov 05- 08, 2013
5	Dr. D. M. Pandey	11th International Symposium on Rice Functional Genomics	Registration and Accommodation by Organizers and TA/DA from TEQIP-COE	NIPGR, New Delhi and Delhi University, South Campus, New Delhi	Grand Hotel, New Delhi, India	Nov 20- 23, 2013

6	Dr D. Prasad	"Plant signal transduction and adaptations to environmental stresses" by Prof. MARC KNIGHT Durham University, UK.	DAFNAE, University of Padova	PhD School of Bioscience and Bio- technology.	Department of Biology, University of Padova	Mar 28- Apr 14 2014
7	Ms. K. Mukherjee	Symposium on "Frontiers in Biomedical Research"	TEQIP, BIT Mesra	Department of Botany, Delhi University.	New Delhi.	Apr 14- 16, 2014
8	Dr R. Bandopadhyay	"Searching Green Technologies with the Global Patent Index and Complementary Services"	Self	West Bengal Chambers of Commerce & European Business and Technology Centre	The Park Hotel, Kolkata	May 30, 2014
9	Dr D. Prasad	Diagnosis of ultrastructural changes through fixation and embedding of biological samples for TEM investigations	DAFNAE, University of Padova	Institute for Electron Microscopy and Fine Structure Research, Graz University of Technology, Austria	Institute for Electron Microscopy and Fine Structure Research, Graz University of Technology	Jun 09- 10, 2014

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. Pandey, D. M., Editorial: Improving crop productivity using modern biotechnology methods. Journal of Advancement in Medical and Life Sciences, 2013, Vol. I-II.
- 2. Kumari, A. and Pandey, D. M., Differential gene expression analysis of some least studied transcription factors/regulators in rice during abiotic stresses. International Journal of Advanced Research, 2013, 1, 412-422.
- 3. Pandey, B., Pandey, D. M., Sharma, I. and Sharma, P., Identification of new aquaporin genes and SNP in bread wheat. Evolutionary Bioinformatics, 2013, 9, 437-452.
- 4. Wany, A., Jha, S., Nigam, V. K. and Pandey, D. M., Chemical analysis and therapeutic uses of citronella oil from Cymbopogon winterianus: A short review. International Journal of Advanced Research, 2013, 1, 504-521.

- 5. Prajapati, G. K., Kashyap, N., Kumar, A. andPandey, D. M., Identification of GCC box in the promoter region of ubiquinol cytochrome C chaperone gene using Molecular Beacon probe and its in silico protein-DNA interaction study in rice (Oryza sativa L.). Int. J. Comput. Bioinfo. In Silico Model., 2013, 2, 213-222.
- 6. Lata, S., Pandey, D. M. and Pandey, J. P., Unraveling the sequence similarities, conserve domain and 3D structure of cocoonase to gain insights into their functional integrity. Int. J. Comput. Bioinfo. In Silico Model., 2013, 2, 141-146.
- 7. Wany, A., Kumar, A., Nigam, V. K. and Pandey, D. M., Isolation and in-silico characterization of geraniol dehydrogenase encoding gene using modified DNA extraction protocol from American basil (Ocimum americanum L.). International Journal Pharmaceutical and Biological Sciences, 2013, 4, 365-379.
- 8. Arfi, T., Agarwal, A. and Nigam, V. K., Bioproduction of Nicotinic Acid. International Journal of Pharmacy & Technology, 2013, 5, 2622-2631.
- 9. Yadav, H., Gothwal, R. K., Nigam, V. K., Sinha-Roy, S. and Ghosh, P., Optimization of culture conditions for phosphate solubilization by a thermo-tolerant phosphate-solubilizing bacterium Brevibacillus sp. BISR-HY65 isolated from phosphate mines. Biocatal. Agric. Biotechnol., 2013, 2, 217-225.
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- 18. Chaudhary, N., Aggarwal, A. and Sinha, R. K., Study of Latent Early-life Associated Regulations and Automated Identification of Parkinson's Disease, International Journal of Basic and Applied Medical Sciences, 2013, 3, 87-97.
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- 22. Mukherjee, K., Pandey, D. M. and Vidyarthi, A. S., 3D structure modeling of human telomere repeat binding factor 2 and DNA-protein docking studies. British Biotechnology Journal, 2014, 4, 81-95.
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- Kumar, A., Heuer, S., Vidyarthi, A. S. and Pandey, D.M., Unraveling the regulatory role of transcription factors for enhancing the tolerance level conferred by Sub1A in rice: An in silico approach. In Proceedings of the 7th International Rice Genetics Symposium-2013 (RG7), Dusit Thani Hotel, Manila, Philippines, 2013.
- Prajapati, G. K., Kumar, A. and Pandey, D.M., Molecular Beacon probe based promoter motif detection & in silico protein-DNA interaction studies during submergence in rice (Oryza sativa L.). In proceedings of the 7th International Rice Genetics Symposium-2013 (RG7), Dusit Thani Hotel, Manila, Philippines, 2013.
- 3. Gaur, N., Banerjee, C., Mukherjee, K. and Bandopadhyay, R., Comparative genomics study of Chlamydomonas reinhardtii and Chloerella variabilis. In Proceedings of the International symposium on "Frontier discoveries and innovation in microbiology and interdisciplinary relevance" (FDMIR-2013), 54th Annual Conference of Association of Microbiologists of India (AMI), Department of Microbiology, Maharshi Dayanand University, Rohtak, Haryana, 2013.
- 4. Singh, D., Banerjee, C., Sinha, A., Nirala, D. P., Nirala, S. P. and Bandopadhyay, R., Analysis of Physico-Chemical Properties of Seeds of Jatropha curcus for Biodiesel Production. In Proceedings of the International symposium on "Frontier discoveries and innovation in microbiology and interdisciplinary relevance" (FDMIR-2013), 54th Annual Conference of Association of Microbiologists of India (AMI), Department of Microbiology, Maharshi Dayanand University, Rohtak, Haryana, 2013.
- 5. Agrawal, K., Agrawal, H., Agarwal, A., Nigam, V. and Bandopadhyay, R., Marine Bacterium as

products of extracellular Esterase and its characterization. In Proceedings of the International symposium on "Frontier discoveries and innovation in microbiology and interdisciplinary relevance" (FDMIR-2013), 54th Annual Conference of Association of Microbiologists of India (AMI), Department of Microbiology, Maharshi Dayanand University, Rohtak, Haryana, 2013.

- 6. Gupta, P., Balaji, R., Parani, M., Chandra, T. S., Shukla, P. and Bandopadhyay, R., Southern ocean bacterial community: biodiversity and characterization of culturable bacteria. In Proceedings of the International symposium on "Frontier discoveries and innovation in microbiology and interdisciplinary relevance" (FDMIR-2013), 54th Annual Conference of Association of Microbiologists of India (AMI), Department of Microbiology, Maharshi Dayanand University, Rohtak, Haryana, 2013.
- 7. Banerjee, C., Shukla, P. and Bandopadhyay, R., Study of algal biomass harvesting through cationic cassia gum, a natural plant based biopolymer. In Proceedings of the International symposium on "Frontier discoveries and innovation in microbiology and interdisciplinary relevance" (FDMIR-2013), 54th Annual Conference of Association of Microbiologists of India (AMI), Department of Microbiology, Maharshi Dayanand University, Rohtak, Haryana, 2013.
- 8. Mishra, S., Singh, S. and Sachan, A., Production of Ferulic Acid Esterase from microbial sources for release of hydroxycinnamic acids from agro-residues. In Proceedings of the International symposium on "Frontier discoveries and innovation in microbiology and interdisciplinary relevance" (FDMIR-2013), 54th Annual Conference of Association of Microbiologists of India (AMI), Department of Microbiology, Maharshi Dayanand University, Rohtak, Haryana, 2013.
- 9. Bauer, A. J., Mishra, S., Panjiar, N. and Ghosh Sachan, S., Biotransformation of p-coumaric acid to value added compounds by bacterial isolates. In Proceedings of the International symposium on "Frontier discoveries and innovation in microbiology and interdisciplinary relevance" (FDMIR-2013), 54th Annual Conference of Association of Microbiologists of India (AMI), Department of Microbiology, Maharshi Dayanand University, Rohtak, Haryana, 2013.
- 10. Dhar, R., Agarwal, A. and Nigam, V. K., Studies on the production of lovastatin from fungi. In Proceedings of the International symposium on "Frontier discoveries and innovation in microbiology and interdisciplinary relevance" (FDMIR-2013), 54th Annual Conference of Association of Microbiologists of India (AMI), Department of Microbiology, Maharshi Dayanand University, Rohtak, Haryana, 2013.
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- 12. Gupta, R., Mukherjee, K. and Singh, S., A comparative codon usage biasness study of Pseudomonas denitrificans and Pseudomonas aeuroginosa involved in gold nanoparticles synthesis. In Proceedings of the International Conference On Health, Environment & Industrial Biotechnology (Biosangam), Allahabad, Uttar Pradesh, 2013.
- 13. Dixit, S. and Nigam, V. K., Production of halophilic bacterial alkaline protease using agricultural residues. In Proceedings of the International Conference On Health, Environment & Industrial Biotechnology (Biosangam), Allahabad, Uttar Pradesh, 2013.

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- 1. Niharika, N. and Bandopadhyay, R., Cellular postal services through vesicles—control system for the transport and delivery of cellular cargo: the 2013 Nobel Prize for Physiology or Medicine. Curr. Sci., 2013, 105, 1661-1663.
- 2. Nigam, V. K., Vimal, A., Vidyarthi, A. S. and Mohan, M. K., Studies on Applicability of Alkaline Protease from Halophilic Bacteria in Detergent Formulations. Indian Journal of Applied Research, 2013, 3, 47-50.
- 3. Ramprasad, R., Chaudhary, B. and Bandopadhyay, R., Induced Pluripotent Stem Cells-A Milestone In Regenerative Medicine: 2012 Nobel Prize For Physiology or Medicine. National Academy Science Letter, 2014, 37, 203-206.
- 4. Kumari, M. and Chandra, S., A Sweet Medicinal Herb Stevia rebaudiana: Perspectives in Therapeutics. BMR Phytomedicine, 2014, 1, 1-10.
- 5. Kumari, P., Kumar, V. and Chandra, S., Synthetic Seeds: A Boon for Conservation and Exchange of Germplasm. BMR Biotechnology, 2014, 1, 1-11.

PUBLISHED IN NATIONAL PROCEEDINGS

- Dastidar, S. G., Wany, A., Kumari, A. andPandey, D.M., A preliminary study on improving flavouring acceptability of peanut oil (Arachis hypogaea L.)- In silico approach. In Proceedings of the National Symposium on "Emerging Trends in Agri-Bioinformatics" (ETAB), Directorate of Wheat Research, Karnal, Haryana, India, 2013.
- 2. Gaur, N., Banerjee, C., Mukherjee K. and Bandopadhyay, R., Comparative analysis of Tandem repeats in eight different species. In Proceedings of the 5th Indian Youth Science Congress (IYSC-2013), MS Swaminathan Research Foundation, SRM University, Rajiv Gandhi Univ and Visva Bharati, Shantiniketan, 2013.
- 3. Agrawal, K., Agrawal, H., Agarwal, A., Nigam, V. K. and Bandopadhyay, R., Estimation of esterase enzyme production from marine bacteria. In Proceedings of the 5th Indian Youth Science Congress (IYSC-2013), MS Swaminathan Research Foundation, SRM University, Rajiv Gandhi Univ and Visva Bharati, Shantiniketan, 2013.
- 4. Agarwal, H. and Bandopadhyay, R., Sequence analysis of the Antarctic and the arctic bacterial strains. In Proceedings of the 5th Indian Youth Science Congress (IYSC-2013), MS Swaminathan Research Foundation, SRM University, Rajiv Gandhi Univ and Visva Bharati, Shantiniketan, 2013.
- 5. Thakur, R. S. and Bandopadhyay, R., Sequencing Boom: The Other Face. In Proceedings of the 5th Indian Youth Science Congress (IYSC-2013), MS Swaminathan Research Foundation, SRM University, Rajiv Gandhi Univ and Visva Bharati, Shantiniketan, 2013.
- 6. Singh, D., Banerjee, C., Sinha, A., Nirala, D. P., Nirala, S. P. and Bandopadhyay, R., Analysis of Physico-Chemical Properties and Biodiesel Production from Different Accession of Jatropha curcus. In Proceedings of the 3rd National Conference on "RECENT ADVANCES IN BIO-ENERGY RESERCH", Sardar Swaran Singh- National Institute of Renewable Energy, Kapurthala, Punjab, 2013.

BOOK:

EDITED BOOKS

Agricultural Bioinformatics edited by Dr. P. B. Kavi Kishor, Dr. R. Bandopadhyay and Dr. Prashanth, Springer Verlag, Berlin, Heidelberg, New Delhi, Germany. ISBN 978-81-322-1879-1

Chapter(s) in Edited Book

- Jahangir, I., Mukesh, N., Toppo, N. N., Mandal, N.P., Tiwari, Y., Variar, M., Bandopadhyay, R., Shukla, P., Rice Informatics: An Insight to Application of Bioinformatics and Computational Statistics in Rice Improvement. In Agricultural Bioinformatics (ed. Kavi Kishor P.B., Bandopadhyay, R. and Prashanth.), Springer Verlag, Berlin, Heidelberg, New Delhi, Germany. (Accepted-due July 31, 2014).
- 2. Sinha, S., Lavanya, C., Chaudhary, R. K., and Bandopadhyay, R., Castor bean. In Future Crops (ed. Peter K. V.), DAYA Publishing House, New Delhi, 2014, pp. 179-198.
- 3. Kumari, M., Chandra, S., Stevia rebaudiana: Beyond sweetness. In Handbook of Medicinal Plants and their Bioactive Compounds, (ed. Gupta N.), Research Signpost Trivandrum, Kerala, India, 2014, pp. 11-26.
- 4. Banerjee, C., and Bandopadhyay, R., Flocculation: an approach towards Algae Harvesting. In Manual of Cryptogamic Botany. (ed. Pal R. and Ray S), Probir Chatterjee Research Foundation, Phycology Laboratory, Department of Botany, University of Calcutta, 2013, pp. 152-156.
- 5. Thakur, R. S., and Bandopadhyay, R., Role of cloud computing in bioinformatics research for handling the huge biological data. In Biology of useful plants and microbes (ed. Sen A.), Narosa Publishing House, New Delhi, India, 2013, pp. 321-329.

AWARD / RECOGNITION BESTOWED ON FACULTIES (STATE / NATIONAL / INTERNATIONAL)

Sl. No.	Name of the Faculty	Title of the Award/ Honours	Organisation	Year / Duration	
1	Dr. D. Prasad	Post Doctoral Fellowship under Research Mobility program for young researcher from India and Nepal	University of Padova, Italy	Jan-Dec 2014	
2	Dr R. Bandopadhyay	Advisor	National Academy of Sciences, India Jharkhand Chapter	2013-2014	

PATENTS (APPLIED / GRANTED)

Sl. No.	Name of the Inventor	Title of the Invention	Application / Patent No. (As applicable)	Year
1	G. Shamim, S. K. Ranjan, D. M. Pandey,K. K. Sharma and R. Ramani	Inhibition of growth in human malignant cell lines using lac dye	Applied	Dec. 2013

BOARD OF STUDIES(UG/PG)

1.	Dr. K. Mukhopadhyay	Head & Chairman
2.	Dr. Usha Jha	Member
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4.	Dr. D. M. Pandey	Member
5.	Dr. Manish Kumar	Member
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Panel of Experts from outside of the Institute: (Any One)

 Prof. P. Ghosh Executive Director, BISR, Jaipur

Dr. Adinpunya Mitra
 Associate Professor
 Dept. of Agricultural & Food Engineering
 IIT, Kharagpur, Kolkata – 700019

3. Dr. R. Ramani Director, IINRG, Namkum, Ranchi

4. Dr. Manoj Prasad Scientist V, NIPGR, New Delhi

DEPARTMENTAL ACADEMIC COMMITTEE

1	Head, Dept. of Bio-Engineering	Chairman
2	Dr. K. Mukhopadhyay, Prof., Bio-Engineering	Member
3	Dr. R. Chandra, Assoc. Prof., Bio-Engineering	Member
4	Dr. D. M. Pandey, Assoc. Prof., Bio-Engineering	Member
5	Dr. Manish Kumar, Asst. Prof., Bio-Engineering	Member
6	Dr. Raju Poddar, Asst. Prof., Bio-Engineering	Member
7	Dr. Ashish Sachan, Asst. Prof., Bio-Engineering	Member
8	Dr. S. Chandra, Asst. Prof., Bio-Engineering	Member
9	Dr. Usha Jha, Prof. & Head, Applied Chemistry	Member
10	Dr. S. Jha, Prof., Pharmaceutical Science & Technology	Member

OTHER IMPORTANT INFORMATION

AWARDS/CITATIONS RECEIVED BY STUDENTS

SI. No.	Name of the students(s)	Particulars
1	Ms. Anupama A. Sharan	i) Selected as a MITACS Globalink research intern 2014 to work under the guidance of Dr. Jerald Lalman, Department of Civil and Environmental Engineering, University of Windsor, Ontario, Canada for a period of 12 weeks.
		ii) Recipient of Cargill Global Scholarship
2	Mr. C. Banerjee	Young Scientist Award,
		Association of Microbiologist of India (AMI 2013)

STUDENTS' CONTRIBUTION IN JOURNAL

- Ms S. Sinha (B. E. Biotechnology 2009 batch) contributed in a book chapter published in Future Crops.
- Mr R. S. Thakur(M.Sc. Bioinformatics 2010 batch) contributed in a book chapter published inBiology of useful plants and microbes.
- Mr R. Ramprasad (B. E. Biotechnology 2007 batch) contributed in paper published in National Academy Science Letter, Springer.
- Ms. N. Niharika (B. E. Biotechnology 2010 batch)contributed in paper published in Current Science
- Mr D. Singh (M. Tech Biotechnology 2012 batch) made an oral presentation in 3rd National Conference on RECENT ADVANCES IN BIO-ENERGY RESERCH" Organised by Sardar Swaran Singh- National Institute of Renewable Energy, Kapurthala, Punjab, 22-24 November, 2013.

LECTURES DELIVERED BY FACULTY MEMBERS AT VARIOUS ORGANIZATIONS:

Dr. K. Mukhopadhyay

- Application of Next Generation Sequencing Techniques in crop biotechnology to harness information on microRNA, Transcription Factors and SNPs' In: Refresher Course on Life Sciences, Academic Staff College, Ranchi University, Sept 03, 2013.
- 2. Next Generation Sequencing Techniques: Application in crop biotechnology to harness information on microRNA, Transcription Factors and SNPs' In: UGC sponsored National Seminar, Ramakrishna Mission Centenary College, Rahara, WB, Sept 06, 2013.
- 3. Application of Next Generation Sequencing Techniques in crop biotechnology' at Eternal University, Baru Sahib, HP, Nov 30, 2013.

Dr R. Bandopadhyay

- In situ and ex situ conservation of Rare, Endangered & Threatened plant species with special reference to guggul in a scientific method. Awareness Workshop on Conservation of Rare, Endangered and Threatened Plant Species' on 29th March 2014. Organized by IFP, Ranchi, Jharkhand.
- 2. Virtualization and cloud computing. National Conference on Emerging Trends in Libraries & information Services (ETLIS 2014), February 22-23, 2014. Organized by Jharkhand Information & Library Association, Ranchi in association with International Research & Development Association, Library Professional Association, Lords Publishing House and Department of Information Technology, BIT, Mesra, Ranchi.
- 3. The power of young minds: Imagination, Information, Idea and Innovation. 5th Indian Youth Science Congress (IYSC-2013), Organized by MS Swaminathan Research Foundation, SRM University, Rajiv Gandhi Univ. and Visva Bharati, Shantiniketan, on December 6-9, 2013.
- 4. Flocculation: An Approach Towards Algae Harvesting. Workshop on Curriculum to Application. Organized by Department of Botany, University of Calcutta, 19-26 November, 2013.
- 5. Bioinformatics: Omics to Drug. Orientation Programme organized by Dept of Pharmaceutical Sciences, BIT, Mesra, Ranchi, July 1, 2013.

OTHER ACHIEVEMENTS BY FACULTY MEMBERS

- Dr R. Bandopadhyay was invited as panellist and invited speaker at 5th Indian Youth Science Congress (IYSC-2013), Visva Bharati, Shantiniketan, West Bengal, December 6-9, 2013.
- Dr D. M. Pandey was nominated as an Expert by AICTE, New Delhi, India for verification of Special Scholarship to J & K students, 2013.
- Dr D. M. Pandey has been nominated as Editorial Board Member for Austin Journal of Biotechnology & Bioengineering, Austin Publishing Group, New Jersey, USA
- Dr R. Bandopadhyay was selected as Executive Committee Member in All India Congress of Cytology & Genetics (AICCG) for 2014-15.

DEPARTMENT OF CHEMICAL ENGINEERING & TECHNOLOGY







18 ft Continuous Distillation Column

The Department of Chemical Engineering & Technology offers two undergraduate programmes - BE(Chemical Engineering) and B.E (Chemical Engineering –Plastics & Polymers), and two post graduate programmes - ME (Chemical Engineering) and M.E. (Polymer Engineering). This academic year Department introduced ME(Chemical Engineering) form July 2013. The Department also provides facilities for Doctoral Research in Engineering and Technology in the areas related to Chemical Engineering & Technology, Polymer Science and Engineering, Chemical Technology including Food Technology. This academic year Department got approval of Board of Studies and Technical council for Integrated 5 year MSc.(Food Technology) programme to be introduced form July 2014. The Department is a DST FIST Department, and also winner of the Gold Trophy for Plasticon Award 2012 in the category of Best Educational Institution Contributing to Plastics. Major grant of 1 Crore has been sanctioned by Ministry for Food Processing Industries for the introduction of M.Sc. (Food Technology) programme.

The undergraduate programme BE (Chemical Engineering) imparts high standard training, emphasizing on Chemical Engineering fundamentals - Heat Transfer, Mass Transfer, Fluid Mechanics, Process Control, Reaction Engineering, Computer Aided Engineering etc to groom them to carry out economic and environment friendly design, technology development and operation of a wide range of industries – Industrial chemicals, petroleum, polymers, pharmaceuticals, cement, fertilizer, fuel, processed food etc. The core curriculum is complemented by electives in the important emerging areas like NanoTechnology, BioTechnology, Molecular Simulation, Food Technology, Colloidal Science and Engineering etc.

In addition to the core chemical engineering subjects, students of BE (Chemical Engineering –Plastics & Polymers) programme are exposed to courses in Polymer Materials Technology, Polymer Processing, Polymer Product Design and Development in order to serve industries involved in polymer manufacture, polymer processing industries, polymer processing machinery manufacturing industries and advanced level research in the field of polymer science and engineering.

The M. E. (Polymer Engineering) programme aims to groom students to cater to the Research and Development need of Polymer Industries.

The Department has modern and sophisticated Laboratories and workshop facilities such as Chemical Engineering Unit Operation laboratory, Chemical Reaction Engineering, Process Control Laboratory, Fuel technology Laboratory, Synthesis Laboratory, Polymer Characterization Laboratory, Polymer Processing Workshop and Product Development Laboratory including a mould design and manufacturing facility. The facilities in the Process Control Laboratory include Trainers for Flow, Level, Pressure & Multi Process control with SCADA etc. Chemical Reaction Engineering Laboratory is equipped with Isothermal, Cascade CSTR, Isothermal Batch Reactor, Isothermal Plug Flow Reactor, computer controlled high pressure reactor etc. The Sophisticated Instrumental facilities include HPLC, Gas Chromatograph, UV-VIS Spectrophotometer, HAAKE Torque Rheometer, Haake Minilab Micro Compounder and micro injection Moulding, Rotational Rheometer, Malvern, Instron Tensile Testing machine, Dynamic Mechanical Thermal analyzer (TA). The major Polymer Engineering facilities are - Injection Moulding machines - 80 ton L&T Ergotech, Extrusion Blow moulding machine with parison programming, Kolsite Film blowing plant and PVC pipe Extrusion plant, Ultrasonic welding, FDM system Stratasys for rapid prototyping, MCP-HEK vacuum casting machine for prototyping,3 axis CNC EDM machine etc. The students are trained in various CAE applications -ASPEN Plus, Accelerys-Material Studio for molecular simulation, MATLAB, PROENGINEER, ANSYS, CATIA, FLUENT, POLYFLOW, and MOLDFLOW etc.

The research areas in the Department include Catalytic Reaction Engineering , Multiphase Flow, Polymer Composites, Alternative Energy, 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 etc. New acquisition in this year are Cyclone Separator and Tray Dryer for Unit Operation Laboratory.

Design Development and Training Centre in Plastics Engineering: Department Polymer Engineering also coordinates the activities of "Design Development and Training Centre in Plastics Engineering", a joint venture of Department of Industries, Government of Jarkhand and BIT Mesra. Services provided by the Centre are: Product Testing Facility to the Plastics Processing Industry, Consultancy and Industry-Institute Collaborative R&D, Need based Short Term Courses to the Industry in the areas of CAD, CAE, Plastics Processing machinery operation, Mould design and fabrication, Entrepreneurship in Plastics Processing, Quality Control, etc.

Centre for Food Processing Technology & Quality Control: From this academic year the Department of Chemical Engineering & Technology is coordinating the activities of Centre for Food Processing and Technology. The Centre for Food Processing & Quality control received grants from Ministry of Food Processing Industries to set up Food Processing Laboratory and Quality Control Laboratory. The Centre's objective is to create adequate Human Resources for the food processing industry and to provide testing and quality control facilities to farmers, entrepreneurs and food processing industries, and to promote entrepreneurship in Food Processing by providing consultancy, and prospective entrepreneurs an opportunity to obtain test runs of their produce and develop standard operating procedure for their products. The Centre offers 3 year Undergraduate programme B.Sc. (Food Processing Technology) and proposes to start Integrated M.Sc (Food Technology). The Food Processing Laboratory for training and product development is a registered unit under F.P.O. Act The Food Quality Control Laboratory includes Lyophilizer, Polarimeter, Microscope, Laminar flow clean Air workstation, UV-VIS Spectrophotometer, HPLC, Digital Photoflurometer, etc.

SPONSORED PROJECTS

PROJECT SANCTIONED

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Human Resource development - Creation of Infrastructure facilities for running degree / diploma course in Food Technology of National Mission on Food Processing (NMFP)-2013-17	Head of the Department	National Mission on Food Processing Directorate of Industries Govt. of Jharkhand	28.02.2014	100.00	
2	National Mission project on education through ICT under developing suitable pedagogical method for various classes intellectual calibre and research in E- Learning- Polymer Sc & Tech	Dr. S. Goswami Dr. A. K. Sen	IIT Kharagpur MHRD, Govt. of India	October 2013	7.50	2 Years
3	Development of organo- phosphorous flame retardants for epoxy and vinyl ester resin	Dr. A. K. Sen	DRDO	03.05.2014	24.955	3 Years

ONGOING PROJECTS

SI. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Development of infrastructure for Polymer blends & nanocomposite Laboratory	Dr.M. Mukherjee Dr. G. Sarkhel Dr. S. Goswami Dr. A. Choudhury	DST-FIST	31.1.11	65.0	3 Years

2	Toughening of Epoxy for PAN Carbon composite	Dr.M. Mukherjee Dr. G. Sarkhel Dr Akhil Sen Dr.G.T. Mohanraj	DRDL, Hyderabad Govt. of India	12.11.10	9.47	4 years
3	Characterization of thermal protection primer and thermal protection coating	Dr.M. Mukherjee Dr. G. Sarkhel Dr Akhil Sen Dr.G.T. Mohanraj	DRDL, Hyderabad Govt. of India	12.11.10	3.70	4 years
4	Preparation of novel Poly(m-aminophenol) /functionalised carbon nanotube nanocomposite for selective sensing of aliphatic alcohols.	PI: Dr. Arup Choudhury Co-PI: Dr. Pradip Kar	DST-SERC, Govt. of India	12.01.2012	24.95	3 years

PROJECTS COMPLETED

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Date of completion of the Project
1	Development of Non- fluorinated hybrid membrane for direct methanol fuel cell	PI-Dr. G. Sarkhel/ Co-PI-Dr. Arup Choudhury	Ministry of New and Renewable Energy Govt. of India	8.10.10	15.40	October, 2013

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Dr M. Jhansi and Ms D. Ghosh	MATLAB Training	TEQIP	BIT Mesra	BIT Mesra	June 24 - July 1, 2013
2	Dr. M.Jhasi, Dr Raghuraj, Dr. Mohanraj,	Intensive Teaching Workshop,		BIT Mesra	BIT Mesra	Aug. 17 – Dec 7 , 2013

3	Dr. M.Jhasi, Dr Raghuraj, Dr. Mohanraj, Ms D. Ghosh, Dr. S. Goswami, Dr.A.K.Sen, Mr. P. Datta Mr.M.P.Chopra, Mr.A.K.Tiwari	Basic Pedagogy Training	TEQIP	BIT Mesra		Aug. 23 -26, 2013
4	Dr. B.K.Sah	International conference on Advances in Engineering & Technology, 2014 (ICAET-2014)		Anjuman College of Engg & Tech, Nagpur	Nagpur	January 8- 9, 2014
5	Mr. J.Sudeepan	International conference on Advances in Engineering & Technology, 2014		Anjuman College of Engg & Tech	Nagpur	January 8- 9, 2014
6	Dr Raghuraja Pandiyan	6-Day DST- SERB School on Evolutionary Techniques for the Optimization of Chemical Engineering Systems	Department of Science and Technology (DST)-SERB, New Delhi	University of Petroleum and Energy Studies (UPES), Dehradun	Dehradun	March 24 – 29 , 2014
7	Mr. A.K.Tiwari and Mr S J Rahaman	Quality Management System and Internal audit as per ISO IEC17025:2005		CIPET	Bhubaneswar	April 24 -27, 2014
8	Dr S. Goswami and Dr. A.K. Sen	Short Term course on Faculty Development Programme for effective Teaching		CET, IIT Kharagpur	Kharagpur	May 15 – 17, 2014

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. Rajput, A. B., Rahaman, S. J., Sarkhel, G., Patra, M. K., Vadera, S. R. and Ghosh, N. N., Preparation, characterization and properties of flexible magnetic nanocomposites of NiFe2O4-polybenzoxazine-LLDPE. Polymer-Plastics Technol. Engg., 2013, 52, 1097–1105.
- 2. Dutta P., Guha C. and Sarkhel, G., Effect of Zn+2 poly(ethylene-co-methacrylic acid) ionomer on mechanical properties, thermal properties, morphology & process rheology of acrylonitrile styrene acrylate(asa) terpolymer. Polymer-Plastics Technol. Engg., 2014, 53, 80-89.
- 3. Ansari, F., Baboo, B., Goswami, D. N., Sarkhel, G., Coating properties of shellac modified with synthesised epoxidised-novolac resin. Pigment Resin Technol. 2014,
- 4. Dutta P., Guha C. and Sarkhel, G., Study of dynamic rheological, dynamic mechanical and creep properties of acrylonitrile styrene acrylate (asa)/zn+2 poly(ethylene-co-methacrylic acid) ionomer blend. J. Macromole. Sci. Part A: Pure Appl. Chem., 2014 (DOI:10.1080/10601325.20 14.937130).
- 5. Choudhury, A., Carboxyl-functionalized MWCNT doped poly(o-toluidine) nanohybrids: Synthesis, characterization with AC electrical and dielectric properties. Synth. Metals, 2014, 188, 13-20.
- 6. Choudhury, A., Preparation and characterization of nanocomposites of poly-p-phenylene benzobisthiazole with graphene nanosheets. RSC Advances 2014, 4 (17), 8856-8866.
- 7. Choudhury, A., Park, J.-H. and Park, S.-Y. Effect of HI-reduction of graphene oxide on electrical properties of BBL/graphene nanocomposites. Macromole. Res. 2013, 21 (11), 1254-1262.
- 8. Kar, P. and Choudhury, A., Carboxylic acid functionalized multi-walled carbon nanotube doped polyaniline for chloroform sensors. Sens. Actuators B: Chem. 2013, 183, 25-33.
- 9. Kar, P. and Choudhury, A., Electrical and dielectric properties of polyaniline doped with carboxyl-functionalized multi-walled carbon nanotube. Adv. Polym. Technol., 2013, 32 (S1), E760-E770.
- 10. Kumari, A., Sarkhel, G. and Choudhury, A., Effect of polyvinylpyrrolidone on separation performance of cellulose acetate-polysulfone blend membranes. J. Macromole. Sci. Part A: Pure Appl. Chem., 2013, 50, 1-11.
- 11. Kiran, K., Panda, A. B., Sharma, P. P., Banerjee, I. and Goswami, S., Study of drug transport phenomenon of acrylic ipns embedded with iron oxide nanoparticles. Int. J. Polym. Mater. Polym. Biomater., 2013, 62, 509-516.
- 12. Gupta, S., Basu, B., Greeshma T., Goswami, S. and Sinha, A., Stiffness and wettability-dependent myoblast cell compatibility of transparent poly (vinyl alcohol) hydrogels. J. Biomedical Mater. Res. :Part b, 2013, 101B, 346-354.
- 13. Ranjan, J., Mahato, K. and Goswami, S., Mechanical and morphological properties of vinyl ester /guar gum treated sisal fibre composites. Int. J. Eng. Res. Technol. 2013, 2, 12.
- 14. Mahato, K., Ambarkar A. and Goswami, S., Morphology and mechanical properties of sisal fibre /vinyl ester composites. Fibres and Polym. 2014, 15, 1310-1320.
- 15. Goswami, S. and Kiran, K., PMMA/PHEA Interpenetrating network embedded with iron oxide

- nanoparticles for drug delivery application. Int. J. Polym. Mater. Polym. Biomater., 2014 (DOI: 10.1080/00914037.2014.886235).
- 16. Shekhar, S., Mukherjee, M., and Sen, A.K., Synthesis and characterization of thermoresponsive terpolymer for protein separation. Int. J. Poly. Mat. Poly. Biomat. 2014, 63, 389-397.
- 17. Swain, P., Nayak, S.K., Sasmal, A., Behera, T., Barik, S.K., Swain, S.K., Mishra, S.S., Sen, A.K., Das, J.K. and Jayasankar, P. Antimicrobial activity of metal based nanoparticles against microbes associated with diseases in aquaculture. World J. Microbio. Biotechnol. 2014, 1-12.
- 18. Swain, P., Sasmal, A., Nayek, S. K., Barik, S. K., Mishra, S. S., Mohapatra, K. D., Swain, S. K., Saha, J. N., Sen, A. K. and Jayasankar, P. Evaluation of selected metal nanoparticles on hatching and survival of larvae and fry of Indian major carp, rohu (Labeo Rohita). Aquaculture Res. 2014, 1-14.
- 19. Jana, S. K., Biswas, A. B. and Das, S. K. Pressure drop in tapered bubble columns using non-Newtonian pseudoplastic liquid Experimental and ANN prediction. Can. J. Chem. Eng., 2014, 92, 578-584.
- 20. Jana, S. K., Biswas, A. B. and Das, S. K. Gas holdup in tapered bubble column using pseudoplastic non-Newtonian liquids. Korean J. Chem. Eng., 2014, 31, 574-581.
- 21. Mohanraj, G.T., Kumar, B., Castro, M. and Feller, J.F., Novel biopolyester-carbon nanotubes nanocomposite thin films for vapor sensing. Sens. & Actuators A: Phys., 2014 (Accepted Feb 2014).
- 22. Mohanraj, G.T., Celton, V., Feller, J. F. and Guegan, P., Synthesis of a novel biosourced polyester and the effect of synthetic parameters, chain extension on the molecular weight of the polyester. J. Appl. Polym. Sci., 2014 (Accepted March 2014).
- 23. Kuppusamy, R. R. P. and Neogi, S., Influence of curing agents on gelation and exotherm behaviour of an unsaturated polyester resin. Bull. Mater. Sci., 2013, 36, 1217–1224.
- 24. Kuppusamy, R. R. P. and Neogi, S., Development of resin transfer molding process using scaling down strategy. Polym Compos., 2014 (DOI: 10.1002/pc.22821).
- 25. Sudeepan, J., Kumar, K., Barman, T. K. and Sahoo, P., Study of tribological properties of ABS/CaCO3 polymer composites using Taguchi method. IOSR J. Mech. Civil Eng., 2014, 10, 38-42.
- 26. Saw, B. K., Optimization of amount of additive to relative viscosity of caol-water slury. J. Appl. Chem. 2014, 8, 58-62.
- 27. M. Jhansi L. Kishore, Dong Hyun Kim, H2 production by methanol steam reforming over copper impregnated anodized aluminum oxide (AAO), Journal of catalyst and catalysis, 1(1) 2014, 23-28.
- 28. M. Jhansi L. Kishore, Grace G. Morgan, Kevin Fennell, James A. Sullivan, Tethering of bi-nuclear complexes to SBA-15 and their application in CO2 hydrogenation, CHEMCATCHEM, 5 (4) 2013, 951-958.

PUBLISHED IN INTERNATIONAL PROCEEDINGS

 Sudeepan, J., Kumar, K., Barman, T. K., & Sahoo, P. Study of tribological properties of ABS/ CaCO3 polymer composites using Taguchi method. 1st International Conference on Advances in Engineering and Technology – 2014 organized by Anjuman college of Engineering and Technology, Nagpur, 8 – 9th Jan, 2014 (P. Id – A-248).

- 2. Sudeepan, J., Kumar, K., Barman, T. K., & Sahoo, P. Study of friction and wear properties of ABS/Kaolin polymer composites using grey relational technique. 2nd International Conference on Innovations in Automation and Mechatronics Engineering 2014 organized by GH Patel College of Engineering & Technology, Gujarat, 7 8th Mar, 2014 (P. Id 28).
- 3. Sudeepan, J., Kumar, K., Barman, T. K., & Sahoo, P. Study of friction and wear of ABS/ZnO polymer composite using Taguchi technique. 3rd International Conference on Materials Processing and Characterisation 2014 organized by Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, 8 9th Mar, 2014 (P. Id 669).
- 4. Sudeepan, J., Kumar, K., Barman, T. K., & Sahoo, P. Study of tribological behavior of ABS/CaCO3 composite using grey relational analysis. 3rd International Conference on Materials Processing and Characterisation 2014 organized by Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, 8 9th Mar, 2014 (P. Id 946).
- 5. Sudeepan, J., Kumar, K., Barman, T. K., & Sahoo, P. Tribological behavior of ABS/TiO2 polymer composite using Taguchi statistical analysis. International Conference on Advances in Manufacturing and Materials Engineering 2014 organized by NIT, Suratkal, 27 29th Mar, 2014 (P. Id MT-08).
- Sudeepan, J., Kumar, K., Barman, T. K., & Sahoo, P. Study of tribological properties of ABS/ Kaolin polymer composite using Taguchi technique. International Conference on Modeling Optimisation and Computing organized by NIU, Tamil Nadu, 10 – 11th Apr, 2014 (P. Id – 123).
- 7. Sudeepan, J., Kumar, K., Barman, T. K., & Sahoo, P. Optimization of friction and wear properties for ABS/clay polymer composite using grey relational technique. International Conference on Modeling Optimisation and Computing organized by NIU, Tamil Nadu, 10 11th Apr, 2014 (P. Id 134).
- 8. Sumit Ritolia, Swaraj Sengupta, Sudipta Goswami, Rheological, Morphological, Mechanical Properties and Solvent Vapour Permeability of PP/PVOH Blend, International Conference on Polymers: Visions and Innovations, APA-2014, February 19-21, India Habitat Centre, New Delhi, organized by Asian Polymer Association and IIT Delhi.

воок: Chapter(s) in Edited Book

Sl. No.	Author (s)	Title of Book	Title of Chapter	Publisher	Year/ Page	ISSN/ISBN
1.	Sudhir Saw, Gautam Sarkhel, and Arup Choudury	Handbook on Cellulose- based Polymer Composites: Processing, Properties and Applications	Effect of Layering Pattern on Physical, Mechanical and Acoustic Properties of Luffa/Coir Fiber Reinforced Epoxy Novolac Hybrid Composites.	Wiley Scrivener publishing LLC, USA	2014	ISBN: 978-1-118- 77357-4
2	Sudhir Saw, Gautam Sarkhel, and Arup Choudury	Natural Fibers and Composites	Effect of fiber surface modification on the properties of epoxy novolac based jute- bagasse hybrid composites	Studium Press LLC, P.O. Box – 722200, Houston TX 77072, USA	2014 (Accepted)	
3	Sudipta Goswami, Kalpna Kiran	Encyclopedia of Biomedical Polymers and Polymeric Biomaterials edited by Munmaya Mishra	Polymeric IPNs for Biomedical Application,	Taylor &Francis, Encyclopedia Program, Taylor & Francis Group, 711 Third Avenue, 8th Floor, New York, NY 10017 U.S.A.	2014	ISBN: 1439898790, 1439898796

DEPARTMENTAL STUDENTS' ACTIVITIES

Sl. No.	Name of the Activity	Students' co ordinator, if any	Date/Duration
1	Under Graduate Engineering students under took Vocational training at ONGC, TATA Steel Ltd , Eastern Railway Workshop, ONGC, NML, Guwahati Refinery, NTPC, Hindustan Copper, MECON, CSIR-NML, R & D Centre Engineers India Ltd., RDCIS-SAIL, SAIL (Bokaro), Hindalco Industries Ltd., Akzonoble India, Haldia Petrochemical Ltd, ICT, IOCL (Mathura, Panipat, Haldia, Barauni), Schenk Process India Ltd., L & T Hydrocarbon Engineering , MCC PTA India Corporation Pvt Ltd , TATA Steel, HPCL Visakh Refinery, Orient Paper Industried Ltd, CMPDI, SAIL R & D , Deepak Fertilizer & Petrochemical Corp. Ltd., Orient Cements , Bajaj Energy Pvt. Ltd. , HPCL Visakha Refinery , NTPC (M.P), MNIT , Oriplast Ltd. , Aditya Birla Chemicals India Lid. , HEC Ltd. , Usha Martin, HAL , GlaxoSmithKline, Ranchi Dairy		May-June 2014
2	BSc (Food Processing Students) went for Credited Industrial Training to Anpras Food Products Pcvt Ltd., Hector Beverages, Gurgaon, Swastik fruit products Pvt. Ltd[Franchise of Parle Agro Pvt Lts Mumbai]		December 2013 to January 2014.
3	Industrial visit to Bokaro Steel Plant for students of V Semester BE(Chemical Engg) BE(Chemical Engg-Plastics and Polymers)		October 23, 2013
4	Industrial visit to Birla Tyre Balasore, Odisha BE(Chemical Engg-Plastics and Polymers)		September 26, 2013
`5	Industrial visit to Sudha Dairy, Ormanjhi, Anpras Rice Mill Ormanjhi B.Sc (Food Processwing Technology)		October 2013
6	IIChE students chapter BIT Mesra organized "Chem-E-Boat" Competition, during Pantheon 2013 at BIT Mesra	Sovan Kr. Patra, Ezaz Dheeraj Kumar Jha	Sept. 19, 2013
7	IIChE students chapter BIT Mesra organized Essay Competition, at BIT Mesra	Sovan Kumar Patra, T K Gaurav	Jan. 10- 24,.2014
8	IIChE students chapter BIT Mesra organized "Chem-E-Hedges" competition during Bitotsav 2014, at BIT Mesra	Sovan Kumar Patra,Dheeraj Kumar Jha,Ashish Kumar , Narendra ingh,Raunak	Feb. 14, 2014
9	IIChE students chapter BIT Mesra organized Group Discussion at BIT Mesra,	Sovan Kumar Patra, Gourav Bhowmik	April 4, 2014

10	IIChE students chapter BIT Mesra organized Induction cum Valedictory Ceremony for 2013 at BIT Mesra	Sovan Kumar Patra,Dheeraj Kumar Jha,Amit Kumar, Vikram Singh, Raunak	April 15, 2014
11	IIChE students chapter BIT Mesra organized "Chem-E-Car" competition at BIT Mesra	Sovan Kumar Patra,T K Gaurav	April 18, .2014
12	Obtained 1st Prize, in Green Tech, Reflux 2.0 Annual Chemical Engg Symposium(2014) IIT Guwahati	Sovan Kumar Patra,T K Gaurav	March 29, 2014
13	Obtained 2ndPrize in Poster Presentation, Reflux 2.0 Annual Chemical Engg Symposium(2014) IIT Guwahati	Sovan Kumar Patra,T K Gaurav	Maech 30, 2014
14	2nd Prize in PDP Reflux 2.0 Annual Chemical Engg Symposium(2014) IIT Guwahati	Sovan Kumar Patra, Kshitij Gaurav	March 31 ,2014
15	1st Prize in Online quiz, Reflux 2.0 Annual Chemical Engg Symposium(2014) IIT Guwahati	Sovan Kumar Patra	March 25, 2014
16	Paper Presentation, IUMRS-ICA 2013 IISc Bangalore	Sovan Kumar Patra	Dec. 18, .2013
17	Paper Presentation, "Development of Polymeric Nano Sponge", First Symposium on Advances in Sustainable Polymers, IIT Guwahati	Gourav Bhowmik	Jan. 7, 2014
18	Poster Presentation, ICONSAT-2014 Punjab University Chandigarh	Sovan Kumar Patra	March 3, 2014

RESEARCH SCHOLAR'S ACTIVITIES

SI. No	Name of the Activity	Students' Coordinator	Date/ Duration
1	Poster presented on "Studies on Synthesis and Characterization of Epoxidised Novolac resin and the effect of their Stiochiometric ratio on their Thermomechanical, Physicochemical Properties" at IUMRS-2013, IISc, Bangalore.	Abhishek Das	Dec.16-20, 2013
2	Paper presented on "Induced Doping Effect of Multiwalled Carbon Nanotubes on Poly(maminophenol) in their Processable Conducting Composite" at IUMRS-2013, IISc, Bangalore.	Sushil Kumar Verma	Dec. 16-20, 2013
3	Doctoral thesis awarded on Development of transparent poly(vinyl alcohol) Hydrogel for Tissue Engineering	Ms Siddhhi Gupta	March 14 ,2014

BOARD OF STUDIES(UG/PG)

MEMBERS ON BOARD OF STUDIES (UG)

(a)	Head of the Department	Chairman
(b)	Prof. (Mrs.) M. Mukherjee	Member
(c)	Dr. Gautam Sarkhel	Member
(d)	Dr. (Mrs.) S. Goswami	Member
(e)	Dr. Akhil Kumar Sen	Member
(f)	Dr. G. T. Mohan Raj	Member
(g)	Dr. (Mrs.) M. Jhanshi L. Kishore	Member
(h)	Dr. A. Kumar, Head, Dept. of Mechanical Engg	Member
(i)	Dr. J. K.Prasad, Head, Dept. of Space Engg. & Rocketry	Member

Panel of External Expert from Institute

- Prof. A. K. Ghosh Centre for Polymer Science and Engineering, IIT, Delhi
- Prof. A. N. Samanta
 Dean PG and Research, Dept. of Chemical Engineering, IIT, Kharagpur
- Prof. P. Sarkar
 Dept. of Polymer Science and Technology, University of Kolkata
- Prof. Parthapratim Gupta
 Dean Research and Consultancy, Dept. of Chemical Engineering, NIT, Durgapur

Panel of External Expert from Industry

- Mr. K.K.Thakur,
 Retd. G.M., Coal and Chemicals, MECON Ranchi.
- Dr Samik Gupta
 Senior Scientist, SABIC Global research Centre, Bangalore

Members on Board of Studies (PG)

(a)	Head of the Department	Chairman
(b)	Prof. (Mrs.) M. Mukherjee	Member
(b)	Dr. Gautam Sarkhel	Member
(c)	Dr. (Mrs.) S. Goswami	Member
(d)	Dr. Akhil Kumar Sen	Member
(e)	Dr. G. T. Mohan Raj	Member
(f)	Dr. (Mrs.) M. Jhanshi L. Kishore	Member

(g) Dr. Arup Choydhury(h) Dr. (Mrs.) U. Jha(i) Dr. J. K.PrasadMember

Panel of External Expert from Institute

- Prof. A. K. Ghosh
 Centre for Polymer Science and Engineering, IIT, Delhi
- Prof. A. N. Samanta
 Dept. of Chemical Engineering, IIT, Kharagpur
- Prof. P. Sarkar
 Dept. of Polymer Science and Technology, University of Kolkata
- 4. Prof. Parthapratim Gupta
 Dean Research and Consultancy, Dept. of Chemical Engineering, NIT, Durgapur
- Prof. B. Adhikari
 Material Science Centre, IIT, Kharagpur
- Prof A.K. Datta,
 Department of Food and Agriculture Engineering
 IIT Kharagpur
- 7. Prof A.K.Chauhan. Centre for Food Science and Technology, BHU,

Panel of External Expert from Industry

- Dr. Samik Gupta,
 Sr. Scientist, SABIC Global Research Centre, Bangalore
- 2. Mr. K.K.Thakur, Retd. G.M., Coal and Chemicals, MECON Ranchi.

DEPARTMENTAL ACADEMIC COMMITTEE:

(a)	Head of the Department	Chairman
(b)	Prof. (Mrs.) M. Mukherjee	Member
(c)	Dr. Gautam Sarkhel	Member
(d)	Dr. (Mrs.) S. Goswami	Member
(e)	Dr. Akhil Kumar Sen	Member
(f)	Dr. G. T. Mohan Raj	Member
(g)	Dr.(Mrs) M. Jhanshi L. Kishore	Member
(h)	Dr. (Mrs.) U Jha	Member
(i)	Dr. L.K. Prasad	Member

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2013 - 14

OTHER IMPORTANT INFORMATION

- i) Dr.(Mrs) M. Jhanshi L. Kishore became a member of Editorial board : Journal of Catalyst & Catalysis Trends in Chemical Engineering
- ii) Dr. Siddhartha G. Chatterjee, Associate Professor Department of Paper and Bioprocess Engineering, New York, SUNY-ESF Syracuce, US, was in the Department as Visiting Professor. He took classes on Project Engineering and participated in collaborative research in July 2013
- iii) Board of Studies Meeting was held with external members to approve Integrated MSc (Food Technology) curriculum. Prof A.K.Chauhan, Centre for Food Science and Technology, BHU attended the meeting.
- iv) Department offered testing facilities especially PVC pipe testing for Minor Irrigation Department, Govt of Jharkhand, worth of Rs 4.6 lacs.

DEPARTMENT OF CHEMISTRY

The Department was established in 1955 as a support Department offering various chemistry courses for the BE programmes and other post graduate programmes.

THE DEPARTMENT CURRENTLY OFFERS FOLLOWING PROGRAMMES:

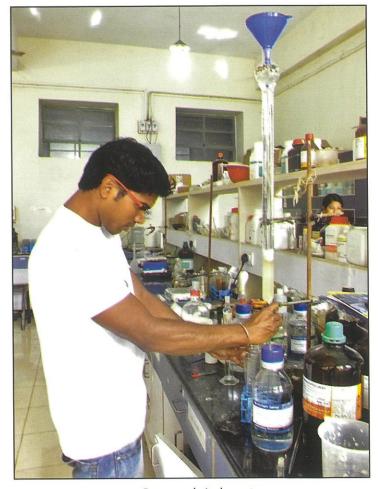
Programmes Offered	Intake
Integrated M.Sc. in Chemistry – (5-years,10- semesters)	40
M. Sc. in Applied Chemistry – (2-years, 4- semesters)	15
Ph. D. Programmes in various discipline of Chemistry and Applied Chemistry	hom to entre an

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 has also received significant funds from World Bank under TEQIP—I which has helped in creating a central Instrumentation Facility with sophisticated instruments like: ICP-AES, AAS, FTIR, GC, UV-Vis, GC-MS, HPLC, HPTLC, DSC, TGA, SEM, AFM and Electrochemical Analyzer. Through the funds obtained from UGC XIth plan the Department has developed a state of art Synthesis Lab which caters to the needs of PG students & research scholars.

The Department has quality research programs supported by UGC, DST, DBT, AICTE, CSIR, UNICEF and the World Bank. The faculty members are actively involved in research in the fields of pure and applied chemistry and have publications in high-impact journals.

The Department is actively involved in promoting environmental awareness amongst the tribal and rural population in Jharkhand and has developed as a nodal centre to answer problems related to Qualitative and Quantitative Analysis of Various Environmental Pollutants and Engineering Materials.

The Department runs a post graduate programme M.Sc. in Applied Chemistry from Session 2009. This program designed to provide an in-depth knowledge in various aspects of Applied Chemistry relevant to current educational and research prospects in Organic & Medicinal Chemistry, Environmental & Inorganic Chemistry, Materials,



Research Laboratory

Computational/Theoretical and Physical Chemistry This curriculum expands the scope of traditional chemistry courses by encouraging students to apply knowledge and skills to important societal problems (food, energy, health, environment, etc.) and by exploring new approaches to common questions about nature and life. The aim of this program is to prepare students for entry into Ph.D. programs, academics, industries and careers in R & D laboratories.

The Department has also started an Integrated M.Sc. in Chemistry programme in the year 2011. This programme lays emphasis on mastering interdisciplinary concepts. Biology, chemistry, mathematics, physics, electronics and computers are intertwined, in lectures and in labs, to achieve a dynamic understanding of a wide range of fundamental principles within the modern scientific method. The result is a community of students trained in, and dedicated to, an interdisciplinary strategy for learning, and ultimately advancing, the many directions of science. Learning the foundations of physical, mathematical and life sciences in an integrated, active-learning classroom has the effect of producing students who are well prepared for delving into diverse areas of research. In addition to meeting disciplinary learning outcomes in biology, chemistry, mathematics, physics and computers, the students develop skills in teamwork, real problem solving, and communication.

SPONSORED PROJECTS PROJECTS SANCTIONED

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in lacs)	Duration of the Project
1	Infrastructure Development Fund	Coordinator : Dr. Usha Jha	DST FIST 2012	2014	160.00	2014-17
2	"Metal Oxide Core- Shell Nanostructures as Anode Material for Lithium Ion Batteries"	Dr. Poulomi Roy	CSIR	2014	25.00	2014-17
3	Induced doping of chemically synthesized processable conducting polyphenylenediamine	Dr.Pradip Kar	DST (under fast track scheme)	27.11.2013	21.53	2014-17
4	"Cobalt Oxide — Graphene Nanocomposite as Anode Material for High Performance of Lithium Ion	Dr. Poulomi Roy	SERB-DST FASTTRACK scheme	2014	21.00	2014-17

5	Synthesis of Polysaccharide based Graft Copolymer of Cinnamic Acid and their application as Floccutant in Fruit Juice Clarification	Dr. Gautam Sen (Mentor Scientist) Pinki Pal (Woman scientist)	Woman Scientist Scheme(WOS-A) (DST)	2014	19.40	2014-17
6	Development of Polymer-Ceramic Nanocomposites with High Dielectric Constant	Dr. Barnali Dasgupta Ghosh	SERB-DST FASTTRACK scheme	2014	22.90	2014-17

ONGOING PROJECTS

Sl. No.	Project Title	PI/Co-PI/Col- laborator if any	Funding Agency	Sanctioned Amount (Rs. in Lacs)	Duration
1	Microwave based synthesis of graft copolymers of barley, its characterization and applications	Dr. S. Mishra	DST FAST Track	26.50	2012- 2015
2	Synthesis, Characterisation and reactivity study of Biologically relevant and Industrially important Coordination Complexes of Mn, Co, Ni, Cu and Zn with N, O and S donor ligands	Dr. S. Naskar	CSIR	20.00	2012- 2015
3	"Ion beam treated HAP coating on alumina for orthopaedic implants."	Dr.DeepShi- kha	DST FAST Track	17.05	2012 - 2015
4	Synthesis, characterization and redox & photo-physical study of Ruthenium dyes for Dye Sensitized Solar Cel	Dr. S. Naskar	AICTE,	20.00	2012- 2015
5	Preparation of Novel Poly(m-amino- phenol)/functionalised carbon nanotube nanocomposites selective sensing for aliphatic alcohol	CO PI: Dr. P. Kar	DST	24.85	2012-
6	Synthesis, characterization and electrochemical study of biologically active manganese complexes	Dr. S. Naskar	UGC	11.45	2012-2015
7	Synthesis and Evaluation of Carbocyclic Nucleoside Analogs with Exocyclic Double Bond as Anti-HBV HepDirect Prodrug	Dr. C. Bal	UGC	4.40	2011 - 2014
8	Microwave assisted synthesis of poly- facrylamide grafted agar, Characteriza- tions and applications as flocculant for waste water treatment	Dr.S. Mishra Dr. G. Sen	UGC	5.97	2011-

9	Deciphering the mode of antiviral action of isolated phytoconstituents and their synthetic analogues/counterparts combining structure and analogs-based approach to develop a therapeutic anti-viral candidate.	Dr. A. Sharon	DBT	11.55	2010-2013
10	Computer assisted design and synthesis of carbocyclic nucleosides as an anti-hepatitis agent	Dr. A. Sharon	UGC	5.94	2010- 2013
11	Structure Based Discovery of novel anti- viral molecules with potential to inhibit drug resistance viruses	Dr. A. Sharon	DBT	21.00	2010- 2013
12	Discovery of HepDirect Nucleotide Prodrug as Anti-Hepatitis B Agent.	Dr. C. Bal	DST	18.83	2010 - 2013
13	Winged Helix domain-oligonucleotide recognition as an axis to develop PfRIO-2 specific inhibitor: implication in anti-malarial drug development.	Dr. C. Bal	DBT	36.85	2010 - 2013
14	Preparation of Novel Poly(m-amino- phenol)/functionalised carbon nanotube nanocomposites selective sensing for aliphatic alcohol	CO PI: Dr. P. Kar	DST	24.85	2012- 2015

PROJECTS COMPLETED

SI. No.	Principal Investigator	Year (Date of Starting)	Funding Agency	Project Title and Sanction number	Amount received (Rs. in lacs)
1	Dr. Ashoke Sharon	2009	DST	The target based discovery of carbocyclic nucleosides as an anti-HCV agent through computer assisted drug design and synthesis	17.03
2	Dr. Ashoke Sharon	2010	DBT	Deciphering the mode of antiviral action of isolated phytoconstituents and their synthetic analogues/counterparts combining structure and analogs-based approach to develop a therapeutic antiviral candidate.	11.55
3	Dr. Ashoke Sharon	2010	DBT	Structure Based Discovery of novel antiviral molecules with potential to inhibit drug resistance viruses	21.00
4	Dr. Ashoke Sharon	2010	UGC	Computer assisted design and synthesis of carbocyclic nucleosides as an antihepatitis agent	5.94

5	Dr. Chandralata Bal	2010	DST	Discovery of HepDirect Nucleotide Prodrug as Anti-Hepatitis B Agent. (SR/ FT/CS-069/2009)	18.83
6	Dr. Chandralata Bal	2010	DBT	Winged Helix domain-oligonucleotide recognition as an axis to develop PfRIO-2 specific inhibitor: implication in anti-malarial drug development.(BT/41/NE/TBP/2010)	36.85
7	Dr. Chandralata Bal	2011	UGC	Synthesis and Evaluation of Carbocyclic Nucleoside Analogs with Exocyclic Double Bond as Anti-HBV HepDirect Prodrug	

SEMINAR / CONFERENCES / SHORT – TERM COURSES CONDUCTED BY THE DEPARTMENT

SI. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short - term Courses
1	Software in Chemical Science Education and Research (SCR 2013)	Dr. A. Sharon	TEQIP	Oct. 3, 2013

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the faculty	Topic of Conference / Symposia / Workshop attended	Duration of Conference / Symposia / Workshop
1	Dr. A. Sharon	International Conference on Antiviral Research, Raleigh, NC, USA	May 12-16, 2014
2	Dr. C. Bal	International Conference on Antiviral Research, Raleigh, NC, USA	May 12-16, 2014

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- In-situ generation of a high-performance Pd-polypyrrole composite with multifunctional catalytic properties Meenakshi Choudhary, Rafique Ul Islam, M. J Witcomb, Kaushik Mallick, Dalton Transaction, 2014, 43, 6396-6405. DOI: 10.1039/C3DT53567C
- 2. Single step bottom-up approach for the synthesis of polymer stabilized palladium nanoparticles for chemoselective transfer hydrogenation of α , β -unsaturated carbonyls, S. K. Mahato, Rafique UI Islam, C. Acharya, M. J. Witcomb,K. Mallick, Chemcatchem, 2014, 6, 1419-1426.; DOI: 10.1002/cctc.201300985;
- 3. G. Usha Rani, Ananda Kumar Konreddy, Sumit Mishra, Gautam Sen, Synthesis and applications of polyacrylamide grafted agar as a matrix, for controlled drug release of 5-ASA International Journal of Biological Macromolecules 65 (2014) 375–382.
- 4. D.Mahto, Priti Rani, Sumit Mishra, Gautam Sen: Microwave assisted synthesis of polyacrylamide

- grafted soya peptone and its application as water soluble adhesive. Industrial Crop and Products2014,58,251-258,
- 5. Gautam Sen, Sumit Mishra, Kartick Prasad Dey, Srijita Bharti: Synthesis and applications of novel polyacrylamide grafted barley. Journal of Applied Polymer Science DOI:10.1002/app.41046(in press, available online).
- 6. Bag, P.; Ojha, D.; Mukherjee, H.; Halder, U. C.; Mondal, S.; Biswas, A.; Sharon, A.; Kaer, L. V.; Chakrabarty, S.; Das, G.; Mitra, D.; Chattopadhyay, D. A dihydro-pyrido-indole potently inhibits HSV-1 infection by interfering the viral immediate early transcriptional events, Antiviral Research, 2014, 105, 126-134.
- 7. Karampuri, S.; Bag, P.; Chakravarty, H.; Bal, C.; Chattopadhyay, D.; Sharon, A. Anti-HSV activity and mode of action study of α -pyrone carboxamides. RSC Adv., 2014, 4, 17354-63.
- 8. Konreddy, A. K.; Toyama, M.; Ito, W.; Bal, C.; Baba, M.; Sharon, A. Synthesis and Anti-HCV Activity of 4-Hydroxyamino α-Pyranone Carboxamide Analogs. ACS Med. Chem. Lett., 2014, 5, 259-263.
- 9. P. K. Maji, Rafique Ul Islam, S. K. Bera,: Recent Progress in Metal Assisted Multicomponent Syntheses of Heterocycles, Heterocycles 2014, 89, 869-962 DOI: 10.3987/REV-13-781; 2013
- M. Choudhary; S. Shukla, Sudheesh; Rafique Ul Islam, M. J. Witcomb, C. Holzapfel, K. Mallick"Polymerization Assisted Reduction Reaction: A Sequential Electron-Proton-Transfer (EPT) Reaction Catalyzed by Gold Nanoparticle", Journal of Physical Chemistry C, 2013, 117, 23009–23016; DOI: 10.1021/jp408456c
- 11. M. Choudhary, Rafique Ul Islam, M. J Witcomb, M. Phali, K. Mallick, Template-less synthesis of polymer hollow spheres: An efficient catalyst for Suzuki coupling reaction; Applied Organomet. Chem. 2013, 27, 523-528. DOI: 10.1002/aoc.3024,
- 12. Rafique Ul Islam, S. K. Mahato, S. K. Shukla, M. J. Witcomb, K. Mallick, Palladium-poly-(3-aminoquinoline) hollow-sphere composite: Application in Sonogashira coupling reactions ChemCatChem, 2013, 5, 2453-2461. DOI: 10.1002/cctc.201300131
- 13. Alisha Sewbalas, Rafique Ul Islam, Willem A.L. van Otterlo, Charles B. de Koning, Moganavelli Singh, Patrick Arbuthnot, Mario Ariatti Enhancement of transfection activity in HEK293 cells by lipoplexes containing cholesteryl nitrogen-pivoted aza-crown ethers; Medicinal Chemistry Research, 2013, 22, 2561-2569. DOI: 10.1007/s00044-012-0252-2
- 14. Rahul, R.; Jha, U.; Sen, G.; Mishra, S., Carboxymethyl inulin: A novel flocculant for wastewater treatment. International journal of biological macromolecules 2014, 63, 1-7.
- 15. Banerjee, C.; Ghosh, S.; Sen, G.; Mishra, S.; Shukla, P.; Bandopadhyay, R., Study of algal biomass harvesting through cationic cassia gum, a natural plant based biopolymer. Bioresource technology 2014, 151, 6-11.
- 16. Rahul, R.; Jha, U.; Sen, G.; Mishra, S., A novel polymeric flocculant based on polyacrylamide grafted Inuline: Aqueous Microwave assisted synthesis, Carbohydrate Polymer 2014, 99, 11-21.
- 17. Sinha, S.; Mishra, S.; Sen, G., Microwave initiated synthesis of polyacrylamide grafted casein (CAS-g-PAM)--its application as a flocculant. International journal of biological macromolecules 2013, 60, 141-7.
- 18. Sen, G.; Rani, G. U.; Mishra, S., Microwave assisted synthesis of poly (2-hydroxyethylmethacrylate) grafted agar (Ag-gP (HEMA)) and its application as a flocculant for wastewater treatment. Frontiers of Chemical Science and Engineering 2013, 7, 312-321.

- 19. Rani, P.; Mishra, S.; Sen, G., Microwave based synthesis of polymethyl methacrylate grafted sodium alginate: its application as flocculant. Carbohydrate polymers 2013, 91, 686-92.
- 20. Rani, G. U.; Mishra, S.; Pathak, G.; Jha, U.; Sen, G., Synthesis and applications of poly(2-hydroxyethylmethacrylate) grafted agar: a microwave based approach. International journal of biological macromolecules 2013, 61, 276-84.
- 21. Parveen, A.; Chakraborty, A.; Konreddy, A. K.; Chakravarty, H.; Sharon, A.; Trivedi, V.; Bal, C., Skeletal hybridization and PfRIO-2 kinase modeling for synthesis of alpha-pyrone analogs as anti-malarial agent. European journal of medicinal chemistry 2013, 70C, 607-612.
- 22. Kumar, R.; Sharma, K.; Tiwary, K.; Sen, G., Polymethacrylic acid grafted psyllium (Psy-g-PMA): a novel material for waste water treatment. Applied Water Science 2013, 3, 285-291.
- 23. Kumar, A.; Chakravarty, H.; Bal, N. C.; Balaraju, T.; Jena, N.; Misra, G.; Bal, C.; Pieroni, E.; Periasamy, M.; Sharon, A., Identification of calcium binding sites on calsequestrin 1 and their implications for polymerization. Molecular bioSystems 2013, 9, 1949-57.
- 24. Kasula, M.; Balaraju, T.; Toyama, M.; Thiyagarajan, A.; Bal, C.; Baba, M.; Sharon, A., A Conformational Mimetic Approach for the Synthesis of Carbocyclic Nucleosides as Anti-HCV Leads. ChemMedChem 2013, 8, 1673-1680.
- 25. Karak, M.; Bal, N. C.; Bal, C.; Sharon, A., Targeting peroxisome proliferator-activated receptor gamma for generation of antidiabetic drug. Current diabetes reviews 2013, 9, 275-85.
- 26. Chouhan, D. K.; Sharon, A.; Bal, C., Molecular and structural insight into plasmodium falciparum RIO2 kinase. Journal of molecular modeling 2013, 19, 485-96.
- 27. Bharti, S.; Mishra, S.; Sen, G., Ceric ion initiated synthesis of polyacrylamide grafted oatmeal: Its application as flocculant for wastewater treatment. Carbohydrate polymers 2013, 93, 528-36.
- 28. Banerjee, C.; Ghosh, S.; Sen, G.; Mishra, S.; Shukla, P.; Bandopadhyay, R., Study of algal biomass harvesting using cationic guar gum from the natural plant source as flocculant. Carbohydrate polymers 2013, 92, 675-81.
- 29. Bag, P.; Ojha, D.; Mukherjee, H.; Halder, U. C.; Mondal, S.; Chandra, N. S.; Nandi, S.; Sharon, A.; Sarkar, M. C.; Chakrabarti, S.; Chattopadhyay, D., An Indole Alkaloid from a Tribal Folklore Inhibits Immediate Early Event in HSV-2 Infected Cells with Therapeutic Efficacy in Vaginally Infected Mice. PloS one 2013, 8, e77937.
- 30. Parveen, A.; Chakraborty, A.; Konreddy, A. K.; Chakravarty, H.; Sharon, A.; Trivedi, V.; Bal, C. Skeletal hybridization and PfRIO-2 kinase modeling for synthesis of alpha-pyrone analogs as anti-malarial agent. Eur J Med Chem, 2013, 70, 607-12.
- 31. Nag, S.; Chouhan, D. K.; Balaji, S. N.; Chakraborty, A.; Lhouvum, K.; Bal, C.; Sharon, A.; Trivedi, V. Comprehensive screening of heterocyclic compound libraries to identify novel inhibitors for PfRIO-2 kinase through docking and substrate competition studies. Medicinal Chemistry Research, 2013, 22, 4737-4744.
- 32. Kumar, A.; Chakravarty, H.; Bal, N. C.; Balaraju, T.; Jena, N.; Misra, G.; Bal, C.; Pieroni, E.; Periasamy, M.; Sharon, A. Identification of calcium binding sites on calsequestrin 1 and their implications for polymerization. Molecular Biosystems, 2013, 9, 1949-1957.
- 33. Kasula, M.; Balaraju, T.; Toyama, M.; Thiyagarajan, A.; Bal, C.; Baba, M.; Sharon, A. A Conformational Mimetic Approach for the Synthesis of Carbocyclic Nucleosides as Anti-HCV Leads. ChemMedChem, 2013, 8, 1673-1680.

- 34. Karak, M.; Bal, N. C.; Bal, C.; Sharon, A. Targeting peroxisome proliferator-activated receptor gamma for generation of antidiabetic drug. Current diabetes reviews, 2013, 9, 275-85.
- 35. Chouhan, D. K.; Sharon, A.; Bal, C. Molecular and structural insight into plasmodium falciparum RIO2 kinase. Journal of Molecular Modeling, 2013, 19, 485-496.
- 36. Balaraju, T.; Kumar, A.; Bal, C.; Chattopadhyay, D.; Jena, N.; Bal, N. C.; Sharon, A. Aromatic interaction profile to understand the molecular basis of raltegravir resistance. Structural Chemistry, 2013, 24, 1499-1512.
- 37. Bag, P.; Ojha, D.; Mukherjee, H.; Halder, U. C.; Mondal, S.; Chandra, N. S.; Nandi, S.; Sharon, A.; Sarkar, M. C.; Chakrabarti, S.; Chattopadhyay, D. An indole alkaloid from a tribal folklore inhibits immediate early event in HSV-2 infected cells with therapeutic efficacy in vaginally infected mice. Plos One 2013, 8, e77937.

AWARD / RECOGNITION BESTOWED ON FACULTIES (STATE / NATIONAL / INTERNATIONAL

Si. No.	Name of the Faculty	Title of the Award/ Honours	Organisation	Year / Duration
1	Dr. Rafique Ul Ishlam	Postdoctoral Fellow	University of Johannesburg South Africa	September 2012 – December 2013

PATENTS (APPLIED / GRANTED)

SI. No.	Name of the Inventor	Title of the Invention	Application / Patent No. (As applicable)	Year
1.	Dr. Ashoke Sharon, Dr. Chandralata Bal, Prof. Masanori Baba and Mr. Ananda K Konreddy	Novel pyranone carboxamide derivative and use thereof as Anti-Hepatitis C Virus drug	Number: 2013-148716 Japanese Patent with Kagoshima University, Japan	July 17, 2013
2.	Dr. Ashoke Sharon, Dr. Chandralata Bal, Prof. Masanori Baba, Mr. Takayuki Hamazaki, Dr. Anandarajan T. and Mr. Mohan Kasula	Anti-Hepatitis B Virus drug	Number: 2013-254236 Japanese Patent with Kagoshima University, Japan	Dec 9, 2013
3.	Dr. Ashoke Sharon, Dr. Chandralata Bal, Prof. Masanori Baba, Mr. Takayuki Hamazaki, Dr. Anandarajan T. and Mr. Mohan Kasula	Anti-Hepatitis B Virus drug	Number: 2013-254238 Japanese Patent with Kagoshima University, Japan	Dec 9, 2013
4	R.Rahul, R.Jha, Dr.U. Jha	Polysaccharides in fluoride removal	Provisional Patent filed, Application No. 718/KOL/2013	2013

BOARD OF STUDIES(UG/PG)

I. Dr. J.P. Pandey, Associate Professor & Head : Chairman

II. Dr.Usha Jha, Professor : Member

III. Dr.Ashoke Sharon, Assistant Professor : Member

IV. Dr.Sumit Mishra, Assistant Professor : Member

Member V. Dr. Deepshikha, Assistant Professor Member VI. Dr.Rafique-ul-Islam, Assistant Professor Member VII. Dr. S. Naskar, Assistant Professor Member VIII. Mr. Rahul, Assistant Professor Member Dr. Mandira Mukherjee Professor (Chemical & Polymer Engg.) IX. Member X. Dr. P. C. Joshi, Professor (Space Engineering & Rocketry)

DEPARTMENTAL ACADEMIC COMMITTEE:

Chairman ١. Dr. J.P. Pandey, Associate Professor & Head Member 11. Dr. Usha Jha, Professor Member Dr. Ashoke Sharon, Assistant Professor III. Member IV. Dr. Sumit Mishra, Assistant Professor Member V. Dr. Deepshikha, Assistant Professor Member VI. Dr. Rafique-ul-Islam, Assistant Professor Member VII. Dr. S. Naskar, Assistant Professor Member VIII. Dr. C. Bal, Assistant Professor VII. Dr. D.Sasmal, Professor, Dept. of Pharm. Sc.&Tech. Member VIII. Dr. P.C.Joshi, Professor (Space Engineering & Rocketry) Member

OTHER IMPORTANT INFORMATION

Sl. No.	Name of Student	Name of Guide (s)	Award/Recognition
1.	Dr. Sumita Hazra	Dr. Usha Jha (Mentor)	UGC-D.S.Kothari -Fellowship (2013-2016)
2.	Ms. Harapriya Chakravarty	Dr. A. Sharon	Italian Government Scholarship 2013- 2014
3.	Mr. Mohan Kasula	Dr. A. Sharon and Dr. C. Bal	Italian Government Scholarship 2014- 2015
4.	Mr. Ananda K Konreddy	Dr. A. Sharon and Dr. C. Bal	Postdoctoral Research Fellowship 2014- 2015, University of Georgia, GA, USA

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING



Model of Wooden Bridge

The Department of Civil Engineering was established in the year 1957. It is one of the oldest Departments and has the infrastructure and facilities to match with the very best in the country. It has all the ingredients for imparting necessary knowledge in providing better quality of life. The range includes topics of general nature and service to mankind. Buildings, Roads and Highways, Railways, Tunnels and Bridges, Dams and Canals, Docks and Harbours, Airports, Water Supply and Drainage works, Tower Structures and Skyscrapers. The Civil Engineering discipline offers wide scope to students in terms of promising career opportunities and professional advancement.

The Environmental Science & Engineering Group (ESEG), established in the year 2002 has emerged as a potential centre in the field of environment through its dedicated involvement and quality contribution towards education, research & professional services. The Institute had been identified as a State Referral Institute and an MoU was entered between Drinking Water and Sanitation Department, Government of Jharkhand and BIT, Mesra for community based National rural drinking water quality monitoring & surveillance programme. The Alumni of the Department are well placed in research positions and jobs in various government and private organisations.

In May 2014 Department of Civil Engineering and Environmental Science & Engineering group has been merged together and is presently known as Department of Civil and Environmental Engineering. Currently the Department offers full time M. E in Soil Mechanics and Foundation Engineering, M.E. in Structural Engineering and M-Tech in Environmental science & Engineering and PhD Programmes in various disciplines of Civil and Environmental Science and Engineering.

SPONSORED PROJECTS

PROJECT SANCTIONED

SI. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount	Duration of the Project
1	Development of Drought	CoPI: Dr.Kirti	IWMI,	May 2014	9600 USD	May 2014-
	Management products for	Avishek	Sri Lanka			April 2015
	Maharashtra and Bihar		***************************************			

ONGOING PROJECTS

SI. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
<u>1</u>	Integrated Watershed management program- Kanke	Project Director: Prof. Gopal Pathak	Ministry of Rural develope- ment	2011	594.00	5 years
2	Development of guidelines to predict distance between toe of the Shovel-dumper-dump and Dragline Dump with consideration of safety and economical design of both shovel-dumper dump and dragline dump	Dr. Indrajit Roy	CIL R&D	6th August 2013	27.13	3 Years
3	Slope Stability Study of Gare-Pelma-II	Dr. Indrajit Roy	LANCO, INDIA	April 2013	2.50	1 year
4	Slope stability study of western quarry and Barrier, Umrer OCP	Dr. Indrajit Roy	WCL	Dec, 2013	5.81	3 years
5	Behaviour of piled raft foundations in layered soils under eccentric vertical loading	PI: Dr. Siddhartha Sengupta	DST	August 2012	8.10	Sept. 2012 -Aug 2015
6	Interference of two closely spaced strip footings carrying eccentric loads in sand	PI: Dr. Siddhartha Sengupta	CSIR	February 2013	6.10	May 2013 – May 2016

7	Geostatistical Analysis and Mapping of Ground Level Ozone in an Urban Area In India: A Case Study of Ranchi City	PI: Dr. Amit Kumar Gorai	DST	July, 2012	20.30	3 years
8	Operational and Management Strategic Plan for Jharkhand Rural Piped water supply projects	PI: Dr. Kirti Avishek	ENV DAS, Lucknow	Feb, 2014	5.70	Feb 2014- September 2014
9	Evaluating the spatial and temporal variations in groundwater quality around municipal solid wastes dumping site in Ranchi and developing a solute transport mode	PI: Dr. R. Naresh Kumar	UGC	April, 2013	11.46	3 years
10	Arsenic enrichment in agricultural soils with potential impacts on crops and food security of Sahibganj, Jharkhand, India	PI: Dr. Sukalyan Chakraborty	DST	Oct, 2013	19.00	3 years
11	Environmental Consequences and Reclamation Options for coal mining Activities in Charhi & Kuju of Jharkhand,India.	PI: Dr. Sukalyan Chakraborty	UGC	March, 2014	6.00	2 years

PROJECTS COMPLETED

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Date of completion of the Project
1	Environmental Impact Assessment on drinking water supply schemes of Jharkhand	PI: Gopal Pathak CoPI: Kirti Avishek	ENV DAS	Jan 2013	2.50	August 2013
2	Development of guidelines for safe dragline dump profile under varying geoengineering conditions in open cast coal mines of India.	Dr. Indrajit Roy	CIL R & D	Jan 2010	59.00	July, 2013

3	Slope Stability Study of OB Dumps of Gondegaon OCP.	Dr. Indrajit Roy	Western Coalfield Limited	Dec 2011	3.50	December, 2013
4	Slope Stability Study of OB Dumps of Ukni OCP.	Dr. Indrajit Roy	Western Coalfield Limited	Dec 2011	3.50	December, 2013
5	Slope Stability Study of OB Dumps of Chinda OCP.	Dr. Indrajit Roy	Western Coalfield Limited	August 2012	3.50	August, 2013
6	Slope Stability Study of Surkha (North) lignite mines.	Dr. Indrajit Roy	GMDC	May 2013	5.00	August, 2013

SEMINAR / CONFERENCES / SHORT – TERM COURSES CONDUCTED BY THE DEPARTMENT/CAMPUS

Sl. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short - term Courses
1	Guest Lecture on "Recent Advances in Civil and Environmental Engineering" by Prof. ShyamSundar Rao (Purdue University, USA)	Prof. Gopal Pathak	BIT, Mesra	May 17, 2014
2	Lecture by Mr. Ben Sakkerkelly (First Officer, Education Department), Australian High Commission, New Delhi.	Dr. Sukalyan Chakraborty	BIT, Mesra	May 18, 2014

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Dr. Gopal Pathak	Eneregy Seminar "Nuclear Fuel cycle Vs carbon cycle"	Stanford centre for Sustainable developement and global competitiveness	Stanford University	California, USA	June 2, 2014
2	Dr. Gopal Pathak	Water and the Future of Membrane Technology	Stanford centre for Sustainable developement and global competitiveness	Stanford University	California, USA	June 3, 2014

3	Dr. Anand	Summit	Tata	TCS	Hyderabad	Nov. 22-
	Kumar Sinha	for Vice	Consultancy			23, 2013
		Chancellors	Services			
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	A CONTRACTOR OF THE CONTRACTOR	on Äcademic				
	Tremstand	Interface				
		program"				
		Sangam - 2013				
4	Dr. Anand	Training	Indian Academy	IAHE,	Noida	Dec. 23-
	Kumar Sinha	Programme on	of Highway	Taranta Avonenta Av		27, 2013
		"Scrutiny of	Engineers			
	es ex-commodern	DPRs of Roads				
	чаларооринанта	and bridges for New STAs.				
5	Dr. Anand	Workshop on	IIT,	l IIT,	Bhubaneswar	Feb. 14-
	Kumar Sinha	Application	Bhubaneswar	Bhubaneswar	Dirabaneswar	15, 2014
		of Non		and National		10, 101.
	NA CONTINUE VA AND	conventional		Rural Roads		
	and a service	materials and		Developement		
		technologies		Agency		
		in rural roads				
6	Dr. Anand	2nd world	NBA	NBA	New Delhi	March
	Kumar Sinha	summit on				8-10, 2014
		accredition				
7	Dr. Anand	Quality	Engineer Staff	Engineer	Hyderabad	June 9-11,
	Kumar Sinha	initiatives	college of India,	Staff college		2014
***************************************		in Technical	Hyderabad	of India,		
		and higher		Hyderabad		
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Antonia		with NBA				
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8	Dr. Arun	Workshop on	IIT,	IIT,	Bhubaneswar	Feb. 14-
	Kumar	Application	Bhubaneswar	Bhubaneswar		15, 2014
		of Non		and National		,
		conventional		Rural Roads		
		materials and		Developement		
		technologies		Agency		
		in rural roads				

9	Dr. Bindhu lal	Workshop on Application of Non conventional materials and technologies in rural roads	IIT, Bhubaneswar	IIT, Bhubaneswar and National Rural Roads Developement Agency	Bhubaneswar	Feb.14-15, 2014
10	Dr. Jitu Kujur	Five days training programme on "Bridge Diagonostics, Performance Evaluation and Rehabilitaion" organized by, during	CSIR-CRRI	CSIR-CRRI	New Delhi	June 16- 20, 2014.
11	Kirti Avishek	ISO 14000 Lead Auditor course.	TEQIP, BIT, Mesra	BSI, India	Mumbai	Jul.19-23 , 2013
10	Kirti Avishek	International Workshop on S&T in Developing countries.	Chinese Academy of Sciences	CAS, Beijing	Beijing	Nov.3-24,. 2013
12	Dr. Tanushree Bhattacharya	4 weeks 77th UGC Orientation Programme, UGC Academic Science College	UGC	UGC Academic Science College, Ranchi	Academic Science College, Ranchi	March 10- 6 ,2014
13	Dr. Tanushree Bhattacharya	Eleventh Distance Learning Program on "Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite Systems"	EDUSAT, IIRS, Dehradun	EDUSAT and Department of Remote sensing, BIT, Mesra	BIT, Mesra	Aug,2013- October, 2013

14	Dr. Sukalyan Chakraborty	Eleventh Distance Learning Program on "Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite	EDUSAT, IIRS, Dehradun	EDUSAT and Department of Remote sensing, BIT, Mesra	BIT, Mesra	Aug,2013- October, 2013
		Satellite Systems"				

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. Srivastava Anamika, Pathak Gopal, Efficiency of DHR as a biosorption of arsenic. International Research Journal of Environment Science, 2013, Vol. 2(10), 71-76.
- 2. Singh, B. K. and Sinha, A. K. "Drag Force in Open Channel", International Journal of Civil Engineering, 2014, Vol. 3, Issue 2, 83-102, published by International Academy of Science, Engineering and Technology, Chennai, Tamil Nadu.
- 3. Singh, B. K. and Sinha, A. K. "Friction Factor in Open Channel", International Journal of Civil Engineering, 2014, Vol. 3, Issue 3, 19-38, published by International Academy of Science, Engineering and Technology, Chennai, Tamil Nadu.
- 4. Singh, B. K. and Sinha, A. K. "Surface Friction in Open Channel", International Journal of Civil Engineering, 2014,Vol. 3, Issue 3, 39-54, published by International Academy of Science, Engineering and Technology, Chennai, Tamil Nadu.
- 5. Singh, B. K. and Sinha, A. K. "Large Scale Roughness", International Journal of Civil Engineering, 2014, Vol. 3, Issue 3, 123-138, published by International Academy of Science, Engineering and Technology, Chennai, Tamil Nadu.
- 6. Sengupt, S., Sharma S. and Roy I. "Investigation of shear strength parameters of highwall rock slopes and overburden dump mass in opencast coal mines"; IJEMHS; International Journal of Engineering, Management, Humanities and Social Science Paradigms, April 2014, Vol 06, Issue 01, ISSN No. 2347-601X.
- 7. Wu, L., Avishek, K., Restoring the Ecological Foundation for Food Security A Soil Organic Matter Perspective. UNEP Policy Series. Policy Brief 12-2013.
- 8. Gorai, A. K., Tuluri, F., Tchounwou, P. B., Ambinakudige, S.,Influence of local meteorology and NO2 conditions on ground level ozone concentration in eastern part of Texas, USA, 2014, Air Quality, Atmosphere and Health, Springer.doi:10.1007/s11869-014-0276-5.
- 9. Gorai, A. K., Tuluri, F., Tchounwou, P. B., A GIS Based Approach for Assessing the Association

- between Air Pollution and Asthma in New York State, USA. International Journal of Environmental Research and Public Health, 2014, 11, 4845-4869; doi:10.3390/ijerph110504845.
- 10. Gorai, A. K., Kanchan, Upadhyay, A., Goyal, P., Development of fuzzy synthetic evaluation coupled AHP model for air quality assessment in Taj trapezium Zone, Uttar Pradesh, India, Environment System and Decisions, 2014, 34(2). DOI 10.1007/s10669-014-9505-6.
- 11. Upadhyay, A., Kanchan, Goyal, P., Yerramilli, A., Gorai, A. K., Development of fuzzy pattern recognition model for air quality assessment of Howrah City. Aerosol & Air Quality Research, 2014, doi: 10.4209/aagr.2013.04.0118.
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- 13. Rajeev, S., Gorai, A. K., and Segaran, R.G. Characterization of LD Slag of Bokaro Steel Plant and its Feasibility Study of Manufacturing Commercial 'Fly Ash LD Slag' Bricks, International Journal of Environmental Technology and Management, 2013, Vol. 16., No. ½, pp.129-145.
- 14. Paul, K., Dutta, A.and Krishna, A.P., A Comprehensive Study on Landfill Site Selection for Kolkata City. Journal of the Air & Waste Management Association (Taylor & Francis), 2014, DOI: 10.1080/10962247.2014.896834.
- 15. Naresh Kumar, R., McCullough, C.D. and Lund, M.A., Upper and lower concentration thresholds for bulk organic substrates in bioremediation of acid mine drainage. Mine Water and the Environment, 2013, Vol.32, pp. 285–292.
- 16. Jonstrup, M., Naresh Kumar, R., B. Guieysse, B. Mattiasson and M. Murto, Decolourisation of textile dyes by Bjerkandera sp. BOL 13 using biomass as carbon source. Journal of Chemical Technology and Biotechnology, 2013, Vol. 88, 388–394.
- 17. Chakraborty, S., Alam, M.O., Bhattacharya T., Singh, Y.N., Arsenic accumulation in food crops: A potential threat in Bengal Delta Plain. Water Quality Exposure and Health, 2014, DOI 10.1007/s12403-014-0122-x.
- 18. Chakraborty, S., Bhattacharya, T., Singh, G., Maity, J.P., Studies on benthic macroalgae as biological indicator of heavy metal pollution in marine environment: A Biomonitoring, approach for pollution assessment. Ecotoxicology and Environmental Safety, 2014, 100, 61–68.
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- 21. Tirkey,P., Bhattacharya,T., Chakraborty,S., Water quality indices- important tools for water quality assessment: a review. International Journal of Advances in Chemistry (IJAC),2013, Vol.1, No.1, November, 15-28, Wireilla Scientific Publication, Australia, Indexed.
- 22. Bhattacharya, T., Chakraborty, S., Tuteja, D., Patel, M., Zinc and Chromium Load in Road Dust,

- Suspended Particulate Matter and Foliar Dust Deposits of Anand City, Gujarat. Open journal of metal, 2013, 3, 42-50.
- 23. Bhattacharya,T., Kriplani,L., Chakraborty,S., Seasonal Variation in Air Pollution Tolerance Index of various plant species of Baroda City. Universal Journal of Environmental Research and Technology,2013,Vol.3, issue 2, 199-208.
- 24. P. Tirkey, A. K. Gorai, J. Iqbal, AHP-GIS based DRASTIC Model for Groundwater Vulnerability to Pollution Assessment: A Case study of Hazaribag District, ij-ep, 2013, 2(3), 20-31.
- 25. Iqbal, J., Gorai, A.K., Pathak, G., Groundwater Vulnerability Assessment using Hierarchical Fuzzy System, Arab J Geosci, 2014, DOI 10.1007/s12517-014-1417-8.
- 26. Kumari, N., & Pathak, G., A review on groundwater quality issue in Jharkhand due to Fluoride. International Journal of Engineering Research and Applications, 2014, Volume 4/3, 65 77.

PUBLISHED IN INTERNATIONAL PROCEEDINGS

- 1. Kujur, J. and Bhattacharjee, B., "Study of corrosion rate in carbonated concrete," International UKIERI Concrete Congress on "Innovations in Concrete Construction," at NIT Jalandhar, Punjab, India, during March 5-8, 2013.
- 2. Goyal, P., Upadhyay, A., Gorai, A. K., Kanchan, Development of ANFIS model for air quality forecasting, 3rd Science One International Conference on Environmental Sciences, pp. 16, 21-01-2014 to 23-0102014, UAE/Dubai, 2014.

BOOK:

- 1. Avishek, K., Thakur, A., Forest Ecosystem Services and valuations: Study on Sal forests in Ranchi, India. Lap Lambert Academic Publishing, Deutschland. Germany. ISBN: 978-3-659-12947-6.2,2014
- 2. "Chatterjee, A.K., Adhikari, S. and Paul, K., Water Supply, Waste Disposal and Environmental Engineering, Khanna Publishers, New Delhi" to "Chatterjee, A.K., Adhikari, S. and Paul, K., Water Supply, Waste Disposal and Environmental Engineering, 9th Edition, Khanna Publishers, New Delhi", 2013

AWARD / RECOGNITION BESTOWED ON FACULTIES (STATE / NATIONAL / INTERNATIONAL)

SI. No.	Name of the Faculty	Title of the Award/ Honours	Organisation	Year / Duration
1	Dr. Gopal Pathak	Member of Building Committee	Central University of Jharkhand	2014
2	Dr. Anand Kumar Sinha	Coordinator, State Technical Agency for Jharkhand state under Pradhan Mantri Gram Sadak Yojna	Jharkhand Government	2013
3	Dr. Anand Kumar Sinha	Member of Performance Evaluation Committee of State Quality Monitors for Jharkhand State under Pradhan Mantri Gram Sadak Yojna	Jharkhand Government	2013

4	Dr. Arun Kumar	Team member, State Technical Agency for Jharkhand state under Pradhan Mantri Gram Sadak Yojna	Jharkhand Government	2013
5	Dr. Bindhu lal	Team member, State Technical Agency for Jharkhand state under Pradhan Mantri Gram Sadak Yojna	Jharkhand Government	2013
6	Dr. A. K. Gorai	Raman Postdoctoral Award under INDO-US knowledge Initiative	University Grants Commission, New Delhi	2013
7	Dr. R. Naresh Kumar	Adjunct Lecturer	School of Natural Sciences, Edith Cowan University, Australia	2012
8	Dr. Sukalyan Chakraborty	Australian Awards Ambassador	Australian High Commission, New Delhi	2014

MOUS / COLLABORATIONS

E :	Name of Organisation / University	Purpose / Area	Year / Duration
1	California, USA	Academic collaboration in Undergraduate and Graduate studies (specifically Stanford Environmental Water Studies Summer program for ME/MTech/ PhD students)	

Departmental Students' Activities

SI. No.	Name of the Activity	Students' co ordinator, if any	Date/Duration
Company of the Compan	One Day workshop on "Software in	Participants: PhD students	September 2013
	Chemical Science Education and	(Shikha Pandey, Mohini Verma,	
	Research"		

BOARD OF STUDIES(UG/PG)

- 1. Head of the Department Chairman
- 2. Prof. Gopal Pathak Member
- 3. Prof. Balram Singh Member
- 4. Prof. Anand Kumar Sinha Member
- 5. Prof. Sudeshna Chakravarty Member
- 6. Dr. Arun Kumar Member
- 7. Dr. Indrajit Roy Member

- 8. Dr. Bindhu Lal Member
- 9. Dr. Amit Kumar Gorai Member
- 10. Dr. Kirti Avishek: Member
- 11. Dr. R. Naresh Kumar: Member
- 12. Dr. Sukalyan Chakraborty Member
- 13. Dr. C. Jagganathan (Professor, Department of Remote Sensing) Member
- 14. Dr. B. K. Mishra (Professor, Department of Mathematics) member
- 15. Dr. Gurdeep Singh (Vice Chancellor, Vinobha Bhabe University) Member
- 16. Dr. A. K. Gupta (Professor, Civil Engineering, IIT, Kharagpur) -Member
- 17. Er. K. K. Chaterjee (G.M. Civil, CMPDI, Ranchi 834008) Member
- 18. Dr. S. C. Jain (MECON, India Ltd. Ranchi) Member
- 19. Dr. Mukhesh Khare (CESE, IIT, Delhi) Member
- 20. Dr. Pramila Goel (IIT, Delhi) Member

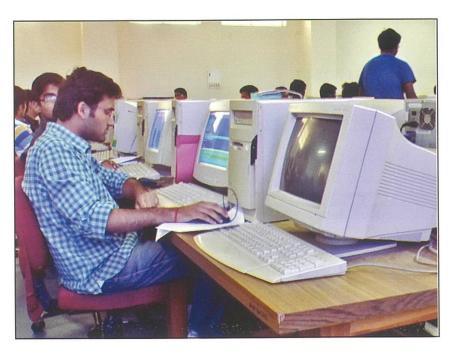
DEPARTMENTAL ACADEMIC COMMITTEE

- 1) Head of the Department Chairman
- 2) Prof. Gopal Pathak Member
- 3) Prof. Balram Singh Member
- 4) Prof. Anand Kumar Sinha Member
- 5) Prof. Sudeshna Chakravarty Member
- 6) Dr. Bindhu Lal Member
- 7) Dr. Jitu Kujur Member
- 8) Dr. Indrajit Roy Member
- 9) Dr. Kirti Avishek: Member
- 10) Dr. R. Naresh Kumar: Member
- 11) Dr. C. Jagganathan (Remote Sensing) Member
- 12) Dr. S. K. Jain (Mathematics) Member
- 13) Guide of the Candidate Member

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

The Department of CSE 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 problem solving 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 Department currently offers the following programmes, all of which are accredited by the All India Council for Technical Education (AICTE).



Computer Laboratory

Programmes Offered	Intake
B.E in Computer Science (4 years :8-semesters)	120
B.E in Information Tetchnology (4 Years:8-semesters	60
M.E.in Software Engineering (2 years: 4-semesters)	15
M.Tech in Computer Science (2 years:4-semesters)	16
M.Tech in Information Technology (2 years:4-semesters)	16
M.Tech in Information Security (2 years:4-semesters)	16
MCA(3 years:6-semesters)	60
M.Sc. (Information Science) (2 years:4-semesters)	20
Ph.D.Programmes	

Facilities: The Department is equipped with seven laboratories with over 445 computers available for conducting laboratory sessions in diverse topics like in (i) programming languages: C, C++, Java, Oracle. (ii) Matlab for Soft Computing and Image Processing (iii) Rational Rose for Software Engineering and (iv) Laboratories for Networking, Multimedia, Simulation, Parallel Computing etc. All the Laboratories are internally networked allowing students to remotely access any particular resource at any point in time.

Areas of Research: Bioinformatics, DNA Computing, Parallel Computing, Image Processing, Robotics, Intelligent Systems, Rough Sets, DNA Nanorobotics, Software Engineering, Sensor Networks, Data Mining, Pattern Recognition, Natural Language Processing etc.

SPONSORED PROJECT:

ONGOING PROJECTS

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Need, Availability and Utilization of Electronic Resources and UGC INFONET Consortia in Universities of Eastern India		UGC	Jan, 2011	5.66	3 Years

SEMINAR / CONFERENCES / SHORT – TERM COURSES CONDUCTED BY THE DEPARTMENT/CAMPUS

Sl. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses
1	National Conference on "Emerging Trends in Library & Information Services (ETLIS-2014)"		Jharkhand Information & Library Association and BIT, Mesra, Ranchi	Feb. 22-23,2014
2	Workshop on Computer Programming	Prof.I.Mukherjee	TEQIP	June 16-21,2014
3	Computer Network	Prof. V.K.Jha	TEQIP	June 30 – July 5, 2014

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1.	B.K. Sarkar,	Two Week ISTE Main Workshop on Computer Networking	MHRD	IIT-Bombay	Remote Centre: BIT Mesra	June 30- Jul. 5, 2014
2	Kalyan Samanta	Two Week ISTE Workshop on Computer Programming	MHRD	IIT Bombay	BIT Mesra (Remote Location)	June 16-21, 2014

3.	P.Paul	Adv.of Electronics ,Information and communication Tech. in India	TEQIP	The Institution of Electronics and Telecommunication Engineers	BNR, Hotel, Ranchi	Jul 13- 14, 2013
4.	S.K. Chatterjee	Short Term Certificate Course on Advanced Data Structures & Algorithms	TEQIP CELL, BIT, Mesra	ISM, Dhanbad	CSE Department	Jan. 10 – 14, 2014
5	S.K. Chatterjee, K.K. Senapati	Short Term Course on FDP for Effective Teaching	TEQIP CELL, BIT, Mesra	IIT, Kharagpur	Centre for Educational Technology	Mat 15 – 17 , 2014
6	Shamama Anwar	Refresher Course in IT		UGC Academic Staff College	Ranchi University	Jan. 13 – Feb. 2 , 2014.
7	K Sridhar Patnaik	Faculty Residency Program on Cloud Computing	IBM Pune	IBM Pune	IBM Pune	June 25-26 , 2014

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. Sarkar B.K, Local Area Rainfall Prediction Using Hybrid Approach, International Journal of Innovative Computing and Applications (IJICA) (Inderscience publ.), 2013 5(4): 213-227.
- 2. Shruti Garg, G. Sahoo, A Comparative Study of Classification Methods for Cracks in Old Digital Paintings, published in Advances in Engineering and Technology Series (AETS), Vol. 3, 2013, 463-468, DOI:03.AETS.2013.3.253 ACEEE, ISBN: 2214-0344.
- 3. Subrajeet Mohapatra, Dipti Patra, and Sanghamitra Satpathy. An Ensemble Classifier System for Early Diagnosis of Acute Lymphoblastic Leukemia in Blood Microscopic Images. Neural Computing and Applications, Springer, 24(7–8): 1887–1904, 2014.
- 4. K.S.Patnaik,G.Bhattacharjee, A Systematic Study of Test Adequacy Criteria satisfied by UML Behavioural Models,International Journal of Engineering Research & Technology (IJERT),ISSN: 2278-0181,Vol. 2, pp-2806-2808, Issue 12, December 2013.
- 5. K.S.Patnaik, Lipika Jha, A New Method to Compute Dynamic Slicing using Program Dependence Graph, International Journal of Computer Applications (0975 8887) Volume 75 ,pp 30-36, No.13, August 2013.
- 6. Paul, Prantosh Kumar, M Ghosh, B Karn "Food Information Systems: Role and Challenges with special reference to Food and Nutrition 2.0 in Indian Scenario" Accepted For International Journal of Advances in Communication Engineering, Vol.6 No.2July-December 2013, pp.221-227, ISSN: 0975-6094

7. Paul, Prantosh Kumar, D Chatterjee, B Karn "Service Science [SS]: Emphasizing role of Information Science [IS] as Service Science" International Journal of Information Technology and Engineering (IJITE), Vol.4 No.2 July-December 2013, pp.61-65, ISSN: 2229-7367

PUBLISHED IN INTERNATIONAL PROCEEDINGS

- P.Paul, M.Basu and S.K.Ghorai, "Max-Connectivity Grooming in WDM mesh networks for cost effective network resource utilization, proc. Of Advances of Electronics, Information and Communication Tech in India, page 5, July13-14, 2013.
- 2 K.S.Patnaik, A.Bhattacharya, Modified Fuzzy C-means Algorithm for MR Image Segmentation, IEEE International Conference on Machine Intelligence and Research Advancement (ICMIRA-2013), 21-23 Dec-2013, SMVDU, Katra, Jammu (India).

PUBLISHED IN NATIONAL JOURNALS:

- 1. Bal Ram and Karn, Bhaskar "Library and Information Science Education In India: Issues and Challences". INFOLIB a Quarterly Bulletin of Jharkhand Information and Library Association, vol.6, 1-2, pp.44-46, December 2013.
- 2. Bal Ram and Karn, Bhaskar "Use of U.G.C. Infonet Consortia on the Users of Universities in Jharkhand: a Study". INFOLIB a Quarterly Bulletin of Jharkhand Information and Library Association, vol.7, 1-4, pp.109-116, April, 2014

BOOK:

Single Authored: Sarkar B.K. (2014): Hybrid Classification Model: A Data Mining Approach, Scholars' Press, LAMBERT Academic Publishing, Germany, ISBN 978-3-639-71099-1

MOUS / COLLABORATIONS (ONGOING)

SI. No.	Name of Organisation / University	Purpose / Area	Year / Duration
1	Mannheim University, Germany	Student Exchange Program	2012 / 2 years
2	Queens University, Canada	Twining Program	2012 / 2 years

BOARD OF STUDIES(UG/PG)(INTERNAL)

Head of the Department, CSE, Chairman (Ex-Officio)

Dr. G. Sahoo

Dr. Abhijit Mustafi

Dr. D.K.Mallick

Mr. S. K. Chatterjee

Dr. S. K. Saha

Mr. K.K.Senapati

Dr. I. Mukherjee

Dr. Nisha Gupta

Board of Studies(UG/PG)(External)

Dr. Rajib Mall

Dept. of Computer Science, IIT Kharagpur

Dr. Aditya Bagchi

Dean of Studies, ISI, Kolkata

Dr. Atal Chaudhuri

Dept. of Computer Science and Engineering, Jadavpur University, Kolkata

Dr. Swapan Bhattacharya

Dept. of Computer Science and Engineering, Jadavpur University, Kolkata

Mr. Kushal Banerjee

Academic Relationship Manager, India-East, Tata Consultancy Services

Departmental Academic Committee

Dr.Sandip Dutta	Chairman
Dr.G.Sahoo	Member
Dr.D.K.Mallick	Member
Dr.(Mrs)Aruna Jain	Member
Dr.Bhaskar Karn	Member
Dr.V.K.Jha	Member
Dr.K.S.Patnaik	Member
Dr.A.A. Som sundara	Member
Dr.Vibha Rani Gupta	Member
Dr.R.C.Jha	Member

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

The Department **Electronics and Communication** Engineering was established in the year 1960. This is one of the largest Departments of the Institute, having the highest number of students and the faculty members. Due to its modern infrastructure and exposure given to the students, it is one of the elite Departments in India. The ECE Department runs Bachelor in Engineering (BE) and several Master in Engineering (ME) Programmes in addition to Ph.D. Programme within the field of Electronics and Communications Engineering.



Comunication Laboratory in Progress

BACHELOR IN ENGINEERING

It offers B.E. in Electronics & Communication Engineering, a 4-year (8-semester) programme with intake of 120 students. The students are exposed to all fundamental and advanced technology in the field of Electronics and Communication Engineering. Some of the courses offered are Modern Instruments and Measurements, Microprocessor and Microcontroller, Digital Communication system, Microwave Engineering, Digital Signal Processing, Intelligent Instrumentation, Computer Networking, Fiber Optics Communication System, Antennas and Propagation for Wireless Communication, Mobile and Cellular Communication etc. The syllabi are frequently updated to incorporate recent developments. The Department has several well-equipped and advanced laboratories to help students in gaining practical exposure. Almost 100% students are absorbed by various leading industries and organizations by campus placement.

MASTER IN ENGINEERING

The Department is currently running three postgraduate programmes with specializations in (a) Instrumentation with intake of 12, (b) Microwave Engineering with intake of 12 and (c) Wireless Communication with intake of 18 students. A team of expert teachers are involved in teaching and providing research guidance. Students are exposed to several specialized software tools such as Cadence System Design Tools, Silvako Software (Athena & Atlas), IE3D, HFSS, Microwave Office, Sonnet, Fidelity, Beampro, SystemView, LABView, MATLAB, NS-2 and QualNet etc. The Department is recipient of assistance in the form of Departmental Research Support under the Special Assistance Programme of UGC. The Department is running several R & D projects from various agencies like UGC, DST, AICTE, ISRO etc.

SPONSORED PROJECTS

PROJECT SANCTIONED

SI. No.	Project Title	PI / Co- PI /	Funding	Date of	Sanctioned	Duration of
		Collaborator, if any	Agency	Sanction	Amount	the Project
		T-12			(Rs. in Lacs)	
1	Development of	PI: Dr. Vijay Nath	MHRD	25.10.13	6.40	2013-15
	VLSI Design Course	Co-PI: Dr. R. K. Lal	New Delhi			

ONGOING PROJECTS

SI. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Studies on Microwave Dielectric Ceramics and their device applications	Co-PI: Prof. V. R. Gupta & Prof. Nisha Gupta	DST (SERB)	20.5. 2013	31.70	2013-15
2	Design of ultra low power CMOS Cell for Temperature Sensor in VLSI	Dr. Vijay Nath	DST New Delhi & DRDL Hyderabad	2011	26.70	2011-15
3	Pedagogy Project (NMPICT) Development of VLSI Design Course	Dr .Vijay Nath	MHRD	2010	10.00	2010-15
4	Pedagogy Project (NMPICT) Development of Intelligent Instrumentation course	Dr. S. S. Solanki	MHRD	2010	10.00	2010-15
5	Establishment of National MEMS Design Centre	Dr. Neela Chattoraj	ADA (Ministry of Defence)	Oct. 2010	11.00	2010-14
6	Special Assistance Program-II (SAP-II) for UG Projects	Prof. Nisha Gupta	UGC	2009	52.50	2009-14
7	Synthesis, dielectric and optical properties of rare earth doped lead free BZT relaxor ceramics, in the Dept. of Physics	Co-PI: Prof. Nisha Gupta	UGC	2011	9.8	2011-13

PROJECTS COMPLETED:

SI. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Date of Com- pletion of the Project
1	Establishment of Entrepreneurship Development Cell	Co-PI: Mr. Vishal H. Shah (PI: Dr. T. Ghose)	AICTE	1.4. 2011	7.00	March 31, 2014
2	Development of VLSI Design Course	PI: Dr. Vijay Nath Co-PI: Mr. Alok Kumar	MHRD New Delhi	25.10.10	3.60	2010-13

SEMINAR/CONFERENCES/SHORT-TERM COURSES CONDUCTED BY THE DEPARTMENT:

Sl. No.	Title of Seminar/Conferences / Short – term Courses/ Workshop	Coordinator	Funding/ Sponsoring Agency	Date of Seminar/ Conferences/ Short-term Courses
1	Workshop on 'Quality Assurance in Compliance with NAAC and NBA'	Dr . Sanjay Kumar	BIT Mesra	March 1, 2014
2	Two week workshop on "Signal &Systems" NMEICT at BIT Mesra	Dr. Mahesh Chandra	MHRD	Jan. 2-12 , 2014
3	Workshop on "Concepts in Wireless Communication"	Dr Sanjay Kumar	Self Sponsored	Dec. 2-7,2013
4	NMEICT workshop on "Signals and Systems" at IIT Kharagpur	Dr. Mahesh Chandra	MHRD	Sept. 30 – Oct.4, 2013

CONFERENCES/SEMINARS/WORKSHOPS/STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Dr. Sanjay Kumar	A Workshop on Outcome Based education and Accreditation	IQAC, BIT Mesra,	IQAC, BIT Mesra,	BIT Mesra,	Jul.11, 2014
2	Mr. Janardan Sahay	Two-week ISTE Main Workshop on Compter Networking Under NMEICT.	MHRD, New Delhi	IIT Bombay	BIT Mesra	June 30- Jul.5, 2014

3	Dr. Sanjeet Kumar	Two-week ISTE Main Workshop on Computer Networking Under NMEICT	MHRD, New Delhi	IIT Bombay	BIT Mesra	June 30 – Jul.5,2014
4	Dr. Mahesh Chandra	International Conference on Intelligent Computing, Communication & Devices	BIT Mesra	SOAU, Bhubaneswar	SOAU, Bhubaneswar	April 18- 19, 2014
5	Dr. Mahesh Chandra	International Conference on Signal Processing & Integrated Networks (SPIN- 2014)	AMITY University	AMITY, Noida	AMITY, Noida	Feb. 20-22, 2014
6	Dr. Mahesh Chandra	Two week workshop on Signal& Systems NMEICT (MHRD) (Coordinator)	MHRD	IIT Kharagpur	BIT, Mesra	Jan. 2-12, 2014
7	Dr. Vijay Nath	3 days Seminar on VLSI Design and Technology aspects	AICTE New Delhi	CIET Raipur	CIET Raipur	Dec. 22-25, 2013
8	Mrs Swati Prasad	The First International Conference on Communications, Connectivity, Convergence, Content and Cooperation (IC5). 2013. Topic: Multistyle Training and Fusion for Speaker Identification of Disguised Voice	AICTE	VNIMT, Mumbai	Mumbai	Dec. 16-19, 2013
9	Dr. Vijay Nath	CCSN-2013	DST New Delhi	PIET, Raurkela	Hayot Hotel Kolkata	Nov. 22-24, 2013

10	Dr. Vijay Nath	Convocation & Student Convention	IEI Kerala State Centre	IEI Kerala State Centre	Thiruvantha- puram, Kerala	Oct.19-20, 2013
11	Dr Sanjay Kumar	A Workshop on "Basic Pedagogy Training Pragramme"	BIT Mesra	TEQIP, BIT Mesra	BIT Mesra,	Aug. 23- 26, 2013
12	Dr. Neela Chattoraj	International conference in Progress on Electromagnetic Research Symposium	Self Financed	RIT, USA	Stockholm, Sweden	Aug, 2013
13	Prof. S. K. Ghorai	IETE Zonal Seminar on Advances of Electronics, Information and Communication Technology in India	IETE	IETE	Ranchi	Jul.13-14, 2013

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. P. K. Sahu, Astik Biswas, Anirban Bhowmick and Mahesh Chandra, Auditory ERB like Admissible Wavelet Packet Features for TIMIT Phoneme Recognition, Engineering Science and Technology, an International Journal (JESTECH), in Press, 2014, (Elsevier) ISSN: 2215-0986
- 2. Astik Biswas, P. K. Sahu, Anirban Bhowmick and Mahesh Chandra, Feature extraction technique using ERB like wavelet sub-band periodic and aperiodic decomposition for TIMIT phoneme recognition. International Journal of Speech Technology, published online, 2014. Springer, ISSN 1381-2416
- 3. Asutosh Kar and Mahesh Chandra, A Novel Variable Tap-length Learning Algorithm for Low Complexity, Fast Converging Stereophonic Acoustic Echo Cancellation. International Journal of Information and Communication Technology, 2014, vol.6, no.3/4, 309-325, Scopus(SJR(2011)-0.12, SNIP(2011)-0.536),ISSN: 1466-6642
- 4. Mahesh Chandra, Asutosh Kar and Pankaj Goel, Performance Evaluation of Adaptive Algorithms for Monophonic Acoustic Echo Cancellation: A Technical Review. International Journal of Applied Engineering Research, 2014, vol.9, no. 17, 3781-2806, Scopus, ISSN 0973-4562.
- 5. Astik Biswas, P. K. Sahu and Mahesh Chandra, Admissible Wavelet Packet Features based on Human Inner Ear Frequency Response for Hindi Consonant Recognition. Computers and Electrical Engineering, May2014, Vol. 40, Issue 4, 1111–1122, IF:0.970,SCI, (Elsevier) ISSN: 0045-790.6

- 6. Astik Biswas, P. K. Sahu, Anirbanbhowmick and Mahesh Chandra, Hindi vowel classification using GFCC and formant analysis in sensor mismatch condition. WSEAS Transactions on Systems, 2014, Vol. 13, 130–143, E-ISSN: 2224-2678.
- 7. Shyam Lal, Mahesh Chandra, Efficient Algorithm for Contrast Enhancement of Natural Images. International Arab Journal of Information Technology, Jordan, Jan. 2014, vol. 11, no. 1, 96-103. SCI, IF-0.39,ISSN:2309-4524.
- 8. Sakshi Kumari, Amit Kumar and Vibha Rani Gupta, Characterization of FR4 Substrate at Microwave Frequencies. International Journal of Applied Engineering Research (IJAER), 2014, Vol.9, No.1, 93-100, ISSN 0973-4562.
- 9. Arpita Sen, Neela Chattoraj, Tetra-Frequency Microstrip Antenna for Wireless Applications, International Journal of Computer Application, Jan.2014, Vol. 85, No 15, 27-31.
- 10. Tanweer, Janardan Sahay, A Novel Frequency Reconfigurable Antenna for Wireless Application. IJRECE, Apr.-Jun. 2014, vol. 2 issue 2, ISSN: 2348-2281.
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- 15. Paresh M. Dholakia, Sanjay Kumar, C. H. Vithalani, 'Performance Analysis of 4X 4 and 8X8MIMO System, to Achieve Higher Spectral Efficiency in Rayleigh and Rician Fading Distributions', Wireless Personal Communications, June 2014. ISSN 0929-6212.
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- 20. Ritesh Kumar Bhadhai and Nisha Gupta, Compact Dual Sinc Shaped Monopole Antenna for Dual Band Wireless Applications. Microwave and Optical Technology Letters, 23 Sept. 2013, Vol.55, 2883-2888.

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- 23. Abhishek Pandey, Divya yadav, Ritika Singh, Vijay Nath, Design of Ultra Low Power CMOS Temperature Sensor of Space Applications. International Journal of Research in Electrical, Electronics and instrumentation Engineering, Aug. 2013, Vol. 2, 4117-4125.
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- 26. Vibha Rani Gupta, Microwave dielectric properties of (1 x)Mg0.95Zn0.05TiO3–(x) Ca0.6La0.8/3TiO3 ceramic composites. Journal of Alloys and Compounds, 2013, Vol. 552, 219–226, ISSN: 0925-8388.
- 27. Sanjay M. Ranjan, Vineet Tiwari, Vijay Nath, Design of Steering Digital to Analog Converter using 250nm CMOS technology. IJECSE, 2013, Vol.1, no.3, 1640-1650.

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- 2. Pandit, N, Tiwary, A. K. and Gupta, N., Improving characteristics of Hairpin Bandpass filter using SIR Concept. In IEEE Explore, the 1st International Conference on Innovative Advancements in Engineering and Technology (IAET), Jaipur National University, 2014.
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- 4. Badhai, R. K., and Gupta N., Design of Wideband Inverted Sinc Shaped Monopole Antenna. In IEEE Explore, of Fourth International Conference on Communication Systems and Network Technologies (CSNT), Bhopal, 2014.
- 5. Sarah Asheer and Sanjeet Kumar, Performance of Wireless Sensor Network Under Various Energy Models, Routing Protocols and Node Mobility Conditions. International Conference on Advanced Communication, control & Computing Technologies (ICACCCT), Tamilnadu, India, May 2014.
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- 7. Sarath Chandra Machavarapu, Manoj Kumar Mukul, et al, EEG Classification based on variance. IEEE International Conference on "Green Computing, Communication and Electrical Engineering, 06-08 March, 2014.
- 8. Tanweer, Dugyala Goutham, Janardan Sahay, A Novel Multiband Frequency Reconfigurable Antenna for WiMax and Wi-Fi Application. IEEE International Conference on Advanced

Communication Control and Computing Technologies (ICACCCT) ISBN No. 978-1-4799-3914-5/14

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- 11. Sumit Srivastava, Pratibha Nandi, G. Sahoo and Mahesh Chandra, Formant Based Linear Prediction Coefficients for Speaker Identification. International Conference on Signal Processing & Integrated Networks (SPIN-2014), pp. 685-688Noida, Delhi-NCR, India, 20-21 Feb. 2014. Print ISBN: 978-1-4799-2865-1, DOI: 10.1109/SPIN.2014.6777042
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- 13. Mahesh Chandra, AkankshaKumari and Sanjeev Kumar, Isolated Text Recognition using SVD and HMM. IEEE International Conference on Advanced Communication Control and Computing Technologies (ICACCCT), pp. 1264-1267, Ramanathapuram, Tamil Nadu, India, 08-10 May 2014.
- 14. Babu lal shahu, Neela Chattoraj, Srikanta Pal, A Novel CPW Fed Sierpinski Carpet Fractal UWB Slot Antenna. International Conference on Microwave and Photonics (ICMAP2013), ISMdhanbad, 13-15December.published in IEEE explorer.
- 15. Debajit De, Neela Chattoraj, RF MEMS Capacitive Type Shunt Switch. IEEE Applied Electromagnetics Conference 2013 (IEEE AEMC 2013), KIIT University, Bhubaneswar; 18-20th December, 2013. (will be published in IEEE explorer).
- 16. Debajit De, Neela Chattoraj, RF MEMS Metal to Metal Contact Type Shunt Switch. IEEE Applied Electromagnetics Conference 2013 (IEEE AEMC 2013), KIITUniversity, Bhubaneswar ; 18-20th December, 2013, (will be published in IEEE explorer)
- 17. Swati Prasad, Zheng-Hua Tan, Ramjee Prasad, Multistyle Training and Fusion for Speaker Identification of Disguised Voice. The First International Conference on "Communications, Connectivity, Convergence, Content and Cooperation (IC5)", Dec.2013.
- 18. Jyoti Singh, Ramkrishna Kundu, Dipayan Ghosh, Abhishek Pandey, Basab Bijoy Pal & Vijay Nath, Study and Design of Low Power Universal Differential Current Conveyor. 2nd International Conf. on "Computing, Communication and Sensor Network. (CCSN-13)", 23 &24 Nov.2013.
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- 20. Ramkrishna Kundu, Dipayan Gosh, Jyoti Singh, Abhishek Pandey, Vijay Nath, Ultra Low Power High Slew Rate Ultra Wideband Cascade Operational Amplifier. International Conference CCSN-2013, Dept. of ECE, PIET, Raurkela, Odissa, India, 22-24th Nov.2013.

- 21. Abhishek Pandey, Jyoti Singh, Ramkrishna Kundu, Dipayan Ghosh, Vijay Nath, A 119nW CMOS Temperature Sensor for Space Applications. International Conference CCSN-2013, Dept. of ECE, PIET, Raurkela, Odissa, India, 22-24th Nov.2013. (Best Paper Award)
- 22. Quartalluin, N. Chattoraj, A compact UWB Antenna with Wide Band notch at 5GHZ for WLAN Band. International conference in Progress in Electromagnetic Research & Symposium, PIERS, Proceeding pp764-767,2013, Stockholm, Sweden, September 2013.
- 23. Prafulla Chandra Prasad, Neela Chattoraj, Design & Development of Reconfigurable Microstrip Patch Antenna Using MEMS switch for KU –band Application. International conference in Progress in Electromagnetic Research & Symposium, PIERS, Proceeding pp 764-767, 2013, Stockholm, Sweden, September 2013.
- 24. Venkata Bharath Reddy Karnati, Uzval Sai GopinathVerma D, Jai Sai Amerineni and Vishal H. Shah, Frequency detection in Medium and High frequency SSVEP based Brain Computer Interface systems by scaling of sine-curve fit amplitudes. Accepted for presentation at International Conference on Networks and Soft Computing (ICNSC-14), Vignan's Foundation for Science, Technology & Research, Guntur, Andhra Pradesh with the Technical Sponsorship of IEEE Hyderabad Section, 19-20 August 2014.
- 25. Bhargav, A. and Gupta, N., Realization of Compact Arrays with low side lobes using Biogeography based optimization. In IEEE Explore, the International Conference on Microwave and Photonics (ICMAP), ISM Dhanbad, 2013.
- 26. Sweta Soni, Ritesh Bohra, Sanjeev M. Ranjan, Harsh Joshi, Vijay Nath, Analog to Digital Converter- Architecture performance analysis and application. Shaastratha an International Conference(SIC-2013), Rungta Group of Colleges, Bhilai (CG), India, 2013.

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- 1. Ghosh, P. and and Gupta, N., Comparison of Crosstalk among Vias in multilayer printed Circuit Board. In Proceedings of Regional Conference on Radio Science, Symbiosis Institute of Technology, Pune, 2014.
- 2. Sanjeet Kumar, Saswat Chakrabarti and Jayanta Mukhopadhyay, Priority Based Pixel Domain Wyner-Ziv Video Coding using Key frames. In Proceedings of the Twentieth National conference on Communications, NCC-2014, IIT Kanpur, March 2014.
- 3. Utkarsh, Dipayan Ghosh, Ritika Singh, Abhishek Pandey, Ramkrishna Kundu, Vijay Nath, Design of CMOS Op-Amp based Class-E Power Amplifier using 45nm Technology for Wireless Communication System. 21th IEI Convocation & Student Convention organized by IEI Kerala State Centre, Thiruvanthapuram, Kerala from 19-20th Oct.2013. (Best Paper Award)
- 4. Partha Paul, Mainak Basu, S. K. Ghorai, Max-Connectivity Grooming in WDM mesh networks for cost effective network resource utilization. Zonal Seminar on "Advances of Electronics, Information and Communication Technology in India" July 13-14,2013.
- 5. R. Kejariwal, S. C. Bose, and A. Islam, Performance Evaluation of Op Amp Using Emerging Device. Zonal Seminar on Advances of Electronics, Information and Communication Technology in India, Jul, 2013.

AWARD/RECOGNITION BESTOWED ON FACULTIES (STATE/NATIONAL/INTERNATIONAL)

Sl. No.	Name of the Faculty	Title of the Award/ Honours	Organisation	Year / Duration
1.	Dr. Vijay Nath	Best Paper Award IEI Convocation & Convention-2013	IEI Kerala State Centre	Oct, 13
2.	Dr. Vijay Nath	Best Paper Award CCSN-2013 (International Conference at Kolkata)	PIET, Rourkela	24 Nov, 13

MOUS/COLLABORATIONS:

SI. No.	Name of Organisation / University	Purpose / Area	Year / Duration
1.	AICTE and BSNL	To provide Employability Enhancement Training program (EETP) to BE students.	l e

DEPARTMENTAL STUDENTS' ACTIVITIES

Sl. No.	Name of the Activity	Student(s) / Students' co ordinator (if any)	Date/Duration
1	Declared Best ED Cell in The Country at IIT-Mumbai,	Team EDC, BIT Mesra Lead By Shreyansh Chamaria	Sept. 12, 2013 - Feb. 13, 2014
2	Secured ranks within Top 7 at ICICI Trinity Program(The Competition is still going on among these 7)	Akshay Jalan & Tarun Karuturi	Dec. 19, 2013
3	Secured rank within Top Three at Texas Instruments Innovation Challenge India Analog Design Contest - 2014 organized by Department of EEE, BIT Mesra, Ranchi.	Mr. Ashish ranjan, (1st), Mr. Shashi Bhusan Vinit((1st), Mr. Sandeep Kumar(1st), Mr. Prakash Kumar(1st) Mr. Sushant Agarwal(2nd), Mr. Vikrant Nanda(2nd), Mr.Shrey Khanna(2nd) Mr. Rohit Kausal(2nd), Mr. Anand Kumar Sing(2nd), Mr. Abhishek Gaurav(3rd), Mr. Manish Kumar Pandey(3rd), Mr. Shasahn Ranu(3rd) Mr. Prashant Gupta(3rd)	Feb. 17-19, 2014
4	Best paper award, 21st IEI convocation and student convocation organized by IEI Kerala,	Mr. Utkarsh, Dipayan, Ritika, Ab Mr. Hishek and Ramakrishna	Oct. 19-20, 2013

Member

BOARD OF STUDIES (UG/PG)

Panel for BOS

6.

1.	HOD, ECE (Ex-officio)	Chairman
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- 2. Prof. R. Sukesh Kumar Member
- 3. Prof. Nisha Gupta Member
- Prof. S. K. Ghorai
 Dr. S. S. Solanki
 Member
- 7. Prof. R. C. Jha (EEE) Member

Panel for expert from outside

- 1. Prof. G. Panda, IIT Bhubaneshwar
- 2. Dr. V. Kumar, ISM, Dhanbad

Mr. S. S. Tripathy

- 3. Prof. S. Sanyal, IIT Kharagpur
- 4. Dr. S. Chakravarty, IIT Kharagpur
- 5. Dr. S. K. Patra, NIT Rourkela
- 6. Dr. Tapas Chakravarty, TCS, Kolkata

Departmental Academic Committee

HOD (Ex-officio Chairman)

Prof. R. Sukesh Kumar

Prof. N. Gupta

Prof. S. K. Ghorai

Dr. S. S. Solanki

Dr. Neela Chattoraj

Dr. Sanjeet Kumar

Dr. Manoj Kumar Mukul

Dr. Aminul Islam

Dr. Rakesh Kumar Sinha (BMI)

Dr. R. C. Jha (EEE)

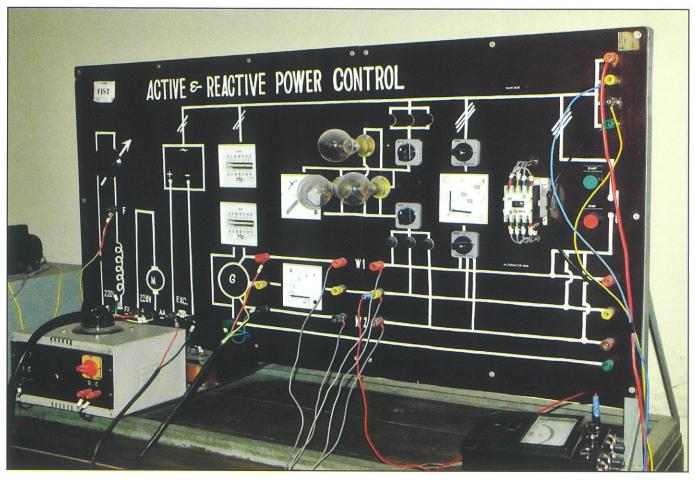
Other important information

 Dr. Sanjay Kumar delivered a invited talk on the topic of 'Preparation of SAR' during the Workshop on Outcome Based Education and Accreditation, organized by IQAC, BIT Mesra, Ranchi, 11 Jul 2014.

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- Dr. Sanjay Kumar delivered a invited talk on the topic of Transactions to Transformation at Gita Group of Institutions, Bhubaneswar, 29 Apr, 2014.
- Dr. Sanjay Kumar delivered a invited talk on the topic of 'Spirituality and Students' during Bharat Mahotsay, organized at BIT Mesra, 02 Mar, 2014.
- Prof. S. K. Ghorai delivered a invited talk on "Optical Networks" at Central University of Jharkhand, Ranchi, Dec, 2013.
- Prof. Nisha Gupta delivered invited talks on "Antenna Design" during the workshop on Concepts in Wireless Communication, organised by the Department in Dec, 2013.
- Dr. Vijay Nath delivered a invited talks in VLSI design and technology seminar at IEI Ranchi, Dec, 2013.
- Prof. S. K. Ghorai delivered a invited talk on 'Fiber Optic Communication and lazer systems" during training program conducted at central training college CRPF Dhurwa, Ranchi 20 Nov, 2013.
- Prof. Nisha Gupta delivered a invited talk on "Electromagnetic Warfare Jammer and Interceptor" during training program conducted at central training college CRPF Dhurwa, Ranchi 22 Nov, 2013.
- Dr. Vijay Nath delivered a invited talks in VLSI design and technology seminar at IEI Raipur, Oct, 2013.

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING



Power Control Panel

The Department of Electrical and Electronics Engineering offers courses in B.E. in Electrical and Electronics Engineering, M.E. in Electrical Engineering with three different specializations, viz., Power System, Control System and Power Electronics. The Centre for Biomedical Instrumentation under this Department offers M. Tech. in Biomedical Instrumentation. Department also offers Ph.D. programmes in various specializations. 31 research scholars are currently pursuing for their doctoral degree. Department of EEE is presently utilizing the grants received from DST under FIST, from UGC under SAP scheme, from AICTE under MODROB grant and grant from TEQIP to strengthen the research facility for test bed of Smart Grid, Electrical Motor Drives, Process control and Control systems. Twin rotor MIMO System, Magnetic Levitation system, DC servo fundamental trainer kit, Temperature, Pressure, level and flow controller both manual and PLC based, Transformer testing kit, circuit breaker, NI Data acquisition Card, controller, NI USRP, NI CRIO, Semikron 3 phase inverter NI SBRIO have been installed in the different laboratories under DigSilent Power factory software has been installed in our computer lab. Faculty members are working on different concepts related to Smart Grid, Hybrid Electric Vehicles, Multi-level inverters, Robotics, V2V energy exchange while in motion, fault tolerant multi phase drives, electric vehicle propulsion, Power System Voltage Stability, System Identifications, Soft Computing Techniques applications etc.

SPONSORED PROJECTS

PROJECT SANCTIONED

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Determination of Mental Workload and Fatigue under Different Degree of Mental Task	Dr. Yogendra Agrawal	UGC (Start- up-grant)	2013	6.00	3 Years
2	Development of Vehicle License Plate Recognition System	Dr. V. Laxmi	UGC (Research Award)	2013	3.00	2 Years

ONGOING PROJECTS

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	FIST Grant for doing research on Smart Grid and Drive Hybrid Electric Vehicle	Dr. T. Ghose	DST (FIST), GOI	2012	58.00	3 Years
2	Application of Power Electronics in Power System and Electrical Drive	Dr. T. Ghose Dr. P. R. Thakura	UGC (SAP)	2012	61.00	5 Years
3	Hardware Development and Implementation of Microcontroller Based Boost Converter for Hybrid Electric Vehicles	Dr. P. R. Thakura	UGC	2012	12.65	3 Years
4	Determination of Mental Workload and Fatigue under Different Degree of Mental Task	Dr. Yogendra Agrawal	UGC (Start- up-grant)	2013	6.00	3 Years
5	Developing Suitable Pedagogical Methods for various classes, intellectual calibres and e-learning for course "Industrial Drives and Control", under National Mission on Education through ICT.(As Co-investigator)	Dr. Kartik Chandra Jana (PI) Dr. Ritesh Kumar Keshri (Co-PI)	NaMICT	2009	2.80	In final phase

6	Development of	Dr. V. Laxmi	UGC	2013	3.00	2 Years
	Vehicle License Plate		(Research			
	Recognition System		Award)			

PROJECTS COMPLETED

SI. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (in Rs.)	Date of com- pletion of the Project
1	Design, development and characterization of magneto optic material based current sensor for industrial application	Sarbani Chakraborty (PI)	DST, New Delhi	24/11/2009	25,98,200/-	Dec, 2013

SEMINAR / CONFERENCES / SHORT – TERM COURSES CONDUCTED BY THE DEPARTMENT/CAMPUS

Sl. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses
1	Short Term Course on Power Converter and Applications	Dr. P.R. Thakura Shri Nirbhar Neogi	NaMPET	July 4-6, 2013
2	Special Session on Traction motor drives for road vehi- cles (SS-29), IEEE Industrial Electronics Conference (IECON 2013),	Vienna, Austria Chairs: Dr. Ritesh Kumar Keshri Prof. Giuseppe Buja (UniPD, Italy) Prof. Chandan Chakraborty (IIT Kharagpur)	IEEE	November10-13 , 2013
3	Workshop on Microcontrol- ler Applications	Dr. P.R. Thakura	BIT	January 5-13, 2014
4	1st National Student Congress of IETE	Mr. G. S. Gupta Dr. P. R. Thakura Dr. Ritesh Kumar Keshri (Program Coordinator)	IETE, Delhi	February 1-2, 2014
5	Texas India Innovation Challenge India Analog Design Contest 2014 [College Level]	Dr. Ritesh Kumar Keshri (Mentor)	Texas Instruments	February 17-19, 2014

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

SI. No.	Name of the Faculty	Title of the Conference/Seminar	Funding Agency	Organizers	Venue	Date
1	Brij Mohan Prasad	Short Term Course on Power Converter and Applications	NaMPET	EEE, BIT, Mesra, Ranchi	EEE, BIT, Mesra, Ranchi	July 4-6, 2013
2	Prem Prakash	Short Term Course on Power Converter and Applications	NaMPET	EEE, BIT, Mesra, Ranchi	EEE, BIT, Mesra, Ranchi	July 4-6, 2013
3	Dr. Ritesh Kumar Keshri	IECON 2013	UniPD, Italy and BIT Mesra	Austrian Institute of Technology, Austria, Vienna and IEEE USA	Vienna International Centre	Nov. 10-13 , 2013
4	Sushma Kamlu	Two week ISTE workshop on Signals and Systems	National Mission on Education through ICT (MHRD)	National Mission on Education through ICT(MHRD)	BIT, Mesra	Jan 2 - 12, 2014
5	Dr. V. Laxmi, Mrs. S. S. Kamlu	Workshop on Microcontroller Applications	UGC(SAP)	Dept of EEE	BIT, Mesra	January 6-13, 2014
6	Dr. P. R. Thakura	International Conference on Non- Conventional Energy	ICONE	JIS College of Engineering, Kalyani, Kolkata	JIS College of Engineering, Kalyani, Kolkata	Januar15-16, y, 2014
7	Dr. T. Ghose	IEEE sponsored conference on Int. Conf. on Control, Instrumentation, Energy and Communication at kolkata from 2nd February to 4 th February,2014	IEEE/IET	Calcutta University		Feb.2-4,2014
8	Sushma Kamlu	IEEE International Students' Conference for Electrical, Electronics and Computer Science (SCEECS-2014)	IEEE SCEECS - 2014	IEEE SCEECS - 2014	Maulana Azad National Institute of Technology Bhopal	March 1 -2 , 2014

PUBLICATIONS:

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- 1. Keshri, R., Bertoluzzo, M. and G. Buja, Integration of a Photovoltaic Panel with an Electric City Car, 2014, Jour. of Electric Power Comp. and Sys. Taylor & Francis, 42, 5, 481-495.
- 2. Buja, G., Menis, R. and Keshri, R., Vector analysis of the current commutation in PM BLDC drives, Bulletin of the Polish Academy of Sciences: Tech Sciences, 2013, 61, 4, 829-836.
- Gopakumar, P., Reddy, M. Jaya Bharata and Mohanta, D. K., Stability Control of Smart Power Grids with Artificial Intelligence and Wide Area Synchrophasor Measurements, Electric Power Components & Systems Journal, volume 24, Issue 10, pp. 1095-1106, 24 June, 2014, ISSN: 1532-5008 print / 1532-5016 online, DOI: 10.1080/15325008.2014.913745.
- 4. Ghosh, D., Ghose, T., Mohanta, D. K., A graph theory approach for reliability analysis of phasor measurement units using frequency and duration technique, Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, DOI: 10.1177/1748006X14539941.
- 5. Murthy, C., Ghosh, D., Mishra, A. Sinha Roy, Mohanta, D. K., Reliability analysis of phasor measurement unit incorporating hardware and software interaction failures, IET Generation, Transmission & Distribution, doi: 10.1049/iet-gtd.2014.0115.
- 6. Gopakumar, P., Reddy, M. J. B., Mohanta, D. K., Stability Concerns in Smart Grid with Emerging Renewable Energy Technologies, International Journal on Electric Power Components & Systems (Taylor & Francis Publications), Volume 42, pp 418-425, February 2014.
- 7. Ghosh, D., Ghose, T., Mohanta, D. K., Communication Feasibility Analysis for Smart Grid with Phasor Measurement Units, IEEE Transactions on Industrial Informatics, Vol. 9, Issue 3, pp. 1486-1496, August 2013.
- 8. Gopakumar, P., Surya Chandra, G., Reddy, M. Jaya Bharata and D. K. Mohanta, Optimal Placement of PMUs for the Smart Grid Implementation in Indian Power Grid A Case Study, International journal of Frontiers in Energy (Spinger), Volume 7, Issue 3, pp. 358 372, September 2013. ISSN 2095-1701 (Print), 2095-1698 (Online) [DOI: 10.1007/s11708-013-0257-7]
- 9. Reddy, M. Jaya Bharata., Sagar, K., Mohanta, D. K., A Multifunctional Real Time Power Quality Monitoring System Using Stockwell Transform, IET Science, Measurement & Technology, pp. 15, October 2013. [DOI: 10.1049/iet-smt.2013.0091]
- Murthy, C.h., Singh, M. S., Sinha Roy, D., Mohanta, D. K., Well Being Analysis of Phasor Measurement Unit (PMU) Using Markov Model and Event Tree, International Journal on Electric Power Components & Systems (Taylor & Francis Publications), Volume 41, Issue 16, pp. 1654-1671, October 2013. [DOI:10.1080/15325008.2013.835359]
- 11. Prakash, Prem., Jha, R. C. and Verma, Vivek Anand, Distribution System Reliability Analysis using ETAP, International Journal of Ad. Research in Electrical & Electronics, ISRJ. Vol.9, No.3/4, pp.191 205, 2013.
- 12. Velega , S., Gupta, S. and Mohanta, D. K., Power system insulator condition monitoring automation using mean shift tracker—FIS combined approach, International Journal of Computer Aided Engineering and Technology, Volume 5, No 1, pp. 1–19, 1757-2657 (Print) 1757-2665 (Online), November, 2013.

- 13. Ghosh, D., Ghose, T., Mohanta, D. K., Reliability Analysis of Geographic Information System (GIS) Aided Optimal Phasor Measurement Unit Location for Smart Grid Operation. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, Volume 227, Issue 4, pp. 450 458, August 2013, DOI:10.1177/1748006X13482853.
- 14. Kadwane, S. G., Mohanta, D. K., Reliability Evaluation for Overall Wind Energy Conversion System Incorporating Power Electronic Inverter, International Journal of Reliability and Safety (IJRS), (Inderscience), Volume 7, Issue 4, pp. 319-331 November 2013. ISSN 1479-389X (Print), 1479-3903 (Online) [DOI: 10.1504/IJRS.2013.057410].
- 15. Mohanta, D.K., Krishnavel, A., Reddy, M. Jaya Bharata, Well-Being Analysis of Generator Step-Up (GSU) Transformer Insulation Incorporating the Impact on Power Generation Using Fuzzy Logic, International journal of Frontiers in Energy (Spinger), Volume 7, Issue 3, pp. 288 – 299, September 2013. ISSN 2095-1701 (Print), 2095-1698 (Online) [DOI: 10.1007/s11708-013-0265-7]
- 16. Pathirikkat, Gopakumar., Chandra, G. Surya., Reddy, M. Jaya Bharata., Mohanta, D. K., Optimal Redundant Placement of PMUs in Indian Power Grid Northern, Eastern and North-Eastern Regions, International journal of Frontiers in Energy (Spinger), Volume 7, Issue 4, pp. 413 428, December 2013. ISSN 2095-1701 (Print), 2095-1698 (Online) [DOI: 10.1007/s11708-013-0274-6].
- 17. Pradhan, S. K. and Subudhi, B. D., Nonlinear Adaptive Model Predictive Control of Flexible-Link Manipulator: A Experimental Study, IEEE Trans. On Control System Technology, DOI: 10.1109/TCST.2013.2294545, January, 2014.
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- 19. Mishra, Sudhansu Kumar., Panda, Ganapati., Majhi, Ritanjali, Constrained portfolio asset selection using multiobjective bacteria foraging optimization". Operational Research: An International Journal, Springer, Vol.138. DOI 10.1007/s12351-013-0138-1, 2014,pp.1-33.
- 20. Dash, Prajna Parimita., Patra, Dipti., Mishra, Sudhansu Kumar, Local Binary Pattern as Texture Feature Descriptor in object Tracking Algorith, Springer, Book Chapter-52, Book Title-Intelligent Computing, Networking, and Informatics, Chapter-52, 2014, pp.541-555.\
- 21. Kumar, Ashwani., Mishra, Sudhansu Kumar., Behera, Subhendu, A Survey on Moving Object Detection and Tracking", International Journal of Innovation in Science and Mathematics, Volume 2, Issue 1. 2347-9051 (Online), Jan 2014, pp.114-118.
- 22. Ranjan, Soumya, Mishra, Sudhansu Kumar., Behera, Subhendu, Multiobjective Optimal Design of Three-Phase Induction Motor for Traction Systems using an Asymmetrical Cascaded Multilevel Inverter", International Journal of Innovation in Science and Mathematics, Volume 2, Issue 1. 2347-9051 (Online), Jan 2014, pp.119-125.
- 23. Kumar, Ravinder., Mishra, Sudhansu Kumar., Behera, Subhendu Kumar, Hardware Design of Two Level Inverters for High Voltage Applications", International Journal of Innovation in Science and Mathematics Volume 2, Issue 1. 2347-9051 (Online), Jan 2014, pp.135-137.
- 24. Behera, Subhendu Kumar., Behera, Satya Ranjan., Mishra, Sudhansu Kumar, Multirate Digital

Signal Processing Application in Subband Coding for Speech Signal", International Journal of Innovation in Science and Mathematics Volume 2, Issue 1. 2347-9051 (Online), pp.138-141, January, 2014.

- 25. Aggarwal, Y., Singh, N., Ghosh, S., Sinha, R. K. (2014) Eye gaze-induced mental stress alters the heart rate variability analysis, Journal of Clinical Engineering, 39: 79-89.
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- 27. Keshri, A. K., Sinha, R. K., Singh, A. and Das, B. N. (2013) LDASpike for recognizing epileptic spikes in EEG, International Journal of Information Engineering and Electronic, IJIEEB Vol.5, No.4, pp. 41-50,ISSN: 2074-9023 (Print), ISSN: 2074-9031 (Online) October 2013.
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- 30. Aggarwal, Y., Singh, S. S. S. and Sinha, R. K. (2013) Chronic Exposure of Low Power Radio Frequency Changes the EEG Signals of Rats, Advances in Biomedical Engineering Research, 2: 17-23.
- 31. Chaudhary, N., Aggarwal, A. and Sinha, R. K. (2013) Study of Latent Early-life Associated Regulations and Automated Identification of Parkinson's Disease, International Journal of Basic and Applied Medical Sciences, 3: 87-97
- 32. Sinha, R. K., Aggarwal, Y. and Chakrabarti, N. (2013) Can phonocardiography evaluate the left ventricular ejection fraction?International Journal of Basic and Applied Medical Sciences, 3: 110-112.
- 33. Sinha, R. K., Aggarwal, Y., Ghosh, S. and Chakrabarti, N. (2013) K-Nearest neighborhood approach to identify level of left ventricular ejection fraction from phonocardiogram, Journal of Clinical Engineering, 38: 75-78.
- 34. Chaudhary, N., Aggarwal, A. and Sinha, R. K. (2013) Artificial neural network based classification of neurodegenerative diseases, Advances in Biomedical Engineering Research, 1: 1-8.

PUBLISHED IN INTERNATIONAL PROCEEDINGS

- 1. Pandey, S.K. and Laxmi, V., Control of twin rotor MIMO system using PID controller with derivative filter coefficient. In Proceedings of IEEE, Student's Conference on Electrical, Electronics & Computer Science, MANIT, Bhopal, March 1-2, 2014.
- 2. Pandey, S.K. and Laxmi, V., LQR controlled twin rotor MIMO system. In Proceedings of IEEE, Student's Conference on Engineering and Systems, SCES, MNNIT, Allahabad, May 22-30, 2014.
- 3. Bertoluzzo, M., Buja, G., Keshri, R.Kand Manis, R., Stationary Plane-based Investigation of the Behaviour of PM BLDC Drives, In Proceedings of 39th Industrial Electronics conference IECON 2013, Vienna, Austria.

- 4. Biswas, Mriganka., Dey, Madhusudan and Chakraborty, Sarbani, Digital Synthesis of Triangular Pulse Shape in Real Time for γ ray Spectroscopy. In Proceedings of the National Conference on Emerging Trends in Engineering and Science (ETES-14), Asansol, West Bengal, 2014.
- 5. Jha, Narendra Mohan and Ghose, Tirthadip, A Comparative Study of Impact of Reactive Power on Ageing of Synchronous Machine in Power System Operation, IEEE 1st International Conference on Condition Assessment Techniques in Electrical Systems, 6-8 December, 2013, Kolkata.
- 6. Aggarwal, P., Ghose, T., A multi stage concept for distribution system planning, int. conf. on Automation, control, Energy and systems-2014,1-2 February, 2014, Hooghly, West Bengal.
- 7. Mishra, Chakrapani., Mohanta, Dusmanta Kumar., Reddy, M. Jayabharata, Impact of Adaptive Relaying in Smart Grid. International Conference on Environment and Electrical Engineering (EEEIC 14), May 10-12, 2014, Krakow, Poland.
- 8. Mondal, Sourav., Murty, Cherukuri., Roy, Diptendu and Mohanta, Dusmanta Kumar, Simulation of Phasor Measurement Unit (PMU) Using Labview, International Conference on Environment and Electrical Engineering (EEEIC 14), May 10-12, 2014, Krakow, Poland.
- 9. Ghosh, Soumita., Das, Soumik., Ghosh, Debomita., Mohanta, D.K., Fuzzy Approach for Reliability Analysis of PMU, International Conference on Environment and Electrical Engineering (EEEIC 14), May 10-12,2014, Krakow, Poland.
- Das, Soumik., Ghosh, D., Ghose, T., Mohanta, D.K., Simulation of Wide Area Measurement System with Optimal Phasor Measurement Unit Location, International Conference on Signal Processing & integrated Networks, (SPIN2014),20-21 Feb 2014, Amity University, Noida, India.
- 11. Ghosh, D., Kumar, C., Ghose, T., Mohanta, D.K., Performance Simulation of Phasor Measurement Unit for wide Area Measurement System, International Conference on Control, Instrumentation, Energy & Communication, (CIEC '14), January 31-2nd Feb 2014, University of Calcutta, Kolkata, India
- 12. Reddy, M Jaya Bharata., Gollu, Deepak and Mohanta, D. K., Hardware Implementation of Grid Connected PV System With Energy Management Scheme, 13thInternational Conference on Environment and Electrical Engineering (EEEIC), Wroclow, November 1-3, 2013, Poland.
- 13. Pathirikkat, Gopakumar., Jaya Bharata Reddy, M. and Mohanta, D. K., Renewable Energy Utilization using Low Power Micro grid System, IEEE International Conference on Power, Energy and Control (ICPEC '13)
- 14. Bertoluzzo, M., Buja, G., Keshri, R. K. and Manis, R., Stationary Plane-based Investigation of the Behaviour of PM BLDC Drives, Accepted for the presentation and publication in the proceedings of IECON 2013.
- 15. Kumar, Ravinder., Mishra, Sudhansu Kumar., Kumar, Avanish, D-Space and Microcontroller based SPWM Inverter for Three Phase Induction Motor, IEEE International Conference on Advanced Communication Control and Computing Technologies (ICACCCT), May 8-10, 2014.
- 16. Sahoo, Amit Kumar., Mishra, Sudhansu Kumar, Design of Sliding Mode Controller using Artificial Delay, IEEE International Conference on Advanced Communication Control and Computing Technologies (ICACCCT), May 8-10, 2014.

- 17. Kumar, Ravinder., Mishra, Sudhansu Kumar, Hardware Design of Two Level Inverters for High Voltage Application, RAPEC-2013, NIT, Rourkela, November-23-24, 2013.
- 18. Ranjan, Soumya., Mishra, Sudhansu Kumar, A comparative performance evaluation of evolutionary algorithms for optimal design of three-phase induction motor, IEEE International Conference on Computing, Communication and Networking Technologies ICCCNT 2013, July 4-6, 2013., Vivekanandha College of Engineering for Women, Tiruchengode, Tamilnadu, India.
- Srivastava, A., Mishra, Sudhansu Kumar, Robust Detection & Tracking of Object, IEEE International Conference, Computing, Communication and Networking Technologies - ICCCNT 2013", Particle Filter using Color Information July 4-6, 2013. Vivekanandha College of Engineering for Women, Tiruchengode, Tamilnadu, India.
- Kumar, Ashwani., Mishra, Sudhansu Kumar and Dash, Pranjna, Robust Detection & Tracking of Object by Particle Filter using Color Information, IEEE International Conference on Computing, Communication and Networking Technologies - ICCCNT 2013.
- 21. Dash, Prajna Parimita., Patra, Dipti and Mishra, Sudhansu Kumar., Local Binary Pattern as a feature descriptor in object tracking algorithm, Springer, ICACNI-2013.
- 22. Kumar, Ayush and Mishra, Sudhansu Kumar, Stereo Vision Based Obstacle Detection Using Cloud Services, IEEE International Conference on Communication and Signal Processing-ICCSP'2013.
- 23. Ranjan, Soumya and Mishra, Sudhansu Kumar., Asymmetrical cascade multilevel inverter for electric traction, IEEE International Conference on Energy Efficient Technologies for Sustainability (ICEETS'13).
- 24. Kumari, Madhwi & Thakura, P. R., Design& Estimation of Drive Train Components for Series Hybrid Electric Vehicles, International Conference on Non-Conventional Energy, 16-17 Jan. 2014.

PUBLISHED IN NATIONAL PROCEEDINGS

- 1. Biswas, Mriganka., Dey, Madhusudan and Chakraborty, Sarbani, Digital Synthesis of Triangular Pulse Shape in Real Time for γ ray Spectroscopy in Proceedings of the National Conference on Emerging Trends in Engineering and Science (ETES-14), Asansol, West Bengal, 2014.
- 2. Das, Soumik., Murthy, Ch., Roy, D. S., Mohanta, D. K., An Overview on Voltage Stability Using Phasor Measurement Unit, Proceedings of National Conference on Recent Advances in Power, Energy and Control (RAPEC 2013), November 23 24, 2013, National Institute of Technology, Rourkela, India.
- 3. Mishra, Chakrapani., Murthy, Ch., Roy, D. S., Mohanta, D. K., Literature Review on Power Transmission Line Protection Using Phasor Measurement Unit, Proceedings of National Conference on Recent Advances in Power, Energy and Control (RAPEC 2013), November 23 24, 2013, National Institute of Technology, Rourkela, India
- 4. Mondal, Sourav., Murthy, Ch., Roy, D. S., Mohanta, D. K., Taxonomy of State Estimation Based on Phasor Measurement Unit (PMU), Proceedings of National Conference on Recent Advances in Power, Energy and Control (RAPEC 2013), November 23 24, 2013, National Institute of Technology, Rourkela, India.

5. Das, M., Thakura, P.R., Gupta, N., Simulation of Switched Mode Power Supply using SIMULINK, IEEE (Kolkata Section) and IETE First National Conference on Emerging Trends in Engineering and Sciences, pp.191-195, 2014.

AWARD / RECOGNITION BESTOWED ON FACULTIES (STATE /NATIONAL /INTERNATIONAL)

Sl. No.	Name of the	Title of the Award/ Honours	Organisation	Year / Duration
	Faculty			
1	Dr. T.Ghose	Session chair IEEE sponsored conference on Int. Conf. on Control, Instrumentation, Energy and Communication at kolkata from 2nd February to 4 th February, 2014	Calcutta University	Feb.2-4, 2014
2	Dr. T.Ghose	Invited Speaker in international conference on Advances in Electrical Engineering at IUB, Dhaka, Bangladesh and delivered lecture on Power System Deregulation Indian Experience	Independent University, Dhaka, Bangladesh	December 10, 2013
3	Dr. T.Ghose	Invited Speaker in TEQIP sponsored short term training programme on Application of Artificial Intelligence in Engineering and Research and delivered talk on Bacterial Foraging Technique on 27th September, 2013	Department of Production Engineering, BIT, Mesra	September 27, 2013
4	Dr. T.Ghose	Invited speaker in TEQIP sponsored short term training programme on Basic MATLAB during 24th June to 01st July,2013	TEQIP-II, BIT, Mesra	July 1, 2013
5	Dr. D. K. Mohanta	Program Committee Member, 13th International Conference on Environment and Electrical Engineering, (EEEIC-2013)	Poland	November 1-3, 2013
6	Dr. D. K. Mohanta	Program Committee Member, International Conference on Signal Processing and Integrated Networks, SPIN – 2014	Noida- Delhi NCR, India	February 20-21, 2014
7	Dr. V. Laxmi	Research Award	UGC	2012-2014
8	Dr. Ritesh Kumar Keshri	SS Chair, IECON 2013	IEEE	2013
9	Dr. Ritesh Kumar Keshri	Member TCAT, IES-IEEE	IEEE	2013 – till date

10	Dr. Ritesh Kumar Keshri	Organizing member/chair of Technical track for Automotive Technologies, 40th IECON 2014	IEEE	To be held from 28th October to 1st November 2014, Dallas Texas USA
11	Dr. Ritesh Kumar Keshri	Organizing member/chair of Special session on Multiphase traction drives for Road Vehicles 40th IECON 2014	IEEE	To be held from 28th October to 1st November 2014, Dallas Texas USA
12	Dr. Sarbani Chakraborty	Fellow	IETE	2013-14
13	Dr. Parashuram Thakura	Fellow	IETE	2013-14

PATENTS (APPLIED / GRANTED)

SI. No.	Name of the Inventor	Title of the Invention	Application / Patent No. (As applicable)	Year
1	Dr. D. K. Mohanta	A Novel Power Monitoring System for Detection, Lovalization and Classification of Disturbances.	Application No. 612/KOL/2008, Patent No. 254882	2013
2	Dr. D. K. Mohanta	A Novel System for Detection and Classification of power System Transmission line Faults.	Application No. 611/KOL/2008, Patent No. 256209	2013

MOUS / COLLABORATIONS

SI. No.	Name of Organisation / University	Purpose / Area	Year / Duration
1	University of Padova, Italy	Research and academic Collaboration	June 2011-Dec. 2014
2	Cranes software: Under Texas Instruments University Program	Setup of lab for Analog teaching	December 2013
3	Cranes software: Under Texas Instruments University Program	Setup of lab for C2000 micro-controller lab	December 2013

DEPARTMENTAL STUDENTS' ACTIVITIES

Sl. No.	Name of the Activity	Students' co ordinator, if any	Date/Duration
1	Workshop on networking	Sumit Jha	July 12- 13, 2013
2	Matlab workshop	Sumit Jha	August 13- 14, 2013
3	Control Circuit Design Workshop	Sharad Agrawal	August 13, 2013
4	C/C++ workshop	Sumit Jha	August 26- 29, 2013
5	Linux workshop	Sumit Jha	September 2- 3, 2013

6	Advanced linux workshop	Sumit Jha	September 9- 10, 2013
7	PLC and SCADA Workshop	Sharad Agrawal	September 2 -14, 2014
8	IETE National Student Congress 2014	Sharad Agrawal	February1 – 2, 2014
9	Texas India Innovation Challenge India Analog Design Contest 2014 [College Level], Texas Instruments	Dr. Ritesh Kumar Keshri (Mentor)	February 17-19, 2014
10	Industrial Visit to Tata Steel, Jamshe dpur, M.E. Power Electronics, 2012 & 2013 Batch	Dr. P. R. Thakura Dr. S.K. Mishra	May 5, 2014

BOARD OF STUDIES(UG/PG)

Internal Members

1)	HOD, EEE (Ex-Officio)	-	Chairman
2)	Prof. R. K. Narayan		Member
3)	Prof. T. Ghose	-	Member
4)	Prof. R. C. Jha	-	Member
5)	Prof. D. K. Mohanta		Member
6)	Dr. N. L. Nath, Asso. Prof.	-	Member
7)	Mr. P. Prakash, Asst. Prof.	-	Member
8)	Dr. Mahesh Chandra, Dept. of ECE	-	Member
9)	Prof. G. Sahoo, Dept. of CSE	-	Member

10) One student representative each from UG, PG and Ph.D. Programme.

External Experts (Any Two)

- 1) Dr. J. Pal, Prof., Dept. of Electrical Engineering, IIT, Kharagpur
- 2) Dr. A. K. Sinha, Prof., Dept. of Electrical Engineering, IIT, Kharagpur
- 3) Dr. D. Das, Prof., Dept. of Electrical Engineering, IIT, Kharagpur
- 4) Dr. S. K. Biswas, Professor, Dept. of EE, Jadavpur University, Kolkata
- 5) Dr. S. K. Goswami, Professor, Dept. of EE, Jadavpur University, Kolkata
- 6) Dr. S. C. Bera, Professor, Dept. of Applied Physics, Instrumentation Engineering Section Calcutta University, Kolkata
- 7) Dr. S. Basu, Mg. Director, Electronics Res. & Dev. Centre. Bose Res. (P) Ltd. Banglore
- 8) Mr. S. B. Prasad, GM, MECON, Ranchi
- 9) Mr. Sandeep Dhir, Chief Employee Training & Development, TISCO, Jamshedpur.

DEPARTMENTAL ACADEMIC COMMITTEE

1)	Head of Depratment, EEE (Ex-Officio)	-	Chairman
2)	Prof. R. K. Narayan, Professor, Dept. of EEE	-	Member
3)	Dr. T. Ghose, Professor, Dept. of EEE	-	Member
4)	Dr. R. C. Jha, Professor, Dept. of EEE	-	Member
5)	Dr. D. K. Mohanta, Professor, Dept. of EE	-	Member
6)	Dr. N. L. Nath, Associate Professor, Dept. of EEE	-	Member
7)	Dr. P.R. Thakura, Associate Professor, Dept. of EEE	-	Member
8)	Dr. V. Laxmi, Associate Professor, Dept. of EEE	-	Member
9)	Dr. S. Chakraborty, Associate Professor, Dept. of EEE	_	Member
10)	Dr. S. K. Mishra, Assistant Professor, Dept. of EEE	-	Member
11)	Dr. S. K. Ghorai, Professor, Dept. of ECE	-	Member
12)	Dr. G. Sahoo, Professor, Dept. of CSE	-	Member
13)	The Guide (s) of the candidates	_	Member

OTHER IMPORTANT INFORMATION

- 1) Dr. P. R. Thakura, Associate Professor, delivered invited talk on Power Electronics Converters & Drives on 16&17th June, 2014. IRIMEE, Jamalpur to IES Probationers.
- 2) Dr. P. R. Thakura, Associate Professor, delivered invited talk on Summer School on Digital Design of VLSI on 27th June, 2014.
- 3) Dr. P. R. Thakura, Associate Professor, delivered invited talk on Role of Microcontroller in Power Electronics, UGC (SAP) sponsored one week workshop of Microcontroller Application in Engineering Automation, January, 2014.
- 4) Dr. P. R. Thakura, Associate Professor, Member of Inspection Team, Kolhan University, Chaibasa, Jharkhand, 10th June, 2014.
- 5) In our Departments' Power Electronics lab, in the area of Regenerative braking of three phase induction motor drive, Hardware development of matrix converter, Constant current source inverter and boost converter, some major breakthrough have been achieved.
- 6) Dr. V. Laxmi, Associate Professor has received Research Award for the year 2012-2014 from UGC, New Delhi in which she will be paid the full salary of two years with admissible allowances which would be reimbursed to the Institute along with a research grant of Rs. 3 Lakhs.

2013 - 14

DEPARTMENT OF HOTEL MANAGEMENT & CATERING TECHNOLOGY



Chef in Making

Department of Hotel Management & Catering Technology was established in January-2003. Department offers 4 years (8 Semester) Bachelor's Degree in Hotel Management & Catering Technology (BHMCT) and 03 years (06 Semester) as an exit option. This program is approved by AICTE. The program lays emphasis on practical application of theoretical lessons through training, laboratory work, hands on workshops, theme parties, and project and study tour. The Department has a well-qualified team of faculty members with a blend of industry experience worked in India and overseas, and academic excellence who are 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 equipped with training kitchens, housekeeping laboratory, front office laboratory, computer laboratory etc. which ensures practical training in a professional environment to students.

Department also publishes its own bi annual blind refereed, research journal JOHAR Journal of Hospitality Application and Research.

As a regular feature Department organizes various workshops and food festivals to cultivate skill among the students. Department has established a respectable place in in the field of hospitality and declared the 18th best Hotel Management Institute of Excellence - survey conducted by GHRDC.

Among the branded and luxurious hotels in India our Department has gained a very good image and students go on "Industrial Exposure Training" for 18 weeks in various star Hotels such as Taj group of hotels, Oberoi group of hotels, ITC, The Park hotels, Dominos, Specialty Restaurant Ltd. etc. From the past three years Department has achieved the superb 100% quality placement to the students.

SEMINAR /CONFERENCES/SHORT-TERM COURSES CONDUCTED BY THE DEPARTMENT

Sl. No.	Title of Seminar/ Conferences/ Short Tem Courses/ Workshop	Coordinator	Funding/ Sponsoring Agency	Date of Seminar/ Conferences/ Short Term courses	
1.	Workshop on Bake and Take	Mr. Rajesh Langiya	Fund was generated from Registration fees of candidates	May 5 – 9, 2014	

CONFERENCES/ SEMINARS/ WORKSHOPS /STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the Faculty	Title of the conference / Seminar	Funding Agency	Organizers	Venue	Date
1.	Nishikant Kumar	National Conference on Transforming Communities through Tourism	ICSSR, Delhi	Institute of Business Management, CSJM University, Kanpur	Institute of Business Management, CSJM University, Kanpur	Feb 21-22, 2014
2.	Nishikant Kumar	National Seminar on Strategies in the Present Recessionary Business Scenario	IIMM & AICTE	Department of Management Studies, ISM Pundag, Ranchi	Department of Management Studies, ISM Pundag, Ranchi	April 11-12, 2014
3.	Abhisek Jana	Effectiveness, Ethics & Sustainability	ISM, Dhanbad	ISM, Dhanbad	ISM, Dhanbad	Dec.6 – 7, 2013

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

1. Kumar, Nishikant, SWOT analysis of mining tourism in Jharkhand – Jharia a critical study (2013) , ISSN 23212438, by IRDA International Journal of Management Studies, Vol., No. 2.

PUBLISHED IN NATIONAL JOURNALS

1. Kumar, Nishikant, Socio-economic Impact of recession on Tourism Industry – A Case study of Jharkhand (2014), ISBN 978-81-928178-2-8,

PAPER IN CONFERENCE PROCEEDINGS

1. Jana, A. and Chandra B. (2013). 'Role of business ethics in hospitality industry: An exploratory study'. Paper presented at National seminar on Effectiveness, Ethics and Sustainability, ISM, Dhanbad.

BOOKS:

CHAPTERS IN EDITED BOOK

- Srivastava, Praveen, "Measuring Guest perception of service quality in Tourism Product: A case study of Hotels in Jharkhand" in the book "Travel Tourism and Hospitality- Emerging Perspective and Paradigm", published by Globus Press, ISBN 9789382484967 (2014) pp 23-35.
- Kumar, Nishikant, Transforming Communities Through Tourism (ed. Ranga, Mukesh & Katiyar R.C), (2014), Victorious Publishers (India), ISBN 978-81-924744-7-2, pp. 75-86

DEPARTMENTAL STUDENTS' ACTIVITIES

SI. No.	Name of Activity	Students' Coordinator, if any	Date / Duration	
1	Food Festival – Bollywood Nights	Prof. Gautam Shandilya	March 13 – 15, 2014	

BOARD OF STUDIES

UG

1.	Head/In charge, HMCT	- Chairman (Ex Officio)
2.	Prof. Praveen Srivastava, Asst. Professor	- Member
3.	Prof. Nishikant Kumar, Asst. Professor	- Member
4.	Prof. Abhinav Kr. Shandilya, Asst. Professor	- Member
5.	Prof. Abhisek Jana, Asst. Professor	- Member
6.	Prof. Gautam Shandilya, Asst. Professor	- Member
7.	Prof. Rajeshwari Chateerjee, Asst. Professor	- Member
8.	Prof. Sanjiv Kr. Srivastava, Asst. Professor	- Member
9.	Prof. Amit Saran, Asst. Professor	- Member
10.	Dr. S.K. Bose, Prof. & Head, Dept. of Management	- Member
11.	Dr. B. N. Sinha, Professor, Dept. of Pharmacy	- Member
12.	Dr. Saswati Ghosh, Assistant Professor, Dept. of Biotechnology	- Member

EXTERNAL MEMBERS (ANY TWO):-

- 1. General Manager, Hotel Radisson Blu
- 2. General Manager, Hotel Ranchi Ashok
- 3. Principal, IHMCTAN, Hazipur
- 4. Principal, NSHM, Durgapur
- 5. General Manager, JTDC, Ranchi.
- 6. Front Office Manager, Hotel Golden Tulip

DEPARTMENTAL ACADEMIC COMMITTEE

Head/ In charge, HMCT - Chairman (Ex Officio)
 Prof. Praveen Srivastava, Asst. Professor - Member
 Prof. Abhinav Kr. Shandilya, Asst. Professor - Member

DEPARTMENT OF MANAGEMENT

The Department of Management was founded in 1979 to impart holistic management education to potential young managers and has completed more than 30 glorious years of its existence. The programmes offered by the Department lay special emphasis on nurturing personal integrity and social responsibility among the students. With its massive infrastructure base of well-equipped library and computer labs, seminar and conference rooms, the Department of Management strives to impart better contemporary education to the students.

The Bi-annual journal of the Department 'The Alternative' and quarterly newsletter, 'Manage-a-Bit' have gained in popularity in the management community. Many new institutions have shown their interest for subscription as well as in obtaining the journal on exchange basis.

Degree/Diploma offered:- The following programmes are being offered by the Department-

- 1. Ph.D. in Management
- 2. Master of Business Administration (2 years Full- Time / 3 years Part- Time)
- 3. M.E. (Quality Engineering & Management)



Attending a Lecture

SPONSORED PROJECTS

PROJECT SANCTIONED

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Pedagogy Project, NMEICT Main Phase)	S Shivani (Institute Coordinator)	MHRD (GOI)	October, 2013	25.00	March 2016

CONFERENCES CONDUCTED BY THE DEPARTMENT

SI. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses
1	Conference on 'Importance of Foreign Language (French) in Management	Dr D K Chand		September 9, 2013
	Education and International Trade'			

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Dr. Manju Bhagat	Vibrant Gujarat- National Education Summit		Ministry of Higher Education	Gandhi Nagar, Gujarat	Jan 10 -11 , 2014
2	Dr. R.N. Bhagat	Social Media promotion in emerging market : An Indian perspective – International conference on management and information system		Chikara University Bangkok, Thailand	Bangkok	Sept.22 – 24, 2013
3	Dr. Supriyo Roy	Application of Artificial Intelligence in Engineering and Research"		Dept. of Production Engineering, BIT Mesra	BIT Mesra, Ranchi	Sept. 23 – 27th 2013
4	Mr. Shailendra Kumar Singh	The Next Leap : Exploring New Paradigms in Business		Central University of Jharkhand and UNICEF	Central University of Jharkhand, Ranchi	February 6-7, 2014

5	Mr Sriniket Kumar Mishra	Introduction to translation	Central Institute of Indian Languages, Mysore	National Translation Mission	CIIL, Mysore	June 19- July 10, 2014
6	Dr S Shivani	Biennial Conference of Indian Academy of Management, IIM Ahmedabad	MHRD Project	Indian Academy of Management	IIM , Ahmedabad	December 14- 16, 2013

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. Mani R.V.S., Baul Utpal, Mohanty R.P., 'An Empirical Study of Information Technology Infrastructure Capability and its Impact on Digitally Enabled Customer Processes in Life Insurance Companies', "International journal of Business Information Systems", Vol.14, No 4, P: 461-479.2013
- 2. Ms. Shobana Karthikeyan, Dr.Manju Bhagat and N. G. Kannan, Examining Human Resource Management Outsourcing in India, International journal of Business Insight and Transformation, Volume 7 Issue 1 (October 2013 March 2014),42-48,ISSN 0974-5874
- 3. Tanmoy Kumar Banerjee, Supriyo Roy and Subhomoy Dey, "Location of Pit in Underground Mining: A Geometrical Approach", Published in International Journal of Managerial Studies and Research, Volume -2, Issue -5, June, 2014, pp. 99-108.
- 4. Tanmoy Kumar Banerjee, Supriyo Roy and Subhomoy Dey, "A GIS based approach for an Integrated Underground Coal Mine Management: A Conceptual Framework", Published in Journal of Management Policies & Practices by American Research Institution for Policy Development, New York, Volume 2, No.- 2, June, 2014
- 5. Ghosh, A., & Chakraborti, C. (2014), "Beyond Corporate Social Responsibility: Ethics in Action." Global Virtue Ethics Review, 6(4), 60-99.
- 6. Dash, Sujata.P. et. al., Impact of Human Capital on Economic Value Addition of Large Scale Organization: A Conceptual Managerial Decision Making Approach, European Journal of Business and Management, December 2013, 5, 23, 98-104.
- 7. Dash, Sujata.P. et. al., Inclusion of Human Capital in the calculation of WACC, European Scientific Journal, October 2013, 9, 28, 405-421.
- 8. Sinha Anand Prasad, Jha,P.C, The Problems Of Public Sector Enterprises In Management Of Technology, International Association of Scientific Innovation and Research (IASIR), USA,ISSN (Online): 2279-0039, ISSN (Print): 2279-0020, Issue 5, Volume 1, June-August, 2013, pp. 105-107,
- 9. Sinha Anand Prasad, Asthana Ashok Kumar, The Need And Effectiveness Of Innovative Planning And in Technology Planning: A Special Study of Central Coalfields Ltd.

SAARANSH, RKG, Journal of Management, (An International Bi-annual Refereed Research Journal), Vol-5, No-2, January 2014, ISSN 0975-4601.

PUBLISHED IN INTERNATIONAL PROCEEDINGS

- 1. Bhagat R.N., "Social Media promotion in emerging market: an Indian perspective" 22nd Sep. 24th Sep. '13, ISBN 978-81-924713-4-1.
- 2. Santosh Pattanayak, Supriyo Roy "Strategic perspective of implementing Enterprise Resource Planning in Indian Capital Goods Industry" Presented in International Conference on "The New Leap: Exploring New Paradigm in Business", Central University of Jharkhand, 6-7th February, 2014; also Published in form of Edited volume, Excel India Publishers, New Delhi, India.
- 3. Vyas R. K, Roy Supriyo, Mohanty R. P " Water Management through Micro-Irrigation Technology for Higher Agriculture Productivity", Presented and Published in 2nd International Conference on "Industrial Engineering (ICIE-2013)", National Institute of Technology Surat, 20 -22nd November, 2013.
- 4. Shailendra Singh, Supriyo Roy, Utpal Baul-"Green Perspectives and Practices towards Environment Impact of Logistics Operations", Presented in International Conference on "The New Leap: Exploring New Paradigm in Business", Central University of Jharkhand, 6-7th February, 2014; also Published in form of Edited volume, Excel India Publishers, New Delhi, India.
- 5. Ramkumar Rudrabhatla, Supriyo Roy, S.K Bose, R. P. Mohanty Micro finance Model for Quality of Life: Trend and Opportunities" Paper presented on 7th Doctoral Thesis Conference, IBS-Hyderabad, The IFHE University, 1-2nd May, 2014
- 6. Shyama Kumari & S Shivani, A Content Analysis of Female Portrayals in Indian Magazine Advertisements, December 2013, Biennail Conference of Indian Academy of Management, December 2013, IIM Ahmedabad
- 7. Shyama Kumari & S Shivani, Female Portrayals in Advertising and its Impact on Marketing Communication Evidences from India, International Conference on Rethinking Marketing, Department of Management Studies, IIT Delhi, December 2013

PUBLISHED IN NATIONAL JOURNALS

- 1. Panna Brishti, Baul Utpal, 'Communicating Brand Ideologies of Global Brands and Applicability of their Explored Communication Tools in the Indian Context', "The Alternative", Journal of Management Studies and Research, Birla Institute of Technology, Mesra, Vol. XIII, No. 1, October'13 March '14, ISSN: 0973-0451, P. 92
- 2. Jagasia Jyoti, Baul Utpal, Kumari Meena, 'Knowledge Management Using Communities of Practice in Higher Technical Education', "Samvid", S.P. Jain Institute of Management and Research, Mumbai, Vol 4, No: 1, 2014 -
- 3. Sahay Kasturi, Baul Utpal., 'Effective Strategies for Virtual Organizations and Virtual Teams'. "Global Journal of Finance and Management", Research India Publications, Delhi, Vol:5, No. 7, 2013, ISSN 0975 6477, P: 15
- 4. Bhattacharjee.D., Baul Utpal, Mohanty. R. P., 'Collaboration Between Auto-Service Sector and Downstream Petroleum Sector in Supply Chain Management', Industrial Engineering Journal,

Journal of Indian Institution of Industrial Engineering, Navi Mumbai, Volume VI & Issue No. 12, December 2013, P: 6

- 5. Ramesh. B., Baul Utpal, Srinivasan. V., 'Management of Logistical systems of Bulk Material Handling in Indian Cement Industry', "KJMDR—Kohinoor's Journal of Management Development and Research", Kohinoor Business School, Mumbai, Volume 3 No.1 December 2013, ISSN No 2249-023X
- 6. Jagasia Jyoti, Baul Utpal, Kumari Meena, 'Community of Practice in Higher Technical Education in India Need for the Study', "The Alternative", Journal of Management Studies and Research, Birla Institute of Technology, Mesra, Vol: XII, No: 2, April '13 September '13, ISSN: 0973-0451, P: 30-48.
- 7. Ms Swati Priyardarshani, Dr Manju Bhagat, "Quality of Work Life Balance: One Lives to Work or Works to Live", Journal of Exclusive Management Science –January 2014 –Vol. 3 Issue 1-ISSN 2277 5684
- 8. Ms Swati Priyardarshani, Dr Manju Bhagat, "work, family, life-balance to take the brunt of recession" JIS Management Vista, Vol. VIII, No. 1 (January-June 2014)
- 9. Shyama Kumari & S Shivani, Consumer Responses of Female Portrayals in Advertising an Indian Perspective" published as Invited Paper in the edited book published by Ansal University, Gurgaon, "Key pillars to Business Success: Strategy Innovation & Technology", Excel Books, New Delhi, ISBN 978-93-5062-372-5, 2014
- 10. Supriyo Roy "Supply Chain Operations Reference Model: A Process Reference Cross Industry Approach to Performance", Perspectives on Management, Bi-annual Journal of Heritage Business School Kolkata, Vol.-5, No. 1&2, July, pp. 154-163

PUBLISHED IN NATIONAL PROCEEDINGS

1. Ghosh, A. 2014. "Evolution of Corporate Social Responsibility (CSR) and Influence of United Nations in India". Paper presented at National Seminar on "Corporate Social Responsibility & Sustainability" Organized by CMPDI (HQ) Coal India Ltd, Ranchi, January 22.

AWARD / RECOGNITION BESTOWED ON FACULTIES (STATE / NATIONAL / INTERNATIONAL)

Sl. No.	Name of the Faculty	Title of the Award/ Honours	Organisation	Year / Duration
1	Mrs. Shelly Srivastava	Young Achiever's	International Research and	Feb.2 2014
		Award	Development Association (IRDA)	

DEPARTMENTAL STUDENTS' ACTIVITIES

SI. No.	Name of the Activity	Date/Duration
1	Guest Lectutre by Tarapad Pyne , GM, Jindal Steel,	Jul. 19, 2013
2	Guest Lecture by Mr Supriyo Bose, DGM, SBI	Jul. 26, 2013
3	Guest Lecture by Mr V S Kumar, DGM, Ashok Leyland	Dec. 3, 2013

BOARD OF STUDIES(UG/PG)

INTERNAL MEMBERS

- 2. HOD, Management
- 3. Dr Utpal Baul
- 4. Dr S K Bose
- 5. Dr Manju Bhagat
- 6. Dr S Shivani
- 7. Mr S C Mishra
- 8. Dr P C Jha
- 9. Dr Supriyo Roy
- 10. Dr Anupam Ghosh
- 11. Mr Amitabh Verma
- 12. Mr Anand Kumar
- 13. Ms Shelly Shrivastava
- 14. Dr J B David
- 15. Dr Dharmendra Chand
- 16. Mr Shailendra Singh
- 17. Ms Rohini Jha
- 18. Dr G Sahoo, Prof & Head, Department of IT
- 19. Dr N C Mohanty, Professor Emeritus, Department of Applied Maths

EXTERNAL EXPERTS (MINIMUM ONE TO ATTEND ANY MEETING)

- 1. Prof Subir Verma, Dean, IIM Ranchi
- 2. Prof Kampan Mukherjee, Professor & Dean, Department of Management Studies, ISM Dhanbad
- 3. Prof Taposh Ghoshal, Dean, School of Management Studies, Central University of Jharkhand
- 4. Dr Hariharan, GM HRD, Management Training Institute, SAIL, Ranchi
- Dr P K Chatterjee, Dy GM (Commercial)
 MECON Ltd, Ranchi

DEPARTMENTAL ACADEMIC COMMITTEE

Sl. No.	Name	Designation
1	Dr S K Bose	Professor & Head
2	Dr U Baul	Professor
3	Dr Manju Bhagat	Professor
4	Dr S Shivani	Professor
5	Dr Vijay Agrawal	Assistant Professor
6	Dr P C Jha	Assistant Professor
7	Dr J B David	Assistant Professor

9	Dr Rohit Pande	Assistant Professor
10	Dr G Sahoo	Professor & Head, Deptt of IT
11	Dr N C Mohanty	Professor Emeritus, Deptt of Applied Mathematics
12	Guide (s)	

OTHER IMPORTANT INFORMATION

- Fabrice Étienne, Consul General of France, Kolkata, visited the Department on 9th September,
 2013 for discussions on opportunities for our faculty members and students in France
- Dr. S.K.Bose was selected as judge of the panel conclave on national level paper presentation competition – "Evolving paradigm of management practices" organized by Heritage Business School, Kolkatta during December 20 -21, 2013 at Kolkatta.
- Dr. Manju Bhagat , Indian Labour and Employment report release 2014, held on 24th June 2014 jointly organized by BIT, Mesra and IND Eastern Religion, IHD, New Delhi .
- Dr. Manju Bhagat was invited to inaugurate & conduct session in DIP. Organized by Department of Management, IIT, Roorkee from 03-07-3014, on Strategic Human Resource Management (SHRM) for effective Performance, ISSR (Funding Agency)
- Dr. Manju Bhagat attended felicitation function in Delhi of Crargil Scholorship on July 2013 with two students of BIT ,Mesra , Abhay Shankar & Anupama Saharan, Cargil ,USA, 8th July 2013.
- Dr. Supriyo Roy was selected as a member of "Honored Judges panel" of the panel conclave on national level paper presentation competition "Evolving paradigm of management practices" organized by Heritage Business School, Kolkatta during December 20 -21, 2013 at Kolkatta.
- Dr. Supriyo Roy is promoted to Senior Life Member (SMIIE) Indian Institution of Industrial Engineering Mumbai.
- Dr. Supriyo Roy selected as Consulting Expertise of 'External Academic Expert' for the Committee of Internal Quality Assurance Cell (IQAC) - JIS Group of Colleges, Kolkata
- Dr. Supriyo Roy was selected as Business Consultant of a Premier Cement Industry "5S Quality Assurance Implementation at Durgapur Cement Works" - Durgapur, under Birla Corporation Limited.
- Dr. Supriyo Roy is Consultant and Advisor Mannara Technologies Pvt.Ltd, 102 Building, 3
 Sector, 3 MIDC, MBP, Mahape Navi Mumbai
- Dr. Supriyo Roy is acting as Corporate Advisor RAINBOW INFRA VENTURES Infrastructure, Project Marketing, Planning & Development, Deonar, Mumbai - 400 088 for the time period January, 2014 to December, 2016.
- Dr. Supriyo Roy reviewed manuscript ID TPRS-2013-IJPR-1788, entitled "Pricing and ordering decisions in a supply chain with imperfect quality items and inspection under a buyback contract" for International Journal of Production Research (IJPR) - UK
- Ms Neha Puria and Ms Sushma Priya, Students of MBA II Semester Participated and won in Paper Prresentation on Innovation in Leadership orgamised by Eastern Regional Conference, NIPM, Dhanbad

DEPARTMENT OF MATHEMATICS



Count Number of Heads

The Mathematics Department offers facilities for research work leading to Ph.D. degree in different areas of mathematics. Besides this, the Department not only teaches various topics in mathematics to undergraduate and post graduate students of different Departments of the Institute, but also runs its own M.Sc. and M. Tech. courses. The Department also has its own state of the art Computational Laboratory. The faculties of the Department are actively engaged in research in the areas of Differential Equations, Mathematical Modelling, Seismology, Fuzzy Logic, Optimisation Techniques and many more.

Programmes Offered

- Integrated MSc. (Mathematics & Computing) 5years
- M. Tech. (Scientific Computing) 3 years
- M.Sc. (Applied Mathematics) 2 years
- Ph.D. (Applied Mathematics)

SPONSORED PROJECTS

ONGOING PROJECTS

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	A Decision Support System for Vendor Selection Problem under intuitionistic fuzzy environment	PI: Dr. P. Kaur Co. PI: Dr. S. K. Jain	UGC	April 2013	11.50	3 years

PROJECTS COMPLETED

SI. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Date of com- pletion of the Project
1	Analyzing the Structure and Performance of Hindustani Classical Music Through Statistics	Dr. Soubhik Chakraborty (PI)	UGC	15.02.2011	6.26	31/07/2013

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. S. B. Singh, S. Chakraborty, K. M. Jha, A. Bhattachayra, S. Prakash, Impact of Hindustani ragas on CVA and DHI patients: An Application of Linear Mixed Model, International Journal of Advanced Science, Engineering and Technology, Vol. 2(1), 2013, 97-103
- 2. S. B. Singh, S. Chakraborty, K. M. Jha, S. Haider, S. Chandra, Repeated Measure Analysis in Raga Therapy: A Case Study on Head Injury Patients, Research Journal of Pharmaceutical, Biological and Chemical Sciences, Vol.4 (1), 2013, 420-428
- 3. S. Tewari and S. Chakraborty, A Statistical Analysis of Bhairav-The First Morning Raga, International Journal of Computers and Technology, Vol. 4, No. 2, 2013, 371-386
- 4. S. Chakraborty, R. Ranganayakulu, S. Chauhan, S. S. Solanki and K. Mahto, Given a raga recording, can we scientifically verify which school of Vadi-Samvadi selection is supported by the artist? International Journal of Computers and Technology, Vol. 4, No. 2, 2013, 300-300
- 5. M. Patra and S. Chakraborty, Analyzing the digital note progression of ragas within a thaat using fractal geometry, International Journal of Advanced Computer and Mathematical Sciences, Vol. 4, issue 2, 2013, 148-153
- 6. S. B. Singh, S. Chakraborty, K. M. Jha, S. Chandra and S. Prakash, Impact of Hindustani ragas on Visual Acuity, Spatial Orientation and Cognitive Functions in Patients with Cerebrovascular Accident and Diffuse Head Injury, Music and Medicine, Vol. 5(2), 2013, 67-75
- 7. S. Chakraborty, S. Sarkar, S. Tewari and M. Pal, An Interesting Application of Simple Exponential Smoothing in Music Analysis, International Journal of Soft Computing, Artificial Intelligence and Application, Vol. 2(4), 2013, 37-44
- 8. S. Tewari and S. Chakraborty, Using K-Means Clustering Algorithm to Optimize the Performance of an Artist and Prevent Music Privacy, International Journal of Innovative Research in Science, Engineering and Technology, Vol.2(11), 2013, 6194-6199
- 9. A. Kumari and S. Chakraborty, Parameterized Complexity-A Statistical Approach Combining Factorial Experiments with Principal Component Analysis, International Journal of Computer Science Engineering, Vol.2(5), 2013, 166-176.
- 10. M. S. Neogi, S. Chakraborty and V. Bhattacherjee, Factors Influencing Software Development Process: A Statistical Outlook, International Journal of Software Engineering and its Applications, Vol. 7(6), 2013, 221-236

- 11. John R. Graef, Seshadev Padhi and Smita Pati; Multiple positive periodic solutions of first order ordinary differential equations with unbounded Green's kernel, Communications in Applied Analysis, 17, no.3 and 4(2013), 319-330.
- 12. John R. Graef, Seshadev Padhi and Smita Pati; Existence and nonexistence of multiple positive periodic solutions of first order differential equations with unbounded Green's kernel, PanAmerican Mathematical Journal, 23(1), (2013), 45-55.
- 13. Seshadev padhi and Smita Pati; Oscillations of the solutions of the third order differential equation x'''+a(t)x''+b(t)x'+c(t)x=0, Qualitative Theory of Differential Equations, 1(2013) 107-114.
- 14. Seshadev Padhi; Stability of solutions of third order delay differential equations, Fasciculi Mathematici, 50(2013), 51-63.
- 15. Seshadev Padhi and P.K. Kar; Existence of multiple positive periodic solutions of state-dependent delay differential equations with applications to population dynamics, Functional Differential equations, 23(2013), 21-35.
- 16. Seshadev Padhi and Smita Pati; Asymptotic behaviour of solutions of the third order nonlinear nonhomogeneous differential equation x'''+a(t)x''+b(t)x'+c(t)x=f(t,x,x'x''), Qualitative Theory of Differential Equations, 1(2013) 306-311.
- 17. Seshadev Padhi and Smita Pati; \emph{Stability of solutions of $x'''(t)=p1x''(t)+p2x''(t-\tau)+q1x'(t)+q2x'(t-\tau)+r1x(t)+r2x(t-\tau)$, Qualitative Theory of Differential Equations, 1(2013) 481-496.
- 18. Seshadev padhi, John R. Graef, S.Pati and P.K.Kar; Periodic solutions of a single species renewable resources under periodic habitat fluctuations with harvesting and Allee effect, Communications on Applied Nonlinear Analysis, 20 (2013), 1-16.
- 19. Smita Pati, Seshadev Padhi and E.Thandapani; Multiple periodic solutions for Some difference equations subjected to allee effects, Dynamic Systems and Applications, 23(2014), 351-374.
- 20. Seshadev Padhi, Julio G.Dix and Smita Pati; Global attractivity of solutions of first-order delay differential equations with applications in population dynamics, Dynamic Systems and Applications, 23(2014), 375-390.
- 21. Seshadev Padhi and Smita Pati; Multiple Positive Periodic Solutions for a Nonlinear First Order Functional Difference Equation with Application to Hematopoiesis Model, Communications in Applied Analysis, Vol. 18, no.2(2014),1-10.
- 22. Seshadev Padhi, Smita Pati and Ranjan Kumar; Positive Periodic Solutions of Nicholson's Blowflies Model with Harvesting, PanAmerican Mathematical Journal, Vol. 24, no.3(2014), 15-26.
- 23. Prashant Kumar, Harleen K. Sandhu & Swapan Kumar Chakraborty, Isolation of Plane Shear Wave using Water Saturated Trench Barrier, Soil Dynamics and Earthquake Engg., 59(2014), Pgs. 42 50.
- 24. Kaushik Haldar, Bimal Kumar Mishra, A Mathematical Model for a Distributed Attack on Targeted Resources in a Computer Network; Communications in Nonlinear Science and Numerical Simulations, doi: 10.1016/j.cnsns.2014.01.028

- 25. Binay Kumar Mishra, Santosh Kumar Srivastava, Bimal Kumar Mishra, A quarantine model on the spreading behavior of worms in wireless sensor network; Transaction on IoT and Cloud Computing 2(1) 1-13 2014
- 26. Bimal Kumar Mishra, Indu Tyagi, Defending against malicious threats in wireless sensor network : A Mathematical Model, International Journal of Information Technology and Computer Science, Volume 6, Issue no.03, pp 12 -19, 2014
- 27. Indu Tyagi, Bimal Kumar Mishra, Bhaskar Karn, An SEIRS epidemic model for spread and control of malicious objects in computer network; International Journal of Mathematical Modeling Simulation and Applications, Vol 5(3), 2013, 302-308
- 28. Navnit Jha, Bimal Kumar Mishra, A Class of spline schemes for nonlinear weakly regular singular boundary value problems using non-uniform mesh: Applications to Physiological models; International Journal of Mathematical Modeling Simulation and Applications, Vol 5(2), 2014, 18-189
- 29. Neha Keshri, Bimal Kumar Mishra, Optimal Control Model for attack of worms in wireless sensor network; Int. Journal of Grid Distribution and Computing, 7(3), 2014, 251-272
- 30. Sounak Paul, Bimal Kumar Mishra, Survey of Polymorphic worm signature; Int. Journal of u- and e- service Science and Technology, 7(3), 2014, 129-150
- 31. Buddhadeo Mahato, Bimal Kumar Mishra, Anurag Jayswal, Ramesh Chandra, Mathematical model on acquired immuno deficiency syndrome; Journal of Egyptian Mathematical Society, doi: 10.1016/j.joems.2013.12.001
- 32. Bimal Kumar Mishra, Samir Kumar Pandey, Dynamic model of worm propagation in computer network; Applied Mathematical Modelling, Elsevier, 10.1016/j.apm.2013.10.046
- 33. Bimal Mishra & Neha Keshri, Stability Analysis of a Predator–Prey model in Wireless Sensor Network; DOI:10.1080/00207160.2013.809070, International Journal of Computer Mathematics, Taylor and Francis
- 34. Bimal Kumar Mishra, Neha Keshri, Mathematical model on the transmission of worms in wireless sensor network; Applied Mathematical Modelling, Elsevier, 37 (2013) pp. 4103-4111
- 35. Bimal Kumar Mishra, Jyotika Srivastava, Mathematical model on pulmonary and multi-drug resistant tuberculosis patients with vaccination; Journal of the Egyptian Mathematical Society, Elsevier, http://dx.doi.org/10.1016/j.joems.2013.07.006
- 36. Sontosh Kumar Srivastava, Bimal Kumar Mishra, Binay Kumar Mishra, Security Framework against malicious attacks in wireless sensor network; International journal of advanced technology and Engineering Research, vol. 3, Issue 5, 2013,, pp 7-10
- 37. Sounak Paul, Bimal Kumar Mishra, Selection of Next Generation Anti-Virus against Virus Attacks in Networks Using AHP; International Journal of Computer Network and Information Security, 5(2), 2013, pp 29-35
- 38. Munna Kumar, Bimal Kumar Mishra, T. C. Panda, A new model on the spread of malicious objects in computer network; International Journal of Hybrid Information Technology, Vol.6, No.6 (2013), pp.161-176
- 39. Bimal Kumar Mishra, Indu Tyagi, A Modified Antidotal e Epidemiological Model for Malicious

- Objects in Computer Network; International Journal of Mathematical Sciences and Engineering Applications, Vol. 7 No. I (January, 2013), pp. 167-176
- 40. Bimal Kumar Mishra and Apeksha Prajapati, Spread of Malicious Objects in Computer Network: A Fuzzy approach; Applications and Applied Mathematics: An International Journal, Vol. 8, Issue 2 (December 2013), pp. 684 700
- 41. Munna Kumar, Bimal Kumar Mishra, T. C. Panda, Naushad Anwar, Effect of Quarantine & Vaccination on Infectious Nodes in Computer Network; International Journal of Advances in Engineering, Science and Technology (Accepted)
- 42. Bimal Kumar Mishra, Indu Tyagi, An SEIRS Epidemic Model for spread and control of Malicious Objects in Computer Network; International Journal of Mathematical Modeling, Simulation and Applications, Volume 5, Issue 3, 2013.
- 43. Bimal Kumar Mishra and Apeksha Prajapati, Dynamical model on transmission of malicious codes in network; International Journal of Computer Network and Information Security, Vol 5, No. 10, 2013, 17-23
- 44. Munna Kumar, Bimal Kumar Mishra, Naushad Anwar, e-Epidemic Model On Highly Infectious Nodes in the Computer Network; International Journal of Computer Science & Engineering Technology, Vol. 4 No. 09 Sep 2013, 1216-1223
- 45. Prasant Kumar Nayak and Bimal Kumar Mishra, e-Dynamic SIR Epidemic Model and Stability Analysis under Vaccination in Computer Network; International J. of Math. Sci. & Engg. Appls. (IJMSEA), Vol. 7 No. V (September, 2013), pp. 1-13
- 46. Sounak Paul and Bimal Kumar Mishra, PolyS: Network-based Signature Generation for Zero-day Polymorphic Worms; International Journal of Grid and Distributed Computing Vol. 6, No. 4, August, 2013, pp 63-74

PUBLISHED IN NATIONAL PROCEEDINGS

- 1. P. Kaur, An Intutionistic Fuzzy Inventory Backorder Problem using Triangular Intutionistic Fuzzy Numbers, 29th Annual National Conference of the Mathematical Society Banaras Hindu University on Recent Trends in Mathematical Modelling and Simulations held on 3-4 February, 2014, in Department of Mathematics, Varanasi, UP.
- 2. P. Kaur, An intutionistic approach to EOQ problem with price breaks, International Conference on exploring new paradigms in business, 6-7, February, 2014 at Centre for Business Administration, Central University Jharkhand, Ranchi, India.

LIST OF MONOGRAPHS PUBLISHED:

1. Seshadev Padhi and Smita Pati; Theory of Third Order Differential Equations, Research Monograph, Springer India, 2013.

ISBN 978-81-322-1613-1

ISBN 978-81-322-1614-8 (eBook)

DOI 10.1007/978-81-322-1614-8

Springer New Delhi Heidelberg New York Dordrecht London.

2. Seshadev Padhi, John R. Graef and P.D.N.Srinivasu, Periodic Solutions of First Order Functional Differential Equations in Population Dynamics, Springer-Verlag, 2014

ISBN 978-81-322-1895-1 (eBook)

ISBN 978-81-322-1894-4

BOOK CHAPTER: 1

Bimal Kumar Mishra, Kaushik Haldar, e-Epidemic Models on the Attack and Defense of Malicious Objects in Networks; Theories and Simulations of Complex Social Systems, Intelligent Systems Reference Library, Springer Berlin Heidelberg, Editors: Vahid Dabbaghian, Vijay Kumar Mago, ISBN: 978-3-642-39148-4 (Print), doi: 10.1007/978-3-642-39149-1 9, Volume 52, 2014, Pages 117-143

AWARD / RECOGNITION BESTOWED ON FACULTIES (STATE / NATIONAL / INTERNATIONAL)

S. No.	Name of the Faculty	Title of the Award/ Honours	Organisation	Year / Duration
1.	Dr. Soubhik Chakraborty	National Award For Teaching Excellence	Indus Foundation	2013
2.	Dr. Soubhik Chakraborty	Best Academic Researcher Award 2013	Association of Scientists, Developers and Faculties	2013

BOARD OF STUDIES(UG/PG)

1.	Dr. S. K. Chakraborty	Chairman
2.	Dr. S.S. Roy	Member
3.	Dr. Sukesh Kumar	Member
4.	Dr. S. Konar	Member
5.	Prof. A.R. Roy	External Member, IIT, Kharagpur
6.	Prof. K. S. Chowdhuri	External Member, Jadavpur University
7.	Prof. Satyajit Roy	External Member, IIT, Madras
8.	Prof. K.C. Prasad	External Member, Ranchi University

DEPARTMENTAL ACADEMIC COMMITTEE

- 1. Dr. S. K. Jain
- 2. Dr. S. K. Chakraborty
- 3. Dr. B. K. Mishra
- 4. Dr. S. S. Roy
- 5. Dr. S. Padhi
- 6. Dr. S. Chakraborty
- 7. Dr. A. P. Ghorai
- 8. Dr. P. Kaur
- 9. Prof. Ashok Kumar Roy (External Member)
- 10. Prof. A. K. Sinha (External Member)

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OTHER IMPORTANT INFORMATION

- ▶ Dr. Bimal Kumar Mishra became Editor −in − chief of International Journal of Mathematical Modeling and Computing, USA
- Dr. Soubhik Chakraborty became a Reviewer of Mathematical Reviews (American Mathematical Society).
- > Dr. P. Kaur Delivered a lecture in a TEQIP sponsored one week short term training programme on "Applications of Artificial Techniques in Engineering and Research" 23-27th September 2013 at BIT, Mesra, Ranchi organized by Department of Production Engineering.

Dr. S. PADHI

- Delivered Invited talk entitled "Oscillation of Third Order Differential Equations" and "Global attractivity of first order differential equations" National Conference on Emerging Trends and Applications of Mathematics to Science and Technology, August 6 7, 2013 at P. G. Sacred Heart College, Tirupattur, India and Chaired a session.
- Delivered an invited talk on the global attractivity of solutions of first order functional differential equations in the 18th Ramanujan Sumposium on Recent Trends in Dynamical Systems and Mathematical Modelling, September 25-27, 2013 at the Ramanujan Institute for Advanced Studies in Mathematics, University of Madras, Chennai, India and Chaired a session.
- Delivered an invited talk on the ``Third Order Linear Differential Equations: From Algebra to Analysis" February 08-09, 2014 in the 1st Seminar of Jharkhand Society of Mathematical Sciences, held at Central University of Jharkhand, Ranchi, India.

DEPARTMENT OF MECHANICAL ENGINEERING





Scheffler Dish

Dual Fuel Diesel Engine Generator Set

Since its inception in 1955, the Department of Mechanical Engineering has gained reputation for its of quality of teaching and research. The excellent laboratory facilities, modern computer clusters, systematically designed curriculum, and dedicated faculty members have made this Department, a highly sought destination for students.

Mechanical Engineering Graduates of this Institute are recruited by many reputed national as well as multinational companies.

The Department of Mechanical Engineering offers the following programs at undergraduate, post-graduate and Doctoral level:

- I) B.E. (Mechanical Engineering), sanctioned strength: 90
- II) M.E. (Mechanical Engineering), sanctioned strength: 42

Specialization:

- a) Heat Power Engineering (12)
- b) Design of Mechanical Equipment (12)
- c) Computer Aided Analysis & Design (18)
- III) M.Tech. (Energy Technology): 18
- IV) Ph.D. in Mechanical and Interdisciplinary field.

SEMINAR / CONFERENCES / SHORT – TERM COURSES CONDUCTED BY THE DEPARTMENT:

SI. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses
1	A 2-Week ISTE Workshop on ENGINEERING MECHANICS	Dr. Jeeoot Singh	MHRD	Nov. 26 – Dec. 6, 2013
2	NMICTE Workshop on Fluid Mechanics	Dr. Apurba Kr. Roy	IIT Kharagpur	May 20 – 30, 2014

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	S K Dhiman	24th National Symposium on Cryogenics (NSC- 24) A 2-Week ISTE Workshop on ENGINEERING MECHANICS conducted by from 26/11/2013 to 06/12/2013 sponsored by MHRD (NME-ICT)	MHRD (NME-ICT)	IIT Bombay	BIT Mesra	Nov. 26- Dec.6, 2013
2	A.K. Roy	One Week Coordinators Workshop on fluid Mechanics"	MHRD	IIT Kharagpur	IIT Kharagpur	Mar.11-15, 2014
3	Arbind Kumar	Quality Initiatives in Technical & Higher Educational Institutions (in Compliance with NBA & NAAC Accreditation)	TEQIP	Staff College of Engg., Hyderabad	Hyderabad	June 9 – 11, 2014
4	D.P.Mishra	Nirma University International Conference on Engineering	TEQIP	Nirma University, Ahemedabad	Nirma University, Ahemedabad	Nov. 28 – 30, 2013

PUBLICATIONS:

PUBLICATION IN INTERNATIONAL JOURNALS:

- 1. U.C. Singh, Anant Prasad & Arbind Kumar, A lump integral model for freezing and melting of a bath material on to a plate shaped solid additive in an agitated bath, Acta Metallurgica Slovaca, 19, pp 61-73, 2013
- 2. U.C. Singh, Anant Prasad & Arbind Kumar, A lump integrated model based freezing and melting of a bath material onto a cylindrical solid Additive of negligible resistance, Journal of Mining and Metallurgy, Section B: Metallurgy , 49(3),pp 245-256, 2013
- 3. R.P.Sharma, A numerical study of three-dimensional darcy- forchheimer (D-F) model in an inclined rectangular porous box, International Journal of Mechanical Engineering and Technology 4(3), pp 259 265 2013
- 4. R.P.Sharma, Experimental analysis of liquid cooling system for Desktop computers, International Journal of Mechanical Engineering and Technology 4(3), pp 266 272, 2013
- 5. R.P.Sharma, Experimental analysis of solar water heater using porous medium and agitator, International Journal of Mechanical Engineering and Technology 4(3), pp 273 280, 2013
- 6. R.P.Sharma and Chikesh Ranjan, Modeling and simulation of four-bar planar mechanisms using ADAMS, International Journal of Mechanical Engineering and Technology 4(2), pp 429 435, 2013
- Alok Kumar Pandey and R.P.Sharma, Simulation of eight wheeled rocker bogie suspension system using MATLAB, International Journal of Mechanical Engineering and Technology 4(2), pp 436 – 443, 2013
- 8. R. P. Sharma and Chikesh Ranjan, Modeling, simulation & dynamic analysis of four-bar planar mechanisms using CATIA V5R21, , International Journal of Mechanical Engineering and Technology 4(2), pp 444 452, 2013
- 9. R.P.Sharma, A numerical analysis of three-dimensional darcy model in an inclined rectangular porous box using S A R technique, International Journal of Mechanical Engineering and Technology 4(2), pp 554 561, 2013
- 10. R.P.Sharma, Mathematical modelling and analysis of three dimensional darcy –brinkman (D-B) model in an inclined rectangular porous box, , International Journal of Mechanical Engineering and Technology 4(2), pp 562 567, 2013
- 11. R.P.Sharma and R. V. Sharma, Modelling & simulation of three-dimensional natural convection in a porous box, International Journal of Mechanical Engineering and Technology 3(2), pp 712 721
- 12. A.K. Roy, B. Maiti, P.K. Das, Visualisation of air entrainment by plunging jet, Procedia Engineering, 56 (2013), pp 468–473.
- 13. M. K. Das, K. Kumar, T. K. Barman and P. Sahoo, Optimization of Material Removal Rate in EDM Using Taguchi Method, Advanced Materials Research, 626, pp 270-274, 2013
- Jeeoot Singh and K. K. Shukla, Meshless analysis of laminated composite and sandwich plates subjected to various types of loads, International Journal for Computational Methods in Engineering Science & Mechanics. 15(2), pp158-171, 2014

- 15. Sandeep Singh, Jeeoot Singh, K. K. Shukla, Buckling of laminated composite plates subjected to mechanical and thermal loads using meshless collocations. Journal of Mechanical Science and Technology 27(2), 327-336, 2013
- 16. Richa Pandey and L. N. Pattanaik, A fuzzy QFD approach to implement reverse engineering in prosthetic socket development, International Journal of Industrial and Systems Engineering Vol. 17(1), pp.1-4,2014
- 17. A Sengupta, P Mishra, V Singh, S Mishra, P K Jha, S K Ajmani and S C Sharma, Physical modelling investigation of influence of strand blockage on RTD characteristics in a multistrand tundish, Ironmaking & Steelmaking; Processes, Products and Applications, 40(3), 159-166, 2013
- 18. D. Mahto and S. Pal, Thermodynamics and thermo-economic analysis of simple combined cycle with inlet fogging, Applied Thermal Engineering 51(1-2), 413 424, 2013
- 19. Vikas, Roy, A. K. and kaushik Kumar, Effect and optimization of machine process parameters on material removal rate in EDM for EN41 material using Taguchi. International Journal of Mechanical Engineering and Computer Applications. 2013, 1(5), 35-39.
- 20. Das, A. Roy, A. K. and kaushik Kumar, Design and Stress Analysis of a Mixed Flow Pump Impeller International Journal of Mechanical Engineering and Computer Applications. 2013, 1(5), 1-7.
- 21. Shashikant, A. Roy, A. K. and kaushik Kumar, Optimization of machine process parameters on material removal rate in EDM for EN19 material using RSM. Journal of Mechanical and Civil Engineering. 2013, 5, 24 28.
- 22. Sambhrant, Das, A., Roy, A. K. and kaushik Kumar, Comparison of design validation of a mixed flow pump impeller blade using CATIA and ANSYS. International Journal of Management and Technical Research. 2013, 1(1), 33-42.
- 23. Milan, Kaushik Kumar, Optimization of surface roughness and MRR in EDM using WPCA. Procedia Engineering., 2013, 64, 446–455.
- 24. Gargi, Kaushik Kumar, Deflection and stress analysis of a cantilever and its validation using ANSYS. International Journal of Mechanical Engineering and Research, 2013, 3(6), 655-662
- 25. Gargi, Kaushik Kumar, Deflection and stress analysis of a simply supported beam and its validation using ANSYS, International Journal of Mechanical Engineering and Computer Applications, 2013, 1(5), 17-20.
- 26. Monika, Kaushik Kumar, Efficacy of ISO 9000 Standards Conversely CMM for a Software Organization. International Journal of Management, Information Technology and Engineering, 2013, 1(2), 13-20.
- 27. Sudeepan, Kaushik Kumar, Study of tribological properties of ABS / CaCO3 polymer composites using Taguchi method. Journal of Mechanical and Civil Engineering, 2013, 6, 38 42.
- 28. Milan, Kaushik Kumar, Optimization of WEDM process parameters on EN31steel by weighted principal component analysis. Journal of Mechanical and Civil Engineering, 2013, 6, 30 33.
- 29. Monika, Kaushik Kumar, ISO 9000-3 OR CMM: which is more extensive for the quality systems in a software industry? International Journal of Advanced Research in Engineering and Applied Sciences, 2014, 3(1), 21-27.

- Monika, Kaushik Kumar, CMM or CMMI, which is more appropriate for a software industry? International Journal in IT & Engineering, 2014, 2(1), 24 33.
- 31. Monika, Kaushik Kumar, Quality standards for a software industry –A review. IOSR Journal of Computer Engineering (IOSR-JCE), 2014, 16(2), 87-94.
- 32. Shashikant, Kaushik Kumar, Optimization of Machine Process Parameters on Overcut in EDM for EN19 Material using RSM. International Journal of Current Engineering and Technology, 2014, Special Issue-3, 50-53.
- 33. Milan, Kaushik Kumar, Optimization of EDM Process Parameters Using Grey-Taguchi Technique. International Journal of Machining and Machinability of Materials, 2014, 15(3/4), 235-261.
- 34. Monika, Kaushik Kumar, Analyzing the Conceptual Approach of ISO/IEC 15504 (Software Process Assessment) Model for Software industry. International Journal of Science, Technology and Engineering, 2014, 1(1), 26-30
- 35. Sujeet Kumar Mishra, Vinay Sharma, Ashok Mishra* "Effect of rate of deformation on electromagnetic radiation during quasi-static compression of sintered aluminium preforms" International Journal of Materials Research (* Formerly Zeitschrift für Metallkunde) Vol. 105 (2014), No. 3, pp. 265-271.
- 36. L.N. Pattanaik and S. Kumar & Richa Pandey, "Fuzzy linguistic hedges for the selection of manufacturing process for prosthetic sockets", Decision Science Letters, Volume 3,pp. 259-268, 2014.
- 35. Mohapatra, K. and Mishra, D. P., Analysis of Heat Transfer and Fluid Flow Characteristics of an Internally Finned Tube. Advances and Applications in Fluid Mechanics, 2014, 15(1), 17-40.
- 36. Beura, S. and Mishra, D. P., Effect of Wall Taper and Attack Angle on Mean Flow Structure around a Pyramid. International Journal of Emerging Technologies in Computational and Applied Science, 2014, 8(6), 490-498, 2014.
- 37. Mishra, D. P. and Mohapatra, K., Effect of fin Configuration on Heat Transfer of an Annulus Tube, American International Journal of Research in Formal, Applied and Natural Sciences, 2014, 6(1), pp. 63-69.

PUBLISHED IN INTERNATIONAL PROCEEDINGS:

- M. K. Das, K. Kumar, T. K. Barman and P. Sahoo, Optimization of surface roughness and MRR in EDM using WPCA International Conference on Design and Manufacturing (IConDM-2013), (18 – 20 July, 2013), Chennai.
- 2. Das, A., Roy, A. K. and Kaushik Kumar, Design of a mixed flow pump impeller and its validation using CATIA. In Handbook of Engineering and Applied Sciences, Society Of Engineering And Management Sciences. 2013.
- 3. Das, A., Roy, A. K. and Kaushik Kumar, Design and FEM Analysis of a Mixed Flow Pump Impeller . In Proceedings of IC MEETS 2014. Excellent Publishing House.
- 4. Shashikant, Roy, A. K. and Kaushik Kumar, Optimization of machine process parameters on overcut in EDM for EN19 material using RSM. In Proceeding International Symposium on Engineering and Technology. International Symposium on Engineering And Technology. 2014.

- 5. Monika, Kaushik Kumar, ISO 9000 for a Software Organization. In Handbook of Engineering and Applied Sciences. Society Of Engineering And Management Sciences. 2013., 1, 95-100.
- 6. Monika, Kaushik Kumar, Effectiveness of ISO 9000 family of Standards for a Software Organization. In Proceeding of ICAIEA 2014., Anna University, 1, 22-25.

PUBLISHED IN NATIONAL PROCEEDINGS

1. S.K. Dhiman, Ashish Narula, A. K. Sahu, "Design of the liquid nitrogen pre-cooling heat exchanger for the kW class indigenous helium refrigerator/liquefier", 24th National Symposium on Cryogenics (NSC-24), Institute for Plasma Research, Gandhinagar, Gujrat, p183. 2013

DEPARTMENTAL STUDENT'S ACTIVITIES

SI. No.	Name of the Activity	Students' Co-ordinator, if any	Date/Duration
1	SAE/ Team Firebolt a Racing event	SAE President : Jay Kumar Megotia	Feb. 14
	at Indore	Firebolt Captain: Utasav Giri	

BOARD OF STUDIES

1.	Head (Mech. Engg.)	-	Chairman (Ex-officio)
2.	Dr. Arbind Kumar (Professor, Mech. Engg.)		Member
3.	Prof. A.K.Ray (Professor, Mech. Engg.)	-	Member
4.	Dr. R.P.Sharma (Associate Professor, Mech. Engg.)	<u></u>	Member
5.	Dr. A.K.Roy Associate Professor, Mech. Engg.)	_	Member
6.	Sri O.P. Pandey Assistant Professor, Mech. Engg.)	-	Member
7.	Dr. B.K.Singh Professor, Prod. Engg. & Dean PG & R	-	Member

Any two external Experts from the following:

- (i) Professor Souvik Bhattacharya
 Department of Mechanical Engineering
 1.1.T. Kharapur, Kharagpur, West Bengal
- (ii) Professor A.K. Jha
 Department of Mechanical Engineering
 B.H.U. Varanasi -10 (U.P.)
- (iii) Professor I. BasakHead, Deptt. Of Mech. Engg.N.I.T. Durgapur, Durgapur, West Bengal

(iv) Professor R. Kumar
Department of Mechanical Engineering
M.N.N.I.T, Allhabad, Allahabad (U.P.)

(v) Mr. Yuvraj Aggarwal
 Director
 Clean Energy Resources Pvt. Ltd. (India)
 3B, Duckback House, 41, Shakespeare Sarani, Kolkata – 700 017

(vi) Dr. G.P.Sinha
 Director
 Central Mechanical Engineering Research Institute
 Mahatma Gandhi Avenue, Durgapur – 713 209, West Bengal.

Departmental Academic Committee

(i) Head of the Department - Chairman (Ex-officio)

(ii) Dr. Arbind Kumar - Member

(iii) Dr. Arbind Kumar II - Member

(iv) Dr. R.P.Sharma - Member

(v) Dr. Apurba Kumar Roy - Member

(vi) Dr. Jeeoot Singh - Member

(vii) Dr. R.C. Jha

Professor, Deptt.of EEE - Member

(viii) Dr. B.K.Singh

Professor & Head, Prod. Engg. - Member

DEPARTMENT OF PHARMACEUTICAL SCIENCES & TECHNOLOGY

The Department of Pharmaceutical Sciences was established in 1972, recognizing the potential of this emerging field of Technology. The Department has a lively, stimulating and a robust scientific community with highly qualified and competent faculty and a large number of postgraduate students, research fellows and visiting scientists. It is well equipped for both teaching and research activities, which are undertaken across the whole spectrum of Pharmaceutical Sciences. The Department encourages and supports studies involving a range of research strategies and have expertise and experience towards quality and innovative research.

The Department offers B.Pharm., M. Pharm., and Ph.D. programmes in Pharmaceutical Sciences. M.Pharm. programmes are being offered in six specializations, Pharmaceutics, Pharmaceutical Chemistry, Pharmacology, Clinical Research, Quality Assurance & Regulatory Affairs and Pharmacognosy. The programmes are recognized by Pharmacy Council of India and AICTE. The Department has state of the art Instrumental Analysis and Molecular Modelling laboratories catering thr need of researchers from different disciplines.

The Department has been supported by FIST of DST and SAP of UGC besides having many R&D projects, funded by national and international agencies.

Recently in May 2014, Department has been renamed as "Department of Pharmaceutical Sciences & Technology".



Laboratory in Progress

SPONSORED PROJECTS

PROJECT SANCTIONED

SI. No	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Investigation of mechanism of antihyperglycemic properties of some indigenous medicinal plants of Jharkhand on various cellular assays,	Dr. Papiya Mitra Mazumder	AICTE under Research Promotion Scheme	8-132/RIFD/ RPS/POLICY - 3/2013 - 14 DATED FEB 28 2014)	6.47	April 2014 – 2017. (3 years)

ONGOING PROJECTS

SI. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	1 Structure-based discovery of antivirals for the treatment of Chikungunya virus infections (Anti-Chick) 1 Indian Co-PI: Dr. Sinha Collaborators: 1. Dr. D. Velmuru University of Macondary of Macondary of Lub Germany 3. Dr. Bruno Cana Axis Marsielle University, France		Indigo Eranet/ DBT-	4th Feb 2011	34.62	2 Years (Extended for 3rd year)
2	Structure-based design of Dengue virus protease inhibitors	Indian Co-PI: Dr. B. N. Sinha Collaborators: 1. Dr. D. Velmurugan, University of Madras, India 2. Dr. Rolf Hilgenfield, University of Lubeck, Germany	DBT- BMBF	1st Dec 2010	24.52	3 Years (Extension)

					1	
3	Design & Synthesis of Potent Dual Inhibitors of Cdk4 and Tubulin as Anticancer Agents	Dr. B.N. Sinha , BIT, Mesra *RGM: Dr. Venkatesan J. Collaborator: Dr. Bob Chaudhury (De Montfort University, UK) Prof. Bob Choudhuri, De Montfort Univ., UK	UGC- UKERI	2013	30.88	2 years
4	Improvement of bioavailability of poorly water soluble drugs by micronization and establishment of Level A In vitro In Vivo correlation.	Dr. Animesh Ghosh	DRDO	2011	9.27	3 years
5	Invitro characterization of microsponge loaded gel for wound healing- evaluation of safety and efficacy	Dr. Animesh Ghosh	UGC- MRP	2012	6.42	3 years
6	Design, Development and Optimization of Self Nanoemulsifying and Solidified Self Nanoemulsifying Drug Delivery Systems of Antitubercular Drugs	Dr. Sandeep Kumar Singh, Dr. PRP Verma and Dr. S.M. Verma	(DBT)	2012	14.5	2 years
7	Antitubercular Drug Loaded Novel Cubosomes/ Hexosomes Based Drug Delivery System Using Response Surface Methodology	Dr. Sandeep Kumar Singh	UGC- BSR	2013	6.00	2 years
8	In silico design, synthesis, and evaluation of newer azoles as HIV-1-RT inhibitors	Dr. Swastika Ganguly and Dr. A. Dev	UGC MRP	April 2013	13.839	3 years

9	Neutraceuticals and cosmaceuticals from Tamarind seeds, Sal Seed Oil and Karanj oil Using Low Cost Technology	Dr. K. Jayaram, Dr. S. Jha and Dr. Anima Pandey	DST TRIFED	2013	12.5	2 years
10	To determine molecular mechanism associated with Type 2 Diabetes associated cognitive impairment.	Dr Sugato Banerjee	DST- SERB	March 2013	25.00	3yrs

PROJECTS COMPLETED

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Date of completion of the Project
1	To understand the nature of diversity in lac insects of Kerri asps	Co-PI: Dr. B. N. Sinha	ICAR-NIAP	Jan 2009	66.50	Dec.2013
2	Design, Synthesis and study of some NIDDM based antidiabetics linear and cyclopeptides and non peptides	PI:Dr.S. Samanta	UGC	Dec 2009	10.818	July 2013
3	Manufacture of Stable Potassium Iodate Tablet and Syrup	PI: Dr R.N. Gupta and Co-PI: Dr Sunil Kaushal	DRDO, DELHI	Sept 2011	9.95	Sept. 2013
4	Evaluation of antidiabetic potential of the indigenous medicinal plants of chotanagpur region	PI: Dr. P. M. Mazumder and Co-PI :Dr. D. Sasmal	UGC	Feb2011	11.08	Feb. 2014

4	Studies on immunotixic profile and proteomics of deltamethrin in murine thymocytes and spenocytes: Attenuation by herbals	PI: Dr. N. Sharma and Co-PI : Dr. D. Sasmal	UGC	Feb2011	9.29	Feb. 2014
6	Modernization of Pharmaceutical laboratory (MODROB)	HOD, Pharm. Sciences & Technology	AICTE	March 2012	6.00	March 2014
7	Estimation of Heavy Metals Toxicity in Vegetables & Medicinal Plants collected from Road Side Market and Organized Market Sites of different areas of Ranchi City	PI: Dr. Manik	UGC	July 2012	0.8	July 2014

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Dr.B.N.Sinha	High throughput virtual screening of Dengue Virus Protease	6 th Asian Association of Schools of Pharmacy conference (AASP), Singapore	AASP, Singapore	National University of Singapore,	Nov.14-17, 2013
2	Dr. Subir Samanta	Design, synthesis and antidiabetic, cardiomyopathy studies of cinnamic acid- amino acid hybrid analogs	BIT	OMICS (MedChem & CADD).	Las Vegas, USA	October 15- 17, 2013.
3	Dr, R. N. Gupta		IPCA	IPCA	New Delhi	Dec. 20 -22, 2013

4	Dr, R. N. Gupta(as Chairman)	IAPST (Indian Association of Pharmaceutical Scientists & Technologists) QIP, Jadavpur University, Kolkata	IAPST AICTE	IAPST AICTE	Kolkata Kolkata	Jan. 17-19, 2014 July 7 -8 , 2013
5	Dr. S. Ganguly(as a Resource person and a chair person for poster presentation)	National Conference on 'Complex Diseases, Novel therapeutics and Delivery Challenges"	AICTE	Gupta College of Technological Sciences, Asansol	Gupta College of Technological Sciences, Asansol	Jan. 23-24, 2014
6	Dr. P. Mitra Mazumder as (Guest of Honour and Resource person)	Recent Issues in Bioanalytical Research	AICTE	P. Wadhwani College of Pharmacy, Yavatmal,	P. Wadhwani College of Pharmacy, Yavatmal, Maharashtra	Oct.17- 18, 2013
7	Dr. (Mrs.) S.M. Verma (a co-chair person for poster presentation)	IAPST (Indian Association of Pharmaceutical Scientists & Technologists)	- IAPST	Jadavpur University, Kolkata	Jadavpur University, Kolkata	Jan. 17-19, 2014
8	Dr. S. P. Pattanayak	Molecular Biotechnology and Bioinformatics	Self Sponsored	International Centre for Stem Cells, Cancer and Biotechnology (ICSCCB), Pune, India	Pune, India	July 15 – 19, 2013
9	Dr. S. P. Pattanayak	BD-JH FACS Academy Training (FACSOrient)	BD 1 Becton Drive Franklin Lakes, NJ USA 07417 - BD India	BD-JH FACS Academy	New Delhi	August 2013
10	Dr. Nibha Mishra	Workshop on Molecular Biotechnology and Bioinformatics	Self funded	International Centre for Stem Cells, Cancer and Biotechnology (ICSCCB)	Prabhavee Tech Park, Baner Road, Pune Maharashtra	Jul 15 -19, 2013

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS:

- 1. Bahare, R. S. and Ganguly, S., Effect of Electronegative Groups on the Antimicrobial activity of 3,5 disubstituted thiazolidine 2,4-diones. Antiinfective agents, 2014, 12, 112-119.
- 2. Bal Trishna, Soni, S. S., Pandey, A., Formulation and in-vitro evalution of curcumin loaded transdermal patches. Current Trend Pharm Science., 2013, 2.
- 3. Bal, T., Sengupta, S., Murthy, P. N., Studies of drug-polymer interactions of Carvedilol with various polymers using various analytical techniques. American Journal of Pharmtech Research, 3(5) 2013.
- 4. Banerjee, S., Chattopadhyay, P., Ghosh, A., Bhattacharya, S.S., Kundu, A., Veer, V., Accelerated stability testing of a transdermal patch composed of eserine and pralidoxime chloride for prophylaxis against (±)-anatoxin A poisoning. J. Food. Drug. Anal., 2014, 22, 264-270.
- 5. Banerjee, S., Chattopadhyay, P., Ghosh, A., Dutta, P., Veer, V., Aspect of adhesives in transdermal drug delivery systems. Int. J. Adhes. Adhes., 2014, 50, 70-84.
- 6. Banerjee, S., Chattopadhyay, P., Ghosh, A., Pathak, M.P., Gogoi, J., Veer, V., Protection by a transdermal patch containing eserine and pralidoxime chloride for prophylaxis against (±)-Anatoxin A poisoning in rats. Eur. J. Pharm. Sci., 2014, 56, 28-36.
- 7. Banerjee, S., Chattopadhyay, P., Ghosh, A., Pathak, M.P., Singh, S., Veer, V., Acute dermal irritation, sensitization, and acute toxicity studies of a transdermal patch for prophylaxis against (±) anatoxin-a poisoning. Inter. J. Toxicol., 2013, 32 (4), 308-313.
- 8. Banerjee, S., Singh, S., Policegoudra, R., Chottopadhyay, P., Ghosh, A., Veer, V., Evaluation of mutagenic potential of a combinational prophylactic transdermal patch by Ames test. Immuno. Anal. Biol. Spé., 2013, 28, 322-326.
- 9. Bansal, S. K.; Sinha, B. N.; Khosa, R. L., gamma-Amino butyric acid analogs as novel potent GABA-AT inhibitors: molecular docking, synthesis, and biological evaluation. Medicinal Chemistry Research 2013, 22, 134-146.
- 10. Behera, P. C., Verma, S. M., Kumar, P. M., Das, N. B., Mishra, P. M., Baliarsingh, S., Anti-Inflammatory and Anti-Microbial Activity of Chalcone from DalbergiaSissooRoxb. Leaves. American Journal of Phytomedicine and Clinical Therapeutic, 2013, 1, 186-194.
- 11. Das, D., Das, R., Mandal, J., Ghosh, A., Pal, S. Dextrin crosslinked with poly (lactic acid): A novel hydrogel for controlled drug release application. J. Appl. Polym. Sci., 2014, 131 (7) 40039.
- 12. Ganguly, S. and Yadav G., Molecular docking studies of novel benzimidazole analogs as HIV-1-RT inhibitors with broad spectrum chemotherapeutic properties. Int. Journal of Drug Design and Discovery, 2013, 4, 1193-1213.
- Ghosh, R., Xalxo, R., Ghosh M., Estimation of Heavy Metal in Vegetables from different Market Sites of Tribal based Ranchi City through ICP-OES and to assess Health Risk. Curr. World Environ., 2013, 8, 435-444.
- 14. Goyal, M., Ghosh, M., Nagori, B. P., Sasmal, D., Analgesic and anti-inflammatory studies of cyclopeptide alkaloid fraction of leaves of Ziziyphusnummularia. Saudi J. Biol. Sci. 2013, 20, 365–371.

- 15. Goyal, M., Nagori, B.P., Sasmal, D., CNS depressant and anticonvulsant activities of the alcoholic extract of leaves of Ziziyphusnummularia. Journal of Ethnopharmacology, 2014, 151(1), 536–542.
- 16. Jayram, K. K., Vashisth, D., Pandey, A., Dioscorea a multidimensional boon of nature. Online International Journal Forestry, 2013.
- 17. Jayram, K. K., Vashisth, D., Pandey, A., Isolation and partial characterization of delayed releasing starches of Colocasia species from Jharkhand. Carbohydrates Polymer, 2013, 96, 253-258.
- 18. Kaity, S., & Ghosh, A., Carboxymethylation of locust bean gum: Application in interpenetrating polymer network microspheres for controlled drug delivery. Ind. Eng. Chem. Res., 2013, 52 (30), 10033-10045.
- 19. Kaity, S., Isaac, J., Kumar, P.M., Bose, A., Wong, T.W., Ghosh, A., Microwave assisted synthesis of acrylamide grafted locust bean gum and its application in drug delivery. Carbohyd. Polym., 2013, 98 (1), 1083-1094.
- 20. Krishnan, S. K., Ganguly, S., Veerasamy, R. and Vijayapandi, P., Synthesis, Antiviral and Antimicrobial Activities of Quinazoline Urea Analogues, Int. Journal of Drug Design and Discovery, 2013, 4, 1215-1230.
- 21. Kulkarni, S. D.; Sinha, B. N.; Kumar, K. J., Modified release and antioxidant stable Lagenaria siceraria extract microspheres using co-precipitated starch. International Journal of Biological Macromolecules 2014, 66, 40-45.
- 22. Kulkarni, S. D.; Sinha, B. N.; Kumar, K. J., Synthesis, characterization and evaluation of release retardant modified starches of Lagenaria siceraria seeds. International Journal of Biological Macromolecules 2013, 61, 396-403.
- 23. Kumar, A., Sasmal, D., Sharma, N., Deltamethrin induced apoptogenicsignalling pathway in murine thymocytes: Exploring the molecular mechanism. J ApplToxicol. 2013 Nov 12. doi: 10.1002/jat.2948.
- 24. Kumar, A., Sharma, N., Singh, S., Sasmal, D., Dev, A., Oral Vaccine AntigenInduced Immune Response Signalling Pathways: Current and Future Perspectives. J VaccinesVaccin 2014, 5, 225-230.
- 25. Kumar, A., Sharma, N., Singh, S., Sasmal, D., Dev, A., Oral Vaccine Antigen Induced Immune Response Signalling Pathways: Current and Future Perspectives. J Vaccines Vaccin 2014, 5, 225-230.
- 26. Kumar, S., Gupta, R. N., Adverse Reactions Of Cosmetic Products: Regulatory Challenges In India. Int J Pharm Bio Sci, 2014, 5(1), (B) 83 93.
- 27. Kumar, S., Gupta, R. N., Safety and Regulatory issues on Sunscreen products in India. Archieves of Applied Science Research, 2013, 5(2), 145-153.
- 28. Mishra, C. K., Shrivastava, B., Sasmal, D., PharmacognosticalStandarization and Phytochemical Identification of Fruit and Root of CarissaCarandas Linn. International Journal of Pharmacy & Pharmaceutical Sciences, 2013, 5.
- 29. Mishra, N., Basu, A., Exploring different virtual screening strategies for Acetylcholinesterase inhibitors. Biomedical Research International, 2013, http://dx.doi.org/10.1155/2013/236850

- 30. Mishra, N., Sasmal, D., Additional Acetyl Cholinesterase Inhibitory Property of DiarylPyrazoline Derivatives. Bioorganic & Medicinal Chemistry Letters, 2013, 23, 702-705.
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- 11. Ajay Kumar, T., Jayaprakash, V., Sinha, B. N., High throughput virtual screening of dengue virus protease. In proceedings of the 6th Asian Association of Schools of Pharmacy Conference, Shaw Foundation Alumni House, National University of Singapore, Singapore, Nov 14-17, 2013.
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- 2. Mukhopadhyay, A., Pradhan, K. K., Samanta, R., Development and Validation of an UV-Spectrometric Method for the Estimation of Fluoxetine in Pure and Tablet Dosage Forms, International Journal of Pharmaceutical Sciences and Research, 2014, 5 (8), 1000-06.
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- 1. Awasthi, P., Khirwal, A., Sinha, B. N., Ghosh, M. GC-MS Analysis of Mosquito Repellent Fraction of Cameliasinensis. In Proceedings of 65th Indian Pharmaceutical Congress, Delhi NCR: Dec 20-22, 2013 (B-86).
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- 6. ParmanandVerma,Roop Narayan Gupta,Arvind Kumar, An Oral Presentation on Eudragit Based Nanoparticles for treatment of Glaucoma Oral Presentation;Chhattisgarh Council of Science and technology sponsored National seminar, in February 2014.
- 7. Pradhan, K. K, Mukhopadhyay, A and Das, S., Generation of 3D Structure of Homo Sapience Class II HDAC Through Homology Modelling and Docking Study of Newly Designed Inhibitors With Their Predicted Binding Affinity and Toxicity Studies. In Proceedings of the AICTE sponsored National Conference on "Complicated Diseases, Novel Therapeutics and Delivery Challenges. Department of Pharmaceutical Sciences, Gupta College of Technological Sciences, Asansol, West Bengal, 2014
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BOOK:

CHAPTER(S) IN EDITED BOOK:

- 1. Jayaprakash, V., Sinha, B. N., Anti-tubercular Drug Design Exploring Mycobactin Biosynthetic Pathway, Designing molecules that mimics hydroxyphenyl oxazoline portion of mycobactin, LAP Lambert Academic Publication, Germany, 2013 (ISBN:978-3-659-43995-7)
- 2. Arijit Basu, Barij Nayan Sinha, Hydroxamates as Ribonucleotide Reductase inhibitors, In "Hydroxamic Acids-A Unique Family of Chemicals with Multiple Biological Activities" edited by Satya P Gupta, Springer-Verlag Berlin Heidelberg, 2013, pp 153-172 (ISBN: 978-3-642-38110-2; 978-3-642-38111-9)

- 3. Mitra Mazumder, P. and Kumar A., Environmental Hazards and Crop cultivation. In edited book Crop Improvement in the Era of Climate Change, (Ed. Roychowdhury R.), I.K. International Publication House Pvt. Ltd., 2014, Page no:31-50
- 4. Ghosh, A., Wong, T.W. (2014). Graft Copolymers of Guar Gum vs. Alginate: Drug Delivery Applications and Implications. (ed. C.H.Chan, C.H.Chia& S. Thomas), Apple Academic Press Inc, New Jersey, 2014, pp. 423-440.

AWARD / RECOGNITION BESTOWED ON FACULTIES (STATE / NATIONAL / INTERNATIONAL)

Sl. No.	Name of the Faculty	Title of the Award/ Honours	Organisation	Year / Duration
1	Dr.B.N.Sinha	President, APTI Jharkhand State Branch	Association of Pharmaceutical Teachers of India	2013-2016
2	Dr R.N.Gupta	Best Pharmaceutical Professional of the Year 2013 Presented	Indian Association of Pharmaceutical Scientist and Technologist	Jan. 17-18, 2014
3	Dr.Arijit Basu	Post-Doc fellowship	Planning and Budgetary commission, Govt. of Israel	Oct 2013 to Sept 2016.
4	Dr. Nibha Mishra	ELSC Fellowship for Post Doctoral Studies in Brain Sciences	Hebrew University, Jerusalem, Israel	Jan 2014
5	Dr. Nibha Mishra	Lady Davis Post Doctoral Fellowship	Lady Davis Trust, Hebrew University, Israel	March 2014
6	Dr. S. P. Pattanayak	Post Doctoral Research Fellowship	Faculty of Medicine The Adolph Weinberger Blg., Ein Kerem Jerusalem 91120, Israel	2013 -2014
7	Dr. S. P. Pattanayak	The Planning and Budgeting Committee Fellowship for Post- Doctoral Research	Faculty of Medicine, The Hebrew University of Jerusalem, Israel	2014-2015

PATENTS (APPLIED / GRANTED)

Sl. No.	Name of the Inventor	Title of the Invention	Application / Patent No. (As applicable)	Year
1	Dr. B. N.Sinha T. Ajay Kumar Dr. Venkatesan J	2-(4,6-Diaminopyrimidin-2-Ylthio)-N-Aryl Acetamide Derivatives, Their Synthesis, Antiviral Activity And Methods Thereof	Application / Patent No. 325/KOL/2014	2014
2	Dr. B. N.Sinha T. Ajay Kumar Dr. Venkatesan J	4-(1, 3-Dioxoisoindolin-2-Yl)-Benzenesul- fonamide Derivatives, Their Synthesis, Antiviral Activity And Methods Thereof	Application / Patent No. 191/KOL/2014	2014

3	Dr. B. N.Sinha Dr. S. S. Jadav Dr. Venkatesan J	Arylmethylidine Heterocyclics as Novel Antiviral agents Against Chikungunya viral Infection	Application / Patent No. 811/KOL/2013A	2013
4	Dr. R.N Gupta , Dr. R. K. Sharma Dr Sunil Kaushal	Manufacture of Stable Potassium Iodate Tablet and Syrup	Application / Patent No. 1239/KOL/2013	2013
5	Dr. Geeta Yadav and Dr. Swastika Ganguly	Novel benzimidazoles as antimicrobials	Application No. 1323/ KOL/2013 (Complete specification)	2013
6	Dr. A. Upadhyay Dr. P. Chattopadhyay Dr. D. Goyary Dr. V. Veer Dr. P. Mitra Mazumder	Preparation of herbal based wound healing formulation and evaluation thereof	Application No. 660/ DEL/2014	2014
7	Dr. S.M. Verma, Dr. Kalyan K. Sethi	4,5,6,7-tetrachloro-1,3-dioxoisoindolin-2-yl benzenesulfonamide derivatives.	Application no. 568/ KOL/2013 (Complete Specification)	2013
8	Dr. S.M. Verma, Dr. Kalyan K. Sethi	4,5,6,7-tetrabromo-1,3-dioxoisoindolin- 2-yl benzenesulfonamide derivatives.	Application no.: 567/ KOL/2013 (Provisional)	2013
9	Dr. S.M. Verma, Dr. Kalyan K. Sethi	Novel Benzothiazole Sulfonamide derivatives.	Application no.:74/ KOL/2013 (Provisional)	2013

BOARD OF STUDIES(UG/PG)

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Professor & Head, Dept. of Biotechnology

14. Respective Guide(s)

Dr. Kunal Mukhopadhyay

13.

DEPARTMENT OF PHYSICAL EDUCATION & SPORTS





Annual Athletic Meet

Basket Ball Match

INTRAMURAL TOURNAMENT

- (1) Nikhil Khanna Rolling Trophy Championship was organized from March 21-24, 2013.
- (2) Football Date October 3,2014

Winner - H. No. - 1 & H. No. - 2

Runner - Hostel No. – 03

(3) Basketball - Date - January 24 ,2014 Hostel No. 02 & 03 V/s 7 (Men) Winner Hostel No. - 02& 03 Hostel No. 08 & 09 (Women)

Winner - H. No. - 09

(4) Volleyball - Date - Janyary 27, 2014

Winner - No. 12 & 13

Runner - Hostel No. 10

- (5) Cross Country Race (Boy's & Girls) January 27, 2014
- (6) 28th Annual Athletic meet 2013-14 was held during January 31- Feruary 02, 2014. Mr. Chetan Kumar of Department of Production Engineering was declared Individual Championship amongst Men and & Miss Apurva Nidhi of Deaprtment of Computer Science and Engineering in women.

EXTRAMURAL TOURNAMENT

- (1) Mecon Sports Club, Doranda, Ranchi organized state championship Open Badminton Tournament 2013 during April 26- 28, 2013, in which Institute Team participated.
- (2) Mr. Lakshay Arora, BE/4123/10, ECE, of BIT Extension Centre, Jaipur participated in All India Inter University Athletic meet 2013-14 organized by Punjabi University Patiala.

(3) Badminton (M & W) 2013 - 14

Inter University Badminton (East Zone) Tournament	No. of Team	Date
(M&W) 2013-14 Organized at BIT Mesra	Participated	жения в менения в ме
	28	Nov. 5-10, 2013

RESULTS

Men's

First Position

University of Calcutta

Second Position -

Manipur University

Third Position -

Mizoram University

Fourth Position -

T.M. Bhagalpur University

Women's

First Position

University of Calcutta

Second Position -

Dibrugarh University

Third Position -

Mizoram University

Fourth Position -

Jadavpur University

- (4) On 15th August 2013 Football match played between SAI Morhabadi Ranchi and Institute Team at sports complex.
- (5) Institute Football Team participated in 'SARDHA' festival organized by BHU, Varanasi.
- (6) 22nd Chetan Devraj Memorial East Zone Technical Institute/College Cricket Tournament 2013-14 was held during February 18 - 22, 2014. A total of ten team participated in the tournament. NIFFT, Hatia, Ranchi won the championship. BIT, Mesra Ranchi was the runners -up

The teams were

- (1) BITEC Lalpur (2) NIFFT, Hatia (3) BIT Mesra Ranchi (4) BITEC Allahabad
- (5) BITEC Deoghar (6) BESU Shivpur(7) RTC Ormanjhi (8) BITEC Kolkata
- (9) BITEC Patna (10) BAU Kanke

AWARDS/HONOURS

- (1) Dr. Mahendra Kumar nominated Neutral AIU Observer for National/Zonal University Games for the Kho-Kho Game session 2013-14 Organized by VBSPU, Jaunpur. (U.P)
- (2) Dr. Mahendra Kumar nominated as Technical Expert by I.Q.R.S for audit in TATA Steel Sports Department from 10th February to 11 February 2014.

DEPARTMENT OF PHYSICS



Physics Research Laboratory

The Department of Applied Physics was established in 1955 and initially offered undergraduate courses in Physics for the B.E. programmes. The Department currently offers the following programmes:

PROGRAMMES OFFERED

Integrated M.Sc. in Physics – (5-years,10- semesters)

M. Sc. in Applied Physics – (2-years, 4- semesters)

M. Tech. in Nano Science & Technology -(2-years, 4- semesters)

Ph. D. Programmes in various discipline of Physics and Materials Science

The Department has received support under "Fund for Improvement in Science & Technology Infrastructure" (FIST) programme of the Department of Science and Technology, New Delhi, and under Special Assistance Programme (SAP) of the UGC. The Department has received funding under TEQIP—I and TEQIP—II. In addition, the Department is currently running sponsored projects funded by UGC, DST, AICTE, BRNS and NRB.

The Department started a new M. Tech. programme in Nano Science & Nano Technology in 2010. This has now been renamed as M. Tech. in Nano Science & Technology, and approved by AICTE, with effect from the academic year 2013-2014 (vide their letter F.No. Eastern/1-1454845662/2013/EOA, dated 19 March 2013). This M. Tech programme lays emphasis on fundamentals of nanotechnology, applications of nanotechnology, theoretical modeling of nanostructures, synthesis and characterization of nanomaterials,

and is conducted in collaboration with the Departments of Chemistry, Bio-engineering, Chemical and Polymer Engineering, Electronics & Communication Engineering, and Mechanical Engineering.

The Department has well-equipped laboratories and computing facilities with software such as MATLAB, Maple, LabVIEW, FullWAVE, BandSOLVE, BeamPROP, etc. The Department is equipped with sophisticated facilities like RF/DC magnetron co-sputtering system (Vacuum Technique Pvt. Ltd., Bangalore), 3-target RF magnetron sputtering system (Plasma Consult, Germany), anodic vacuum arc deposition unit (Hind Hivac, Bangalore), plasma nitriding system (Milman, Pune), plasma enhanced chemical vapour deposition systems (DC, RF and Microwave), salt spray chamber, planetary ball milling unit, and several high temperature furnaces. The Department has a real-time holography laboratory for non-destructive testing of materials. In addition, it has facilities for optical coherence tomography, fabrication of fibre composite plates, and optical characterization of materials. Recently, the Department has also purchased Micro-Raman spectrometer (Renishaw, UK), Nano-indenter (Bruker-CETR, USA), Ferroelectric loop tracer (Radiant, USA). The Department has cryogenics, materials science and thin film laboratories where research work is being conducted on advanced materials like high-temperature superconductors, colossal magneto-resistive materials, dilute magnetic semiconductors, microwave dielectric ceramics, piezoelectric materials, electronic composites, diamond-like carbon films, nano and ultranano crystalline diamond films, grapheme, photo-catalytic coating of TiO2, tribological coatings like CN, TiC, TiN, SiC,Ti(Al)N. HfC, etc. The optics laboratory also has aNd-YAG laser. The Department regularly organizes seminars and symposia and maintains a nationally and internationally recognized academic level. The Department has organized aOne Day Workshop on Solar Cellon 15th May 2014.

The current areas of research activities in the Department are nanotechnology, solar cells, plasma and laser material processing, surface engineering with plasma coating, anodic vacuum arc deposition of thin films, carbon nanotubes, DLC films, nanocrystalline diamond coatings, plasma torch parameters and applications in material processing, high temperature superconductivity, colossal magneto-resistive materials, dilute magnetic semiconductors, dielectric, ferroelectric and piezoelectric materials, fiber composite materials, electronic composite materials, magnetic composites, holography for non-destructive testing, nonlinear optics, soliton and light propagation, optical communication, photonic crystal fibres, optoelectronics etc.

During 2013-14, the Department has completed one project, and received 2 new projects while 10 projects are running. A total number of 43 national and international journal publications add to its credit.

SPONSORED PROJECTS PROJECT SANCTIONED

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Investigation on Rare Earth Substituted layered Perovskites for Ferroelectric and Piezoelectric applications	S K Rout	Naval Research Board, New Delhi	07/05/2014	15.90	2 years

2	Investigation on photoluminescence and microwave dielectric properties of some tungstats and	S K Rout	DST, New Delhi	19/05/2014	24.00	3 years
	molybdates prepared by microwave assisted solid state reaction route					Victoria de la constanta de la

ONGOING PROJECTS

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Simulation of highly nonlinear photonic crystal fibers and study of nonlinear optical phenomena in these fibers.	Dr. S. Konar	DST	Sept. 2011	12.87	3 years
2	Special Assistance Programme-UGC (SAP-UGC)	Dr. S. Konar & Dr S.Keshri	UGC	Sept. 2011	57.00	5 years
3	Design and investigation of photonic crystal fibers with emphasis to the development of optical nonlinearity based devices	Dr. S. Konar	UGC	July 23, 2012	10.43	3 years
4	Self similar modes of femto-second laser pulse and beam propagation in media with two or multi- photon absorption and non-linear refraction	Dr. S. Konar	DST - RFBR	Aug 2013	14.30	2 years
5	Study of Spin Injection and Spin Dynamics in Semiconductors for Spintronic Applications	Dr Samrat Mukherjee	CSIR	Nov.1, 2012	18.42	3 years

6	Fabrication and Characterization of magnetically doped semiconducting mesoscopic quantum dots for possible spintronic applications	Dr Samrat Mukherjee	UGC	June 1 ,2012	12.43	3 years
7	Studies on microwave dielectric ceramics and their device applications.	PI- Prof. S. Keshri, Dept. of Phys. Co-PIs: Prof. N. Gupta & Prof. V. R. Gupta, Dept. of ECE	DST	June, 2013	31.72	3 Years
8	Study of Physico- Technological Principles of Preparation of New Magnetic Nanostructures for Multifunctional Biomedical Applications	PI- Prof. S. Keshri, Dept. of Phys. Co-PI: Dr. S. Ganguly Collaborator: Prof. A. S. Kamzin, Ioffe Physical technical Institiute, St. Petersburg, Russia.	DST- RFBR	Feb. 1, 2013	9 .00	2 Years
9	In-situ spectroscopic investigation of the growth mechanism of nitinol shape memory alloy (SMA) thin films and its correlation with mechanical, tribological, chemical and biological reliability of the films	I. Banerjee	DST	June , 2012	22.10	3 Years
10	Effect of rare earth elements on structural, dielectric and optical properties of BaZrO3	Ela Sinha	DST, New Delhi	Aug.23, 2013	20.08	3 years

PROJECTS COMPLETED

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Date of completion of the Project
1	Investigation of plasma instability and establish its correlation with deposited species during thin film deposition	S K Mahapatra (PI), I Banerjee (Co-PI)	BRNS	Feb. 26, 2010	21.87	Mar.31, 2014

SEMINAR / CONFERENCES / SHORT – TERM COURSES CONDUCTED BY THE DEPARTMENT/CAMPUS

Sl. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses
1	One Day Workshop On Solar Cell	Dr.S.Konar- Chairman, Dr. Rishi Sharma-Convener, Dr Samrat Mukherjee, Co-Convener	UGC-SAP	May 15, 2014

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the Faculty	Title of the Conference/Seminar	Funding Agency	Organizers	Venue	Date
1	Dr.S.Konar	Workshop on Coherent Phenomena in Disordered Optical Systems; 26 May 2014 - 30 May 2014;	ICTP (Italy) &INSA- New Delhi	International Center for Theoretical Physics, Trieste, ITALY	International Center for Theoretical Physics, Trieste, Italy	May 26 - 30, 2014
2	Dr. I Banerjee	National Symposium on Emerging Plasma Techniques for Materials Processing and Industrial Applications	Power Beam Society of India (PSI)	Dr. V L Mathe, Department of Physics,	University of Pune, Pune 411007	February 13-15, 2014
3	Dr S K Sinha	International Conference on Science and Engineering of Materials (ICSEN-2014), rganized by		Sharda University, Greater Noida	Sharda University, Greater Noida	January 6-8, 2014

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS:

- 1. Sharma M.; Borogohain N.; Konar S.. Index Guiding Photonic Crystal FibersWith Large Birefringence and Walk-Off. Journal of Lightwave Technology 2013, 31, 3339-3344.
- 2. Konar S,; Biswas A. Properties of optical spatial solitons in photorefractive crystals with special emphasis to two-photon photorefractive nonlinearity. Optical Materials 2013, 35, 2581-2603.
- 3. Shwetanshumala, S.; Konar, S., Biswas, A. Ultraslow solitons due to large quintic nonlinearity in coupled quantum well structures driven by two control laser beams. Applied Physics B 2013, 111, 53-64.
- 4. Shwetanshumala, S.; Asif, N.; Konar, S.; Biswas, A. Bright Spatial Solitons in Biased Centro-symmetric Photorefractive Medium Under Drift as Well as Diffusion Effects. Optik 2013, 124, 229–233.
- 5. Pal U. N., Pooja Gulati, Ram Prakash, Mahesh Kumar, Srivastava V, Konar S.Analysis of power in argon filled pulsed dielectric barrier discharge (DBD). Plasma Science and Technology 2013, 15, 635-639.
- 6. Shailendra Singh Rajput and SunitaKeshri; ,Structural and microwave properties of (Mg,Zn/Co) TiO3 dielectric ceramics, Journal of Materials Engineering and Performance (Springer-Verlag publication) 2014, 23, 2103–2109.
- 7. Sunita Keshri, Vivekanand Kumar, Piotr Wiśniewski and Alexander S. Kamzin; Synthesis and characterization of LSMO manganite based biocomposite, Phase Transitions (Taylor & Francis Publication) 2014, 87, 468-476.
- 8. M.V. Tkachenko, L.P. Ol'khovik, A.S. Kamzin, S. Keshri; Bioceramics of calcium phosphate and a hexagonal M type ferrite Multifunctional medical applications: Technical Physics Letters 2014, 40, 9-15
- 9. Shailendra Singh Rajput, Sunita Keshri; Structural, vibrational and microwave dielectric properties of (1-x) Mg0. 95Co0. 05TiO3 (x) Ca0.8Sr0.2TiO3 ceramic composites: Journal of Alloys and Compounds (Elsevier Publication) 2013, 581, 223-229.
- Sunita Keshri and Shailendra Singh Rajput; Investigation on Low Loss (1-x) Mg0.95Co0.05TiO3-(x) Ca0.6La0.8/3TiO3 Composite Series for achieving a nearly Zero Temperature Coefficient of Resonant Frequency, Ceramics International 2014, 40, 4257-4266.
- 11. Ashutosh Kumar, Sunita Keshri and Debdulal Kabiraj, Influence of annealing temperature on nanostructured thin films of tungsten trioxide; Materials Science in Semiconductor Processing 2014, 17, 43-52
- 12. S. Mukherjee, K. Bhushan and V. Bandopadhyay, Spin injection in quasi defect-free mesoscopic ZnO nanostructures, Proc. Amer. Inst. Phys, 2013, 1536, 101
- 13. V. Bandopadhyay, K. Bhushan and S. Mukherjee, Evidence of Itinerant Ferromagnetism in Transition Metal Doped ZnO Nanostructures, , J. Nano. Electron. Phys. 2013, 5, 2030
- 14. S. Mukherjee, J. Basu and D. Das, A novel synthesis route to bio-functionalized and magnetically addressable ferrogels, Mod. Phys. Lett. B 2013, 27, 1350239
- 15. S. Mukherjee, S. Pradip, A. Mishra and D. Das, Zn substituted NiFe2O4 with very high saturation magnetization and negligible dielectric loss prepared via a soft chemical route, Appl. Phys. A, DOI: 10.1007/s00339-013-8140-2 (2014)
- 16. R. K. Choubey, S. Medhekar, R. Kumar, S. Mukherjee and Sunil Kumar, Study of nonlinear optical properties of organic dye by Z-scan technique using He–Ne laser, J. Mater Sci: Mater Electron, DOI 10.1007/s10854-014-1743-3 (2014)
- 17. S. K. Mukherjee, A. Nebatti, F. Mohtascham, C. Schipporeit, C. Notthoff, D. Mergel, Influence

- of thickness on the structural properties of radio frequency and direct current magnetron sputtered TiO2anatase thin films, Thin Solid Films 2014, 558, 443-448
- 18. S. K. Mukherjee and D. Mergel, Thickness dependence of the growth of magnetron-sputtered TiO2 films studied by Raman and optical transmittance spectroscopy, Journal of Applied Physics 2013, 114, 013501-9
- 19. Ashwini Kumar Singh, Neelam Kumari, S. K. Mukherjee and P.K. Barhai, Atomic force microscopy analysis of effect of rf/dc power ratio on the properties of co-sputtered TixAl1-xN thin films, , IJRRAS 2013, 14(3), 603-611
- 20. I. Banerjee, H.S.Kim, K P Mohanchandra, Scott Keller and Greg Carman Correlation between Magneto-dielectric and Magnetic Anisotropy Maxima in γ-Fe2O3 Nano-composite, IEEE Magnetics Letters 2013, 4, 2500104
- 21. A.B. Panda, S. Gopikishan, S.K. Mahapatra, P.K. Barhai, A.K. Das, I. BanerjeeBactericidal efficiency of nano structured Al-O/Ti-O composite thin films prepared by dual magnetron reactive cosputtering technique, Ceramics International, DOI 10.1016/j.ceramint.2013.08.141, (2013)
- 22. KalpanaKiran, SudiptaGoswami, ParthaPratimSharma, AtalaBihariPanda&IndraniBanerjeeStudy of Drug Transport Phenomenon of Acrylic IPNs Embedded with Iron Oxide Nanoparticles, International Journal of Polymeric Materials and Polymeric Biomaterials 2013, 62, 509-516.
- 23. S.K.Ghosh, M.Ganguly, S.K.Rout, T.P.Sinha; Structural and dielectric relaxor properties of a-site deficient samarium doped Ba1-xSmx)(Zr0.3Ti0.7O3) ceramics, J Mater Sci 2014, 49, 5441–5453
- 24. Kumar Mohit, V.R. Gupta, N. Gupta, S. K. Rout; Structural and Microwave Characterization of Ni0.2CoxZn0.8-xFe2O4 for Antenna Applications, Ceramics International, 2014, 40(1), 1575-1586.
- 25. Kumar Mohit, Vibha R. Gupta, and Sanjeeb K Rout; Microwave Dielectric Properties of Ni0.2CuxZn0.8-xFe2O4 for Application in Antenna, Progress, Electromagnetics Research B 2014, 57, 157-175.
- 26. S.K.Ghosh, M. Ganguly, S.K. Rout, S. Chanda; Structural, optical and dielectric relaxor properties of neodymium doped cubic perovskite (Ba1–xNd2x/3)(Zr0.3Ti0.7)O3, T.P. Sinha, Solid State Sciences, 2014, 3068–77.
- 27. S. Parida, S.K. Rout, L.S. Cavalcante, A.Z. Simões , P.K. Barhai, N.C. Batista, E. Longo, M. Siu Li, S.K. Sharma; Structural investigation and improvement of photoluminescence properties in Ba(ZrxTi1-x)O3 powders synthesized by the solid state reaction method, Materials Chemistry and Physics 2013, 142, 70-76
- 28. M. Ganguly, S. K. Rout, C. W. Ahn, I. W. Kim Characterization of A-site deficient Neodymium doped Barium Titanate, Phase Transitions 2013, 87, 157.
- 29. S. Parida, AnuragBisen, E.Sinha, S.K. Rout, Dielectric Resonant Antenna Studies of Dysprosium Doped Barium Zirconate Ceramic, Journal of Materials Engineering and Performance 2013, 22, 2634–2640.
- 30. M. Ganguly, S.K. Rout, C.W. Ahn, I.W. Kim, Manoranjan Kar; Structural, electrical and optical properties of Ba(Ti1-xYb4x/3)O3 ceramics, Ceramics International, 2013, 39, 9511 9524.
- 31. Nidhi Khobragade, Ela Sinha, S.K. Rout, Manoranjan Kar, Structural, optical and microwave dielectric properties of Sr1–xCaxWO4 ceramics prepared by the solid state reaction route, Ceramics International 2013, 39 (8), 9627-9635.
- 32. M. Ganguly, S.K. Rout, T.P. Sinha, S.K.Sharma, H.Y. Park, C.W. Ahn, I.W. Kim, Characterization and Rietveld Refinement of A-site deficient Lanthanum doped Barium Titanate, Journal of Alloys and Compounds, 2013, 579, 473-484.

- 33. B. Parija, T. Badapanda, S.K. Rout, L.S. Cavalcante, S. Panigrahi, E. Longo, N.C. Batista, T.P. Sinha Morphotropic phase boundary and electrical properties of 1–x[Bi0.5Na0.5]TiO3–xBa[Zr0.25Ti0.75] O3 lead-free piezoelectric ceramics, Ceramics International 2013, 39(5), 4877-4886.
- 34. Ammu Priya, Ela Sinha, S K Rout, Structural, optical and microwave dielectric properties of Ba1-xSrxWO4 ceramics prepared by solid state reaction route, Solid State Science, 2013, 20, 40-45
- 35. S.Parida, S.K.Rout, N. Gupta. V. R. Gupta; Solubility limits and microwave dielectric properties of Ca(ZrxTi1-x)O3 solid solution, Journal of Alloys and Compounds, (2013) 546 216-223.
- 36. M.Ganguly, S.K. Rout, W.S. Woo, C.W. Ahn, I.W. Kim; Characterization of A-site deficient samarium doped barium titanate, Physica B: Condensed Matter 2013, 411, 26–34.
- 37. S K Rout Editorial article: The special issue on condensed matter physics from the CMDAYS-2012 conference, Physics Express, 2013.

PUBLISHED IN NATIONAL JOURNALS

- 1. Mohit Sharma, NituBorgohain, S. Konar; Supercontinuum generation in photonic crystal fibers possessing high birefringence and large optical nonlinearity; Phys. Express (2014)4, 1-9
- 2. ReddikumarMaddipatla, Kingshuk Bose, Raju Poddar, Noninvasive measurement of relative blood oxygen saturation in human retina by using 1µm Fourier Domain Optical Coherence Tomography, International Journal of Innovative Research in Science, Engineering and Technology(2013) Vol. 2, 7168-7172.

CHAPTER(S) IN EDITED BOOK

1. Book Title: Nanomedicine and Drug Delivery, Series: Advances in Nanoscience and Nanotechnology, Volume: 1, Chapter – 4

Author: S. Goswami, K. Kiran, A. B. Panda, P. P. Sharma, S. K. Mahapatra, S. V. Bhoraskar, and I. Banerjee

ISBN: 9781926895178, Apple Academic Press, Canada

http://www.appleacademicpress.com/title.php?id=9781926895178

2. Book Title: Advanced Nanomaterials

Synthesis, Properties, and Applications Chapter - 9

Author: P. Laha, A. B. Panda, S. K. Mahapatra, P. K. Barhai, A. K. Das, and I. Banerjee

ISBN: 9781926895796, Apple Academic Press, Canada

http://www.appleacademicpress.com/title.php?id=9781926895796

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

SI. No.	Name of the Faculty	Title of the Award/ Honours	Organisation	Year / Duration
1		Commonwealth Academic Fellow		

Patents (Applied / Granted)

Sl. No.	Name of the Inventor	Title of the Invention	Application / Patent No. (As applicable)	Year
1	Dr S K Rout (BIT, Mesra) Dr B Mallick (IOP,Bhubaneswar)	A new liquid cell for MeV- electron irradiation at	Applied	2013
	bi bi wanick (101, bilabaneswai)	low temperature		

BOARD OF STUDIES(UG/PG)

INTERNAL MEMBERS

1.	Dr. S. Konar, Prof.& Head, Dept. of Applied Physics	:	Chairman
2.	Dr. D. Jairath, Professor, Dept. of Applied Physics	:	Member
3.	Dr. (Mrs.) S. Keshri, Professor, Dept. of Appl. Physics	:	Member
4.	Dr. S. K. Rout, Assoc. Professor, Dept. of Applied Physics	:	Member
5.	Dr. (Mrs.) UshaJha, Professor, Dept. of Appl. Chemistry	:	Member
6.	Dr. S. K. Ghorai, Professor, Dept. of ECE	:	Member

EXTERNAL MEMBERS (ANY TWO OF THE FOLLOWING)

- 1. Dr. B. S. Murty, Professor, Dept. of Materials and Materials Engineering, IIT, Madras, Chennai-600036, India, Ph: 044-22574754, email: murty@iitm.ac.in
- 2. Dr. V. Subramanian, Professor, Dept. of Physics, IIT Madras, Chennai-600036, Ph: 044-22574883, Email: manianvs@iitm.ac.in
- 3. Dr. S. R. Kumar, Associate Professor, Dept. of Materials and Metallurgical Engineering, NIFFT, Ranchi
- 4. Dr. S. Panigrahi, Professor, Department of Physics, NIT, Rourkela, Odisha, Ph. 9437145313
- 5. Dr. Anil Kumar Nirala, Professor, Department of Physics, Indian Schools of Mines, Dhanbad, Ph: +91-326-223-5282, Email: aknirala@gmail.com
- 6. Dr. (Mrs.) S. K. Mishra, Scientist EII, MST Division, National Metallurgical Laboratory Jamshedpur, India-831007 Ph. 91-657-2271709*2030, Fax 91-0657-2270527, Mob.: 9334732298, Email: suman@nmlindia.org,skm_smp@yahoo.co.in

DEPARTMENTAL ACADEMIC COMMITTEE

- 1. Dr S Konar, Professor & Head, Department of Applied Physics
- 2. Dr D Jairth, Professor, Department of Applied Physics
- 3. Dr (Mrs) S Keshri, Professor, Department of Applied Physics
- 4. Dr S K Sinha, AssocProfessor, Department of Applied Physics
- 5. Dr S K Rout, Assoc Professor, Department of Applied Physics
- 6. Dr (Mrs) I Banerjee, Assoc Professor, Department of Applied Physics
- 7. Dr Kingshuk Bose, Asst. Professor, Department of Applied Physics
- 8. Dr Samrat Mukherjee, Asst. Professor, Department of Applied Physics
- 9. Dr S K Ghorai, Professor, Dept. of ECE
- 10. Dr (Mrs) UshaJha, Professor, Dept. of Applied Chemistry

DEPARTMENT OF PRODUCTION ENGINEERING

Since its inception in 1964, The Department of Production Engineering has been imparting quality education to under graduate and post graduate students by training them to meet the demands of the manufacturing industry. The Department has established links with the industry, R&D organizations, consultancy organizations and academic Institutes of the nearby area in furtherance of the cause of manufacturing engineering. The Department sees itself as the pathfinder of emerging technologies and techniques in the area of production engineering, develops students to be technologically and managerially sound to meet the challenges of the rapidly changing manufacturing scenario.

The major long- range goal of the Department is to develop itself as a centre of excellence in teaching, consultancy and research in various aspects of Production Engineering. An increasing number of Institute-industry collaborations are shaping through sandwich training programmes, short term courses, workshops, and live projects for UG, PG and Doctor Level. In this respect, the Department has been able to establish well-equipped laboratories, upgrades the syllabi on regular basis and carries out its teaching and academic programme through its qualified and experienced faculty and visiting professors. Both our graduates and post-graduates have been doing well in industry and other Universities of higher learning in India and abroad.



Wire EDM



Laser Cutting and Welding Machine

SPONSORED PROJECTS

PROJECT SANCTIONED

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Microwave assisted welding	Dr. Vinay Sharma B. K. Singh Arpita Roychoudhary	UGC	Apr.1, 2013	5.55	3 Years

PROJECTS COMPLETED

SI. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Date of completion of the Project
1	Creating infrastructural facilities for training and research in precision forming.	Dr. B.K. Singh	UGC (SAP)	Apr. 1, 2007	72 lakhs	2013

SEMINAR / CONFERENCES / SHORT – TERM COURSES CONDUCTED BY THE DEPARTMENT

Sl. No.	Title of Seminar / Conferences / Short – term Courses	Name of Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses
1	Applications of Artificial Intelligence Techniques In Engineering and Research	Dr. Vijay Pandey	TEQIP-II	September 23-27, 2013.

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES/ ORIENTATION PROGRAMME/ REFRESHER COURSE ETC. ATTENDED:

Sl. No.	Name of the Faculty	Title of the Conference/Seminar	Organized by	Venue	Date , Month, Year
1	Dr. Vijay Pandey	Research methodology & Design of Experiments	Department of Mechanical Engineering, MNIT, Jaipur	MNIT, Jaipur	October 21 – 25, 2013
2	Dr. S.C. Srivastava	Research methodology & Design of Experiments	Department of Mechanical Engineering, MNIT, Jaipur	MNIT, Jaipur	October 21 – 25, 2013

3	Dr. Rajeev Agrawal	Management Development Programme on "Statistical Modeling in Data analysis" SMDA- 2013	Vinod Gupta School of Management	Indian Institute of Technology Khargpur, India	December 9-14,2013
4	Mr. Binay Kumar	Applications of Artificial Intelligence Techniques In Engineering and Research	Department of Production Engineering, B.I.T., Mesra, Ranchi	B.I.T., Mesra, Ranchi	September 23-27, 2013.

PUBLICATIONS

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. Richa Pandey, L. N. Pattanaik and S. Kumar (2014), "Fuzzy linguistic hedges for the selection of manufacturing process for prosthetic sockets", Decision Science Letters, 3, 259–268. Scopus Indexed.
- 2. Pattanaik, L. N. and Agarwal, H., (2014), "Development of Magnetorheological Finishing Process (MRF) For Freeform Surfaces", International Journal of Advanced Mechanical Engineering, Vol. 4, No.6, pp. 611-618. (ISSN 2250-3234)
- 3. Pandey, R. and Pattanaik, L. N. (2014) 'A fuzzy QFD approach to implement reverse engineering in prosthetic socket development', Int. J. of Industrial and Systems Engineering, Vol. 17, No. 1, pp.1–14 (ISSN 1748-5037) (Inderscience Publishers) Scopus Indexed.
- 4. Pattanaik, L. N. (2013), "Applications of Soft computing tools in Metal forming: A state-of-art review", Journal of Machining and Forming Technologies, Vol 5, Issue 1-2, pp 29-44. (ISSN 1947-4369).
- 5. Subodh Kumar, Vinay Sharma, Ajit Kumar Singh Choudhary, Somnath Chattopadhyaya, Sergej Hloch," Determination of layer thickness in direct metal deposition using dimensional analysis", The International Journal of Advanced Manufacturing Technology, August 2013, Volume 67, Issue 9-12, pp 2681-2687
- 6. Sanjeev Kumar, S. Chattopadhyaya, Vinay Sharma, "Developing Green Supply Chain System for Indian Enterprises", Int. J. Business Excellence, Vol. 6, No. 3, 2013, pp 270-291
- 7. V N Sundharam, Vinay Sharma, I S Stephan Thangaiah, "An integration of BSC and AHP for sustainable growth of manufacturing industries" Inderscience, International Journal. Business Excellence, Vol. 6, No. 1, 2013,pp77-92
- 8. P. Prakash, S. K. Jha "A Study Of Process Parameters Of Friction Stir Welded AA 6061 Aluminum Alloy", International Journal of Innovative Research in Science, Engineering and Technology, PP. 2304-09, Volume 2, Issue 6, 2013.
- A. Singh, S. K. Jha "Green Manufacturing Practices In Brick Industries: A Case Study Using AHP", International Journal of Innovative Research in Science, Engineering and Technology, PP. 2236-42, Volume 2, Issue 6, 2013.

- 10. Subir kumar, and Dr. S.C. Srivastava," Designing a cellular Manufacturing System by GA Based Approach, An International Journal Manufacturing Technology and Research, July- December, 2013 Volume 9, No.2 ISSN No.: 0973-0281 pp.27-31.
- 11. Pankaj Upadhyay, and Dr. S. C. Srivastava, "Improving a Flexible Manufacturing Scheduling using Genetic Algorithm", Journal of Academia and Industrial Research (JAIR), Volume 2, Issue 2 July 2013, ISSN: 2278-5213, pp.146-150.
- 12. Binay Kumar, Ritesh Kumar Singh, Surendra Kumar, Sanjeev K Tiwari "Design for variety in the initial stages of product development", Page No- 16-22, Manufacturing technology and Research, July-dec, 2013, Vol 9 No-2, ISSN No- 0973-0281
- 13. Saw, S. K., Purwar, R., Nandy, S., Ghose, J., and Sarkhel, G. 2013. Fabrication, characterization, and evaluation of Luffa cylindrica fiber reinforced epoxy composites, BioRes. 8(4), 4805-4826, Nov 2013. ISSN: 1930-2126.
- 14. Rajeshwari Chatterjee, Vinay Sharma, Samrat Mukherjee, and Surender Kumar, "Life Cycle Assessment of Bio-dieselProduction—A Comparative Analysis" (2014) Springer Journal of Institutions of Engineers (India), Section C, published online on 31 May 2014, DOI 10.1007/s40032-014-0105-5.
- 15. Rajeshwari Chatterjee, Vinay Sharma, Samrat Mukherjee and Surender Kumar, "Value stream mapping based on energy and cost system for biodiesel production", Int. J. Sustainable Manufacturing, (2014) Vol. 3, No. 2, pp95-115.
- 16. Rajeshwari Chatterjee, Vinay Sharma, Samrat Mukherjee and Surender Kumar, "Quantitative assessment of biodiesel production: A model-based scenarios of sustainable development" Journal of Renewable and Sustainable Energy 6, 013129 (2014), American Institute of Physics.
- ArpitaRoychoudhury, B.K.Singh, Vinay Sharma, "Microwave Assisted Welding: A New Tool for Welding of Plastics" Kaav International Journal of Science, Engineering & Technology, (2014), VOL-1/Issue-1, pp35-45 (ISSN:2348-5477)
- 18. SK Tiwari, RK Singh, SC Srivastava, "Six Sigma Project Selection Using Extent Fuzzy AHP: An Empirical Study", International Journal of Research in Industrial Engineering, VOL-2/Issue-2, pp. 50-63, 2013

PUBLISHED IN INTERNATIONAL PROCEEDINGS

- L. N. Pattanaik and Himanshu Agarwal, (2014), "Development of Magnetorheological Finishing Process (MRF) For Freeform Surfaces", 4th International Conference on Advances In Mechanical, Material, Manufacturing, Automobile and Aeronautical Engineering (AMAEAP-2014), June 7-8, JNU, New Delhi.
- 2. L. N. Pattanaik, Sudhir Kumar and Srikrishna Purohit, (2014), Machinability Improvement Through Heat Treatment of SAE-1050 Steel, Proceedings of 1st International Conference on Mechanical Engineering: Emerging Trends for Sustainability,29th 31st January, MANIT, Bhopal, India.
- 3. L. N. Pattanaik and Tapan Kumar Baug (2014), An AHP-based Selection of Lean Tools For Achieving Sustainability In Manufacturing, Proceedings of 1st International Conference on Mechanical Engineering: Emerging Trends for Sustainability, 29th 31st January, MANIT, Bhopal, India.

- 4. P. Bannerjee and L. N. Pattanaik, (2013), Model of An Intelligent Automobile Driving Assistance System, Proceedings of 9th International Conference on Intelligent Unmanned Systems (ICIUS), 25-27 September, Jaipur, India.
- 5. Manish Oraon, Vinay Sharma, "Effectiveness of tool profile in sheet metal incremental forming", 5th International Scientific and Expert Conference of the International TEAM Society, TEAM 2013, Vol.No.1, November 2013. pp 55-59, ISSN 1847-9065.

PUBLISHED IN NATIONAL PROCEEDINGS

- 1. N.K. Mahto, Vijay Pandey, and D. Mahto. "Automation of Mechanical Design Transformer", Proceeding of National Conference on Research And Innovations In Mechanical Engineering (RIME-2014), Department of Mechanical Engineering, Technocrats Institute of Technology & Science College, Bhopal, March 5-6, 2014.
- 2. Rajashree samantray, khushboo Rani, and Vijay Pandey. "Agile, Lean & Leagile: Comparative Analysis", Proceeding of National Conference on Research And Innovations In Mechanical Engineering (RIME-2014), Department of Mechanical Engineering, Technocrats Institute of Technology & Science College, Bhopal, March 5-6, 2014.
- 3. Binay Kumar, Ritesh kumar singh, Surendra kumar, Amit Kumar, "A Product Platform Based Approach for solving Product Demand Uncertainty in a Product family", National Conference on "Global Competitiveness Through Quick Response Manufacturing" (Challenges & Opportunities for Indian Manufacturers) on 18th to 20th April, 2014, Deptt. of Mechanical Engg., GLA University, Mathura.
- 4. Shariqul Hoda & Rajeev Agrawal, "Design A Low Cost Automated Filament Winding Machine", National Conference on Research And Innovations In Mechanical Engineering (RIME-2014), Organized by "Department of Mechanical Engineering", Technocrats Institute Of Technology & Science And TIT College, Bhopal, March 05-06, 2014
- Gaurav Yadav & Rajeev Agrawal ,"Image Processing Techniques For Automated Inspection", National Conference on Research And Innovations In Mechanical Engineering (RIME-2014), Organized by "Department of Mechanical Engineering", Technocrats Institute Of Technology & Science And TIT College, Bhopal, March 05-06, 2014
- Naval Kishor Gupta, Dr. Rajeev Agrawal, Dr. Surender Kumar, "Multi-Agent Framework For Scheduling Of Steel Continuous Casting", National Seminar on "Recent Advancement in Manufacturing and its Management (RAMM-14)" at B.I.T. Sindri, Dhanbad, organized by Institution of Engineers (I) Dhanbad Local Centre and B.I.T. Sindri, Dhanbad. February 07-08,2014
- 7. Satyajit Mahto, Amit Rai Dixit, Rajeev Agrawal, "Achieving process excellence in field quality through DMAIC road map of Lean six sigma", National Seminar on "Effectiveness, Ethics and sustainability, The measure of organizational excellence, NSEES 2013, Organized by Department of Management studies, Indian School of Mines, Dhanbad, December 6th and 7th, 2013.

BOARD OF STUDIES (UG/PG)

- 1. Head of the Production Engineering Department-Chairman
- 2. Dr. Vinay Sharma, Professor
- 3. Dr. S.K. Jha, Associate Professor
- 4. Dr. J.K. Prasad, Professor, Department of SE & R
- 5. Dr. Ashok Misra
- 6. Two Student members (One from UG and one from PG)

EXTERNAL

- 7. Dr. S.S. Mahapatra, Professor, Mechanical Engineering Department, N.I.T., Rourkela
- 8. Dr. A.K. Jha, Professor, Mechanical Engineering Department, IT, BHU, Varanasi
- 9. Dr. A.K.S. Choudhary, Professor & Head, Production Engineering Department, B.I.T., Sindri, Dhanbad
- 10. Dr. S. Kumar, Professor, Mechanical Engineering Department, N.I.T., Jamshedpur
- 11. Dr. A.K. Pathak, Associate Professor, Department of Manufacturing Engg., NIFFT, Hatia
- 12. Er. S.K. Saxena, G.M., Foundry and Forge Plant, H.E.C., Ranchi

DEPARTMENTAL ACADEMIC COMMITTEE

SI. No.	Name	Designation	
1.	Dr. Vinay Sharma	Professor & Head	Chairman
2.	Dr. B.K. Singh	Professor	Member
3.	Dr. Sanjay Kumar Jha	Associate Professor	Member
4.	Dr. S.C. Srivastava	Associate Professor	Member
5.	Dr. Joyjeet Ghose	Associate Professor	Member
6.	Dr. Rajeev Agrawal	Assistant Professor	Member
7.	Dr. Somak Datta	Assistant Professor	Member
8.	Dr. Arbind Kumar	Professor, Mech. Engg.Deptt.	Member (Allied Dept.)
10.	Dr. R.C. Jha	Professor & Head, EEE	Member (Allied Dept.)

OTHER IMPORTANT INFORMATION

1. New Lab added : Manufacturing simulation lab

2. New equipment added : Computerized rolling mill

DEAPRTMENT OF REMOTE SENSING





Remote Sensing Laboratory

Satellite Image of BIT, Mesra

Department of Remote Sensing was established in the year 1997 with an aim to meet the increasing demand of qualified human resources in this rapidly developing field. Application of Remote Sensing/Geo-informatics techniques for various necessities such as resources evaluation, environmental monitoring and land use/land cover mapping etc., has grown considerably during the last few decades and RS data products as well as GIS/GPS are increasingly being used for plan formulation at all levels. This Department strives to contribute in the building of indigenous capacities for the development and utilization of space science and technology. Availability of remote sensing (RS) data with varied resolutions in digital forms has increased the scope of identifying, mapping, monitoring, classifying and evaluating different forms of renewable and non-renewable earth resources using multi-spectral, multi scanner and multi-temporal data products. The benefits of space technology, both direct and indirect, have introduced new dimensions into the study and understanding of Earth system processes and improving the quality of life. This is now a FIST-DST sponsored Department and is also supported by UGC - SAP (Special Assistance Programme). The Department offers highly amicable teaching-learning ambience and research environment.

PROGRAMMES OFFERED:

- 1. M.Tech. (Remote Sensing) 2 Years/4 Semesters duration (18 Seats)
- 2. M.Sc. (Geo-informatics) 2 Years/4 Semesters duration (20 Seats)
- 3. Ph.D. (Full time and Part time) Admission held twice in a year (Monsoon and Spring Semesters)

FACILITIES/EQUIPMENTS AVAILABLE:

- 1. Digital Image Processing (DIP) Laboratory
- 2. Geographical Information System (GIS) Laboratory
- 3. Digital Photogrammetry Laboratory
- 4. Global Positioning Systems (GPS) & Differential GPS
- 5. Photogrammetry Laboratory with Stereoscopes
- 6. Ground Truth Radiometer (GTR)
- 7. GPS Enabled Digital Camera
- 8. A0 Size Scanner/Plotter
- 9. Other essential lab as well as field implements for remote sensing application areas

SPONSORED PROJECTS

PROJECT SANCTIONED

Sl. No.	Project Title	PI /Co- PI/ Collaborator	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Crop Suitability and Potential Soil Erosion Assessment in the Drought Prone Puruliya District of West Bengal	Dr. Abhisek Santra	University Grants Commission (UGC)	April 5, 2013	6.00	2 years
2	Ground Water Quality Mapping under RGNDWM- PH-IV in parts of M.P.	Dr. V. S. Rathore	NRSC, DoS, Hyderabad	Sept.1, 2011	45.25	3.5 years (31.12.14)
3	Monitoring Snow & Glaciers of Himalayan Region, Zanskar Basin (J&K) Ph-II	Dr. V. S. Rathore	MoEF and DoS	July 1, 2011	38.55	4 years (31.3.14)

PROJECTS COMPLETED

Sl. No.	Project Title	PI / Co- PI/ Collaborator	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Date of completion of the Project
1	National Land Use Land Cover Mapping 2nd Cycle	Dr. C. Jeganathan	NRSC, ISRO, Hyderabad	Feb.6, 2012	30.27	2 Years (approx.)

SEMINAR / CONFERENCES / SHORT – TERM COURSES CONDUCTED BY THE DEPARTMENT/CAMPUS

Sl. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses
1	11th EDUSAT (Satellite Based Distance Education) Course on "Basics of Remote Sensing, GIS and GPS".	Dr. C. Jeganathan	Indian Institute of Remote Sensing (IIRS, ISRO, Dehradun)	August 5 - November 4 2013
2	12th EDUSAT Course on "Microwave (SAR) Remote Sensing for Natural Resources"	Dr. C. Jeganathan	Indian Institute of Remote Sensing (IIRS, ISRO, Dehradun)	Feb. 3 - March 29, 2014

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

SI. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	A.P. Krishna	SPIE International Symposium on Remote Sensing	Conference Grants - TEQIP-II project	SPIE – The International Society for Optics and Photonics	Dresden, Germany	
2	A.P. Krishna	Workshop on Management capacity Enhancement for Administrators	TEQIP-II project	IIM-Lucknow	NOIDA Campus	Aug.19-23, 2013

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. Santra, A. and Mitra, S., A comparative study of tasselled cap transformation of DMC and ETM+ images and their application in forest classification. Journal of the Indian Society of Remote Sensing, 2014, 42(2), 373-381.
- 2. Mitra, S., Santra, A. and Mitra, D.. Change detection analysis of the shoreline using toposheet and satellite Image: A case study of the coastal stretch of Mandarmani-Shankarpur, West Bengal, India. International Journal of Geomatics and Geosciences, 2013, 3(3), 425-437.
- 3. Dasgupta, Arunima, Sastry, K.L.N., Dhinwa, P.S., Rathore, V.S. and Nathawat, M.S., Identifying desertification risk areas using fuzzy membership and geospatial technique A case study, Kota District, Rajasthan, J. Earth Syst. Sci., 2013, 122(4),1107–1124.
- 4. Singh, S.K., Pandey, A.C. Rathore, V.S. and Nathawat, M.S., Evaluating factors responsible for contrasting signature of wasteland development in northern and southern Ganga Plains (Bihar State, India) with focus on waterlogging, Arab J. Geosci, 2013, 6 (8).
- 5. Sharma, L. P., Patel N., Ghose, M. K. and Debnath, P., Synergistic Application of Fuzzy Logic and Geo-informatics for Landslide Vulnerability Zonation A Case Study in Sikkim Himalayas, India, Applied Geomatics, 2013, DOI: 10.1007/s12518-013-0115-7.
- 6. Manibhushan, Patel, N., Sahoo, G. and Singh, A. K., Image Classification for Different Land Use and Land Covers Using Fuzzy Logic for the Improvement of Accuracies, Journal of Agricultural Science, 2013, 5(3), 278 283.
- 7. Patel, N.and Mukherjee, R., Extraction of Impervious Features from Spectral Indices using Artificial Neural Network, Accepted for publication in the Arabian Journal of Geosciences, 2014, DOI: 10.1007/s12517-014-1492-x.
- 8. Paul, K., Dutta, A. and Krishna, A.P., A comprehensive study on landfill site selection for Kolkata City, India, Journal of the Air & Waste Management Association, 2014, 64(7), 846-861.
- 9. Chatterjee, S., Krishna, A.P. and Sharma, A.P., Geospatial assessment of soil erosion vulnerability at watershed level in some sections of the Upper Subarnrekha river basin, Jharkhand, India, Environmental Earth Sciences, 2014, 71(1), 357 374.

PUBLISHED IN INTERNATIONAL PROCEEDINGS

- 1. Krishna, A.P. and Kumar, S., Landslide hazard assessment along a mountain highway in the Indian Himalayan Region (IHR) using remote sensing and computational models, In: Proc. of SPIE Remote Sensing, Earth Resources and Environmental Remote Sensing/GIS Applications IV (ed. Ulrich Michel, Daniel L. Civco, Karsten Schulz, Manfred Ehlers, Konstantinos G. Nikolakopoulos), 2013, Vol. 8893, 88930Q1 Q13,doi:10.1117/12.2029080, Dresden, Germany.
- Krishna, A.P. and Sharma, A., Snow cover and land surface temperature assessment of Gangotri basin in the Indian Himalayan Region (IHR) using MODIS satellite data for climate change inferences, In: Proc. of SPIE Remote Sensing, Earth Resources and Environmental Remote Sensing/GIS Applications IV (ed. Ulrich Michel, Daniel L. Civco, Karsten Schulz, Manfred Ehlers, Konstantinos G. Nikolakopoulos), 2013, Vol. 8893, 889314-1 to 9, doi:10.1117/12.2029084, Dresden, Germany.

PUBLISHED IN NATIONAL JOURNALS

- 1. Nagarjuna Kumar, R., Srinivas Reddy, K., Nathawat, M.S, Patel, N., Sharma, L.K., Rathore, V.S. Reddy, R., Rao, S.M., and Sailaja, B., Identification of Grape Orchard Using Combination of Image Analysis Techniques, Environment & Ecology, 2013, 31 (3), 1269-1275.
- 2. Nagarjuna Kumar, R., Srinivas Reddy, K., Nathawat, M.S, Patel, N., Sharma, L.K., Rathore, V.S, Reddy R, G., R. Chary and Gr. M.Sankar, Long-term Mean Monthly Rainfall Analysis of Ranga Reddy District of Andhra Pradesh Using GIS, Journal of Agro-meteorology, 2013.
- 3. Bez, P.K. and Krishna, A.P., Geospatial assessment of erosional behaviour of a watershed in Angara block of Ranchi district, Jharkhand, Indian Journal of Soil Conservation, 2014, 42(1), 107 113.

PUBLISHED IN NATIONAL PROCEEDINGS

1. Dubey, R., Sharma, R.N.K. and Poddar, J., "Site suitability analysis for sewagewater treatment plant for Ranchi city", Proc. AGSE 2013, International Conference on Geospatial Momentum for society and environment, at CEPT University, Ahmedabad, 16-19 December 2013.

воок:

Chapter(s) in Edited Book

- 1. Santra, A., Role of remote sensing in forest carbon sequestration with special emphasis on fossil fuel combustion. In: Fossil Fuels: Sources, Environmental Concerns and Waste Management Practices (ed. Kumar, R). Nova Science Publishers, Inc. (ISBN: 978-1-62808-413-9), 2013.
- 2. Kour, R., Patel, N. and Krishna, A.P., Estimation of snowmelt runoff in Chenab Basin, Western Himalayas. In: Climate Change and Himalayan Ecosystem-indicator, Bio and Water Resources (ed. Sundaresan, J., Gupta, P., Santosh, K.M. and Boojh, R.), Scientific Publishers (India), 2013, pp. 21-34.

${\bf AWARD \ / \ RECOGNITION \ BESTOWED \ ON \ FACULTIES \ (\ STATE \ / \ NATIONAL \ / \ INTERNATIONAL \)}$

SI. No.	Name of the Faculty	Title of the Award/ Honours	Organisation	Year / Duration
1	Dr. Abhisek Santra	Reviewer	Journal "Positioning" Publ. Wuhan University, China	Since 2014
, 2	Dr. V. S. Rathore	Reviewer	Indian Academy of Sciences, & Springer	Since 2013
3	Dr. V. S. Rathore	Reviewer	IJARSGG	Since 2013
4	Dr. C. Jeganathan	Editor-in-Chief	International Journal of Advancement in Remote Sensing, GIS and Geography IROSSS	Since 2013
5	Dr. A.P. Krishna	Reviewer	Water Resources Management	Continuing in 2013 – 14
6	Dr. A.P. Krishna	Reviewer	International Journal of Geosciences	Invited in 2013 - 14
7	Dr. A.P. Krishna	Member, Editorial Board	International Journal of Advanced Remote Sensing and GIS	Continuing in 2013-14
8	Dr. N. Patel	Member, Editorial Board,	Journal of Forestry Research	
9	Dr. N. Patel	Member, Editorial Board,	Journal of Earth Sciences and Climate Change	
10	Dr. N. Patel	Associate Editor	Spanish Journal of Agricultural Research	
11	Dr. N. Patel	Member, Editorial Board,	Theoretical and Empirical Research in Urban Management (TERUM)	
12	Dr. N. Patel	Guest Editor	Earth Science Informatics	
13	Dr. N. Patel	Member	Journal of Agricultural Sciences and Applications (JASA)	
14	Dr. N. Patel	Advisory Board Member	International Research Journal of Humanities, Engineering and Pharmaceutical Sciences	
15	Dr. N. Patel	Member, Editorial Board	Advances in Applied Research	
16	Dr. N. Patel	Member, Editorial Board	Journal of Advanced Research in Remote Sensing and Geoscience	
17	Dr. N. Patel	Visiting Scholar in Applied Ecology	University of Poitiers, Poitiers (France)	October, 2013

MOUS / COLLABORATIONS

SI. No.	Name of Organisation / University	Purpose / Area	Year / Duration
1.	International Centre for	Developing Hindu-Kush-Himalaya (HKH)	2014/ 9 Months
	Integrated Mountain	level regional products on Agricultural	
	Development (ICIMOD), Nepal	Ecosystem using Time-Series Satellite Data	

DEPARTMENTAL STUDENTS' ACTIVITIES

SI. No. Name of the Activity Students' co ordinator, if any Date/Duration					
1.	Education field trip	Dr. V.S. Rathore	August 2013 (Bhopal)		
2.	Education field trip	Dr. V.S. Rathore	January 2014		

BOARD OF STUDIES

INTERNAL MEMBERS

1.	Head of the Department	Chairman, Ex-Officio
2.	Dr. N. Patel	Member
3.	Dr. A.P. Krishna	Member
4.	Dr. C. Jeganathan	Member
5.	Dr. V.S. Rathore	Member
6.	Dr. Mili Ghosh	Member
7.	Dr. Abhisek Santra	Member
8.	Dr. G. Sahoo (IT - now CSE)	Member
9.	Dr. S. Jha (Pharmaceutical Sc. & Technol.)	Member

EXTERNAL MEMBERS (ANY TWO)

- 1. Dr. S. Sengupta, Advisor, Deptt. Of Science & Technology, West Bengal
- 2. Dr. D. Ramakrishna, Assoc. Professor, Deptt. Of Earth Sciences, IIT Bombay
- 3. Dr. M.K. Ghosh, Prof. & Head, Computer Science & Engg., SMIT, Majitar, Sikkim
- 4. Dr. R.N. Sahoo, ICAR, Pusa, New Delhi
- 5. Dr. V. Raghavaswamy, Group Director (LU & US Group), NRSC, Hyderabad

DEPARTMENTAL ACADEMIC COMMITTEE

1.	Head of the Department	Chairman, Ex-Officio
2.	Dr. N. Patel	Member
3.	Dr. A.P. Krishna	Member
4.	Dr. C. Jeganathan	Member
5.	Dr. V.S. Rathore	Member
6.	Dr. Mili Ghosh	Member
7.	Dr. Abhisek Santra	Member
8.	Dr. G. Sahoo (IT - now CSE)	Member
9.	Dr. S. Jha (Pharmaceutical Sc. & Technol.)	Member
10.	Guide (s) of the Candidate	Member .

DEPARTMENT OF SPACE ENGINEERING AND ROCKETRY

The Department introduced two- year Post Graduate Degree Programme in 1968, leading to M. E. in Space Engineering and Rocketry with two specializations, namely Aerodynamics and Rocket Propulsion. In the year 2002, another Post Graduate Programme was introduced, leading to M. Tech. in Fuels and Combustion.

The Department has its own administrative building, having Class Rooms and Seminar Halls, besides various Laboratories, housed in separate buildings. The various Divisions under the Department are: Aerodynamics DivisionRocket Propulsion, Division, Propellant Technology, Division and Combustion Division.



SLV 3 Model

The Department has endeavoured to develop a state- of- the art infrastructure to train post graduate students and to support R & D work for Doctoral and Post- Doctoral levels, as also to carry out Grant- in-Aid Projects, sponsored by various Agencies.

The Department has taken up sponsored R & D Projects from premier Agencies, like UGC, AICTE, DST, Ministry of HRD, ISRO, DRDO, CSIR. It has successfully completed as many as 38 Projects and currently 5 sponsored projectsunder progress. The Department has also been recognized under Special Assistance Programme of UGC. Development of a Hybrid Rocket Propulsion facility is under progress in Phase II.

The notable current research activities of the Department include:

- Development of Hybrid Rocket Propulsion Systems
- Droplet Combustion Studies
- Development of High Regression Rate Hybrid Fuel
- Combustion Study of Hybrid Fuels with Nitrous Oxide Oxidizer
- Study on Premixed Flame
- Commissioning of Liquid Propulsion and Solid Liquid Hybrid setup



Liquid- Hybrid Test Facility

- Flow field of Reusable Launch Vehicle at Subsonic Speed
- Flow Field around Slender Bodies at High Angles of Attack
- Flow field around multiple cylinders at Subsonic speed
- Studies of flow field around protrusions at Supersonic speed
- Cavity flow field at supersonic speed
- Studies on Blunt Bodies with Spikes at Supersonic Speeds
- Flow Field Studies around Supersonic Air Intake
- Commissioning of a Supersonic Wind Tunnel of size 4" x 6".



Subsonic Wind Tunnel

SPONSORED PROJECTS

ONGOING PROJECTS

Sl. No.	Project Title	PI / Co- PI/Col- laborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Development of Cryo - Hybrid Rocket Propulsion	Dr. P. C. Joshi	UGC (SAP - II)	April 01, 2007	49.00	06 years
2	Study of Flow Field Inside Air Intake With Flow Control	Dr. J. K. Prasad Dr. Sudip Das Prof. P. Kumar	RESPOND (ISRO)	April 1, 2011	18.59	03 years
3	Investigation of Flow Behaviour on Winged body at Subsonic Speed	Dr. J. K. Prasad Dr. Sudip Das Prof. P. Kumar	AR&DB	Feb.1, 2012	11.40	02 years

PROJECTS COMPLETED

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Date of Completion of the Project
1	Augmentation of Supersonic Tunnel	Dr. J. K. Prasad Dr. Sudip Das Prof. P. Kumar	AR &DB Ministry of Defence	Oct.1, 2009	19.38	2013
2	Investigation of Flow Field around Double Delta Wing at Subsonic Speed	Dr. J. K. Prasad Prof. P. Kumar Dr. Sudip Das	CSIR, New Delhi	May 1, 2010	07.51	Mar. 2014

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the Faculty	Title of the Conference/Seminar	Funding Agency	Organizers	Venue	Date
1	Dr. J. K. Prasad	3rd National Conference on Wind Tunnel Testing	ANSP Project	VSSC,	Trivandrum	Aug. 23-24, 2013
2	Dr. J. K. Prasad	14th Asian Congress of Fluid Mechanic	BIT, (TEQIP)		Hanoi, Vietnam	Oct. 15-19, 2013
3	Prof. Priyank Kumar	6th International Symposium on Applied Aerodynamics & Design of Aerospace Vehicles	BIT, (TEQIP)	ASL, Hyderabad	Hyderabad	Nov. 21-23, 2013

PUBLICATIONS:

NATIONAL JOURNALS

1. Das, S., Kumar P, Ralh, M. K., Rao, R. K. M., Prasad, J. K., "Drag reduction of a hemispherical body adopting spike at supersonic speed", Journal of Aerospace Sciences and Technologies No. 4 Vol. 65, 2013, pp. 313-325.

INTERNATIONAL PROCEEDINGS

- 1. J. Sinha, S. Das, P. Kumar, J. K. Prasad, "Studies on an Axisymmetric supersonic Cavity with Front Wall Inclinations", Int. proceeding of 15th Annual CFD Symposium, 2013, IISc Bangalore.
- 2. D. Sahoo, S. Das, P. Kumar and J. K. Prasad, "Steady and unsteady flow over spiked blunt body at supersonic speed",14th Asian Congress of Fluid Mechanics (14 ACFM), Hanoi, Vietnam, October 15-19, 2013.
- 3. P. Kumar and J. K. Prasad, "Effect of height of trip on the side force over a slender body at subsonic speed" 6th International Conference Symposium on Applied Aerodynamics and Design of Aerospace Vehicles, Hyderabad, November 2013.
- 4. D. Sahoo, S. Das, P. Kumar and J. K. Prasad, "Effect of Spike Length on Steady and Unsteady Flow Over a Spiked Blunt Body at Supersonic Speed", 6th International Conference Symposium on Applied Aerodynamics and Design of Aerospace Vehicles, Hyderabad, November 2013.
- 5. M. Kiran Kumar P. C. Joshi, "Combustion study of AP mixed paraffin wax hybrid fuel with gaseous nitrous oxide N2O" 6th International Conference Symposium on Applied Aerodynamics and Design of Aerospace Vehicles, Hyderabad, November 2013.

NATIONAL PROCEEDINGS

- 1. P. Kumar and J. K. Prasad, "Investigation of side force on slender body with trip at a large angle of attack at subsonic speed" 3rd National Conference on Wind Tunnel Testing, VSSC, Trivandrum, August 2013.
- 2. Deepan J, S. Das, P. Kumar and J. K. Prasad, "Flow field around cylindrical protrusion with vortex generators at supersonic speed" 3rd National Conference on Wind Tunnel Testing, VSSC, Trivandrum, August 21-23, 2013.
- 3. P. Kumar and J. K. Prasad, "Effect of reynolds number on flowfield over a slender body at high angles of attack at subsonic speed", 27th National convention of Aerospace Engineers, Institution Engineers, Dehradun, November 2013.
- 4. J. Yuvaprakash, P. Kumar, S. Das and J. K. Prasad "Investigation of flow field on double delta wing with sharp leading edge at subsonic speed", 27th National convention of Aerospace Engineers, Institution Engineers, Dehradun, November 2013.
- 5. P. Kumar and J. K. Prasad, "Effect of location of circular trip on slender body flowfield at high angles of attack at subsonic speed", 40th National Conference on Fluid Mechanics and Fluid Power, NIT Hamirpur, December 2013.
- 6. G. Chopra, S. Das, P. Kumar and J. K. Prasad, "Investigation of Flow field inside a Supersonic Air-Intake with 3-D Bump" 40th National Conference on Fluid Mechanics and Fluid Power, NIT Hamirpur, December 2013.

7. Prem D., S. Das, P. Kumar and J. K. Prasad, "Flow field over a reentry capsule with ventilation at supersonic speed" 40th National Conference on Fluid Mechanics and Fluid Power, NIT Hamirpur, December 2013.

AWARD / RECOGNITION BESTOWED ON FACULTIES (STATE/NATIONAL) :

Sl. No.	Name of the Faculty	Title of the Award/ Honours	Organisation	Year / Duration
1	Dr. J. K. Prasad	Vic- President, Fluid Mechanic & Fluid Power Society of India	FMFP Society of India	2013-2014
2	Dr. J. K. Prasad	Member of Core Group, Aerospace Division, IE(I)	Institution of Engineers (India)	2013-2014

BOARD OF STUDIES (PG)

Internal Members

Head of the Dept.	Dept. of SE&R	Chairman
Dr. J. K. Prasad	Professor, Dept. of SE&R	Member
Dr. P. C. Joshi	Professor, Dept. of SE&R	Member
Dr. Sudip Das	Professor, Dept. of SE&R	Member
Prof. Priyank Kumar	Asst. Professor, Dept. of SE&R	Member
Dr. Arbind Kumar	Professor, Dept. of Mech. Engg.	Member
Dr. B. K. Singh	Professor, Dept. of Prod. Engg.	Member

External Members

- 1) Dr. Navtej Singh, Professor IIT, Kharagpur
- 2) Dr. B. Mazumdar, Professor Jadavpur University, Kolkata
- 3) Dr. A. K. Chakrabarti, Emeritus Scientist DRDL, Hyderabad
- 4) Shri M. C. Dathan, Director LPSC, Valiamala, Trivandrum

Departmental Academic Committee:

Head of the Department	:	Chairman, ex- Officio
Dr. J. K. Prasad	:	Professor, Dept. of SE&R
Dr. P. C. Joshi	:	Professor, Dept. of SE&R

Dr. Sudip Das : Assoc. Professor, Dept. of SE&R
Dr. Arbind Kumar : Professor, Dept. of Mech. Engg.

Dr. Usha Jha : Professor, Dept. of Applied Chemistry

TEQIP

(Technical Education Quality Improvement Programme Phase -II)

The Technical Education Quality Improvement Programme Phase-II (TEQIP-II) of Government of India (GOI) objectives are to Strengthening Institutions to produce high quality engineers for better employability, Scaling-up postgraduate education and demand-driven Research & Development and Innovation, Establishing Centers of Excellence for focused applicable research, Training of faculty for effective Teaching, and Enhancing Institutional and System Management effectiveness.

Birla Institute of Technology, Mesra, Ranchi has been selected in TEQIP-II under sub-component 1.2 and subcomponent 1.2.1(March 2013).

Under sub-component 1.2 the Institute will receive Rs. 12.5 crore for Scaling-up Post Graduate Education and demand driven Research & Development and Innovation. Institute has received two installment of Rs 2 crore each. The Institute has received Rs.2 Crore on 12.05.2012 for initiating various activities of the project as first installment. Second installment of Rs. 2 crore was released on 19.02.14.

Under subcomponent 1.2.1 the Institute will receive Rs. 5 Crores for establishment of center of excellence on Bioresources and Bioprospecting. SPFU, Jharkhand has released Rs. 2 crore to the Institute under this subcomponent in June 2013.

RELEASE OF FUNDS:

Sub -Component	Amount Released (Rs. Crore)	Released on	% Utilization (30 June 2014)
1.2	4.00	May 12 , 2012 & Feb.19, 2014	78.18 %
1.2.1	2.00	May 13, 2013	75.74 %

A. DETAILS OF ACTIVITIES CARRIED OUT UNDER SUBCOMPONENT 1.2

1. Improvements in teaching, training and learning facilities

a. Up gradation of Existing laboratory facilities

- i. Central Instrumentation Facility (CIF)
- ii. Solar Energy Lab, Mechanical Engineering

b) Learning Resources (Software's) procured:

- i. Mathematica for Computer Science & Engg.
- ii. DELMIA Digital Manufacturing for Manufacturing simulation lab of Production Engg.

2. Teaching and Research Assistantships

- TEQIP Teaching assistantship of Rs 5000/- per month has been provided to 118 ME/MTech students admitted in Institute in 2012.
- TEQIP research assistantship of Rs 18000/- per month has been provided to 14 PhD students admitted in various Departments in 2012.

3. Faculty and Staff Development

Faculty and Staff Development is an important component of TEQIP. Training need analysis (TNA) of faculty and staff members is conducted in the beginning of every year. Training Plan for the year was prepared on the basis of TNA analysis. Following activities are conducted under head FSD:

- a) **Thirty nine** faculty members were financially supported to attend Conferences, workshops, seminars, training programs etc. outside Institute.
- b) Seven Training program were organized for faculty members and staffs.

Title of programme	Duration Of Programme	No. of participants
Half day IIT-NPTEL Workshop	July, 12, 2013	144
Workshop on Basic Pedagogy	Aug. 23- 26, 2013	50
Technical Presentation-cum-Interaction Session on "Advances in Material Testing, Materialographic Sample Preparation & Coating Thickness Measurement etc'	Aug. 20, 2013	25
Short Term training programme on Applications of Artificial intelligence techniques in Engineering & Research	Sept. 23- 27, 2013	69
Software's in chemical science education and research (SCR 2013)	Oct. 3, 2013	130
One week Quality improvement training program on machining	June 23-27, .2014	21

- c) One faculty member was supported for publishing research article in international journals in 13-14
- d) Four faculty members where supported for printing PhD thesis.
- e) Intenational Conference/training program:

SI. No.	Nameand Designationof personswho visited abroad	Purpose of Visit	Duration of Visit	Place of Visit
1	Dr. A.P. Krishna (Professor)	SPE International Conference on Remote Sensing	Sept. 21- 29, 2013	Germany
2	Dr. J.K. Prasad (Professor)	14th Asian Congress of Fluid Mechanics	Oct. 13- 23, 2013	Vietnam

4. Institutional Management Capacity Enhancement

Details of Institute officials sent for administrative training and training in their functional areas:

- i. Two day conclave on Management development program for administrators at IIM, Raipur on 19.05.14 to 20.05.14
 - a) Dr. G. Sahoo, Dean (A&AR)
 - b) Dr. B.K Mishra, Dean (Student Welfare)

- ii. Workshop on Quality Initiatives in Technical & Higher Educational Institutions at Engineering Staff College of India, Hyderabad on 09.06.14 to 11.06.14
 - a) Dr. Anand Kr. Sinha, Dean (UG)
 - b) Dr. Arbind Kumar-II, Head, Mechanical Engineering

5. Quality Circle

Under TEQIP-II program the Institute is placed in quality circle of IIT Delhi. IIT Delhi has organized a "two day Conclave" from 27th-28th, May, 2014 for all TEQIP-II Institutions in its Quality Circle. Following participants represented the Institute in the conclave:

- a) Dr. B. K. Singh, Dean (PG)
- b) Dr. Anand Kr. Sinha, Dean (UG)

6. Industrial visit

Around 35 students of ME Power Electronics went for an industrial trip to Tata Steel, Jamshedpur on 28.03.14.

7. Academic support to weak students

- a) 112 Remedial classes where conducted for weak students.
- b) Finishing school:
 - Diagnostic test for 463 students of 7th Semester has been conducted.
 - 5 sessions of 2 hrs was conducted under Competency development Programme (CDP) in July 2013 with support of T&P section.

8. Development of research interest among undergraduate students:

- From IOC head of TEQIP-II provision has been made to provide financial support to UG/PG/PhD students for paper presentation in seminar, conference, workshops etc.
- Total number of students supported in 2013-14: 45

9. Patent

Patent filed with TEQIP support: 3

B. DETAILS OF ACTIVITIES CARRIED OUT UNDER SUBCOMPONENT 1.2.1

Name of Centre of Excellence: Bioresources and Bioprospecting

1. Academic activities carried out under sub-component 1.2.1 Centre of Excellence:

- 5 thematic areas of research has been identified for CoE i.e. Medicinal Plant, Microbial resources, Microbial Transformation, Biofuel Production, and Plant derived chemicals
- 16 faculty, 14 PhD scholars and 26 MTech students are involved for doing research in the thematic areas.
- Initial research has been started in the 15 specific topics in the thematic areas. It is decided that the faculty working in CoE will try to get sponsored research projects in these 15 thematic areas to strengthen the CoE for which seed money is provided by NPIU.

- Two faculty members supported from CoE to bring new sponsored projects in the thematic areas of CoE.
 - o Dr. Kunal Mukopadhyay, to develop collaborative research between BIT Mesra & External University, External University, Baru Sahib, HP on 25.11.13 to 30.11.13
 - o Dr. Sheela Chandra, to Present new Project proposal to UGC, 07.10.13, New Delhi

2. Assistantship to M. Tech. and Doctoral students has already been started as per details given below:

S. No.	Category	No. of Students	Amount
1	M. Tech. 1st Semester	11	5000/- p.m.
2	M. Tech. 3rd Semester	15	5000/- p. m
4	Ph. D. existing	8	10000/- p.m.
5	Ph. D. New	6	16000/- p.m.

3. Faculty gone for training/Conference/Workshop under CoE in 2013-14:

- Two faculty members attended 2013 BGRI, Technical Workshop, 19.08.13 to 22.08.13, New Delhi:
 - o Dr. Kunal Mukhopadhyay, Professor & Head, Biotechnology
 - o Dr. Manish Kumar, Asst. Professor, Biotechnology
- Koel Mukherjee, Asst. Professor, Biotechnology, Conference on Recent Advances on, Computational Drug design, 16.09.13 to 17.09.13, IISC, Bangalore.
- Three faculty members attended International Symposium on Frontier Discoveries and Innovations in Microbiology and its Interdisciplinary Relevenance (FDMIR-2013)& GB meeting at MDU, Rohtak on 17.11.13 to 20.11.13:
 - o Dr. Rajib Bandopadhyay, Asst. Professor, Biotechnology
 - o Dr. Ramesh Chandra, Assoc. Professor, Biotechnology
 - o Shashwati Ghosh Sachan, Asst. Professor, Biotechnology
- Dr. D.M Pandey, Associate professor, Biotechnology attended 11th International Symposium on Rice `Functional Genomics at The grand Hotel, New Delhi on 20.11.13 to 23.11.13.
- Dr. Sheela Chandra, Asst. Professor, Biotechnology attended Workshop on Modern Biotechnology at Dept. of Biotechnology, NIT Durgapur on 5.12.13 to 11.12.13.

4. 14 students were financially supported for paper presentation in conference/ seminar.

5. Procurements of Equipments under CoE:

Following instruments were procured under CoE:

- Electronic multi dispensing variable volume micro pipette with adaptor (Pack of 3)
- Research grade micro pipette (Pack of 3)
- Complete Laboratory ultra-water purification system with pre-configured pre-filters
- a) Analytical pH Meter cum conductivity meter b) Electronic analytical balance with internal calibration (4th place)(c)Electronic balance with internal calibration (3rdplace) d)Electronic

digital balance. e)Electronic pH meter

- Ultra low temperature deep freezer (-86 degree Celsius)
- Spectrophotometer with kinetics and microcuvette
- Non Refrigerated Mini-centrifuge
- Thermomixer with 24 reaction vessels
- LC-MS/MS

6. Research Collaboration

- 1. Dr. Kunal Mukhopadhyaya and Dr. Manish Kumar visited Max Plank Institute, Germany for development of research collaboration on thematic are of CoE from June 21st -30th. Expression of interest has been signed between the two Institutes. Preliminary work has been started on thematic research areas and a formal MoU will be signed between the two Institutes regarding research collaboration.
- 2. Dr. Kunal Mukopadhyay visited Eternal University, Baru Sahib, HP from 25.11.13 30.11.13 for discussing the various thematic areas for collaborative research. An expression of interest is also signed between the two Institutes.

C. DETAIL OF NMEICT WORKSHOP CONDUCTED AS REMOTE CENTER (REMOTE CENTRE 1331)

SI. No	Name of Workshop	Conducted by	Date	No. of Participate
1	Half Day ISTE Workshop on "Green Building Awareness	IIT Bombay	August 24 , 2013	49
2	Two Week ISTE Main Workshop on "Engineering Mechanics"	IIT Bombay	November 26 - Dec.6 , 2013	14
3	Two Week ISTE Main Workshop on "Signal & Systems"	IIT Kharagpur	January 2- 12, 2014	23
4	Two week ISTE Main Workshop on "Fluid Mechanics"	IIT Kharagpur	May 20- 30, 2014	12
5	Two week ISTE Main Workshop on "Computer Programming"	IIT Bombay	May 22 - June 21, 2014	13
6	Two week ISTE Main Workshop on "Computer Networking"	IIT Bombay	June 30- July 5, 2014	14

NATIONAL CADETS CORPS 3 JHARKHAND COMPOSITE TECHNICAL COMPANY NCC BIT MESRA

3 Jharkhand Composite Technical Company located in campus at Birla Institute of Technology, Mesra is responsible for imparting military training to students (both boys and girls) of the Institute. An overview of the role and function of Army, Navy and Air Force is provided to the enrolled cadets of this elite institution. The enrolled students are hereby trained to become leaders who can opt for defence forces as a profession or leaders in national/international organizations. The students are given in sight into the three technical arms and sources of Indian Army i.e. Engineers, Signals and Electronic and Mechanical Engineer.

NCC training activities have been conducted in form of classes, lecture cum demonstrations, weapon training, combined annual training camps and physical training activities. The cadets based on the training conducted put up an impressive parade during Republic and Independence Day. The cadets have also excelled in small arms inter group firing competition conducted during combined annual training camp. The following major activities were conducted by the NCC unit:-

- (i) Small Arms firing of .22 Rifle by cadets.
- (ii) Participation in Republic Day and Independence Day Parade.
- (iii) Tree Plantation by cadets inside the B.I.T. Campus.
- (iv) Blood Donation by the entire NCC team incl the cadets at B.I.T. Dispensary
- (v) 'No Tobacco Rally' in adjoining villages of Rudia and Pancholi.

The unit is commanded by Lt Col L M Jha and has Associate NCC Offr Major Subir Samanta, Lt K K Senapati, Caretaker Ms S Prasad and other staff from Army and Civil.

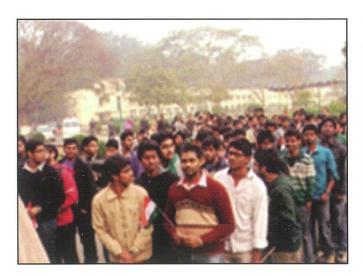


NCC Cadets



Guard of Honour

NATIONAL SERVICE SCHEME





Assembly for Prabhat Pheri

NSS is a joint programme for youth run by the Ministry of Youth Affairs and Sports Govt of India and State government. In NSS, primary focus is put on the development of personality of students through community service.

Aim: Personality and Character development of students in schools and colleges.

Activities: All NSS activities fall under 2 subcategories:

- Regular activity
- 2. Special activity

NSS in BIT: In BIT, NSS is added in course curriculum up to 4th semester having one credit point in each semester under extra-curricular activities (NCC, NSS, PT & Games and Creative Arts).

ACTIVITIES

TEACHING PROGRAMS:

Evening Schools running by NSS students in five adopted village nearby BIT Mesra:

A team of **60 students** has been formed for teaching children from villages in and around Mesra. The children benefitting from these classes fall under the age group of **5-10 years**. These classes have been scheduled in the **evening** during 5 PM -7.30 PM. **Everyday** NSS volunteers have been going down to these villages in groups of two and giving these children basic primary level education. Each group of 2 volunteers has been allotted a particular subject like **Mathematics**, **English and Science etc.** to ensure that all around education is provided to these children.

Also, in every village where this programme is being conducted, an **unemployed graduate youth** has been given the duty to enrol around 20-30 students falling under the age group of 5-10 years and arranging a village community hall where these children can be properly taught. For his services, the unemployed youth receives an amount of **Rs. 1000 Per Month** for enrolling the students and arranging the venue.

ADULT EDUCATION AND EMPLOYMENT PROGRAMMES

WOMEN EMPLOYMENT PROGRAMME

This programme has been initiated to benefit uneducated, unemployed rural women. In this programme, rural women are trained to make carry bags using newspapers which can then be sold to various shops for money which can help these women financially. Various self-help groups are made under this programme which make these carry bags, sell them to respective buyers and distribute the income amongst them. Currently this programme has been generating an income of Rs 4000 per month.

- 1. Around 650 men and women have been trained in doing official work with computer.
- 2. 278 men and women have got jobs in town and started their own jobs.
- 3. After training 11to 12 villagers got jobs as clerks in different Departments in our college, BIT Mesra, Ranchi

PERSONALITY DEVELOPMENT PROGRAMMES FOR NSS STUDENTS:

Yoga Shivir:

A Yoga Shivir was organized from 1st-7th of April 2014 in BIT premises which received participation from all the NSS students as well as members of the staff of BIT Mesra. This week long Shivir by Honourable Yoga Gurus from Bihar School of Yoga, Munger focused on Physical, Mental and Spiritual Exercises for overall personality development.

The week long Yoga Shivir in Pictures

Training Programme on "Motivation of youth for Inspiring Rural Reconstruction"

ORGANIZING PRABHAT PHERI ON INDEPENDENCE DAY AND REPUBLIC DAY

As a responsible and citizen of mother India it is every citizen's duty to respect and observe days of national importance namely the Independence Day and Republic Day. The **flag hoisting ceremony** was preceded by Singing of **National Anthem** and a **Rally** all around the College Campus by all the NSS volunteers. During the Rally students shout various Slogans in praise of the country.

Prabhat Pheri organized in BIT Campus

Cultural program performed by village kids

VISIT TO AN OLD AGE HOME

On 26th of October 2013, the student members of NSS (National Service Scheme), BIT Mesra visited 'Mahatma Narayan Das Grover Ashram', an old age home situated close to D.A.V Nandraj, Bariatu

A free medical check-up of all the residents was also carried out by respective Doctors Launching of National Youth Policy and Rajiv Gandhi Khel Abhiyan

A seminar was organised in for launching of National Youth Policy and Rajiv Gandhi Khel Abhiyan by NSS of BIT Mesra.

BLOOD DONATION CAMP

A Blood donation Camp was organized by NSS volunteers on 6th December 2013 in BIT Dispensary. Over 350 bottles of blood was collected which was donated by students and staff of BIT Mesra and was donated to RIMS Ranchi.

OFF CAMPUSES

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ALLAHABAD

The off campus at Allahabad is located at the Raymond Crossing on Allahabad-Mirzapur Road. This Centre was established in the session 1997-98 with a view to start B. Tech. Degree Programme in Civil, Mechanical and Electrical & Electronics Engineering for the working Engineering Diploma holders on part time basis. The first batch of students of B. Tech programme was admitted in January 1998 and so far, six batches of students have passed out.

In view of demand of trained computer and management personnel at National level and as also to provide job-oriented professional education and training to youth of the area, the



Main Building

Institute introduced (3-years) full-time courses like Bachelor of Computer Applications (BCA), Bachelor of Business Administration (BBA), 5 year Integrated Master of Computer Application, 5 year Integrated Master of Business Administration and Master of Computer Applications (MCA).

The computer laboratory of this centre has over 100 computers connected through LAN network and Internet connectivity is available through out the day. The centre is Wi-Fi enabled. The Institute Library has a reasonably good number of text books and Technical Journals are being regularly subscribed by it. The library currently provides access to e-journals like ScienceDirect and other resources to the faculty, students, and staff under internet environment. The centre has its own website where relevant information regarding the centre is available throughout the year.

Some of the engineering laboratories developed by the centre are Electrical Machines laboratory, Basic Electrical & Electronics laboratory, Microprocessor laboratory, Digital Electronics laboratory, Control Engg. laboratory, Power Electronics laboratory, Digital Signal Processing laboratory, IC Engines laboratory, Manufacturing Processes laboratory, Non-conventional Energy laboratory, Hydraulics Laboratory, Surveying and Geotechnical Engg. Laboratory.

The centre has a moderate play ground, Volleyball Court and Badminton Court. The centre encourages students to organize co-curricular and extra curricular activities such as Games and Sports meet, Cultural meet, Quiz, Debates & Essay competition, Painting & Photographic competition etc at periodic intervals.

Keeping in view the requirements of the region, the following full time programmes are being planned to be added in near future at Allahabad Centre.

- (I) 4-years (Full Time) BE in Electronics and Communication Engineering
- (II) 4-years (Full Time) BE in Computer Science & Engineering
- (III) 2-years (Full Time) M.Sc. Information Technology
- (IV) 2-years Master of Business Administration (Slow Pace) MBA-Slow Pace
- (V) 2-years Master of Technology in Computer Science (Slow Pace) M.Tech(CS) Slow Pace

FULL TIME PROGRAMMES OFFERED

- (i) Master of Computer Applications (MCA)
- (ii) 5 year Integrated Master of Computer Applications (IMCA)
- (iii) 5 Year Integrated Master of Business Administration (IMBA)
- (iv) Bachelor of Computer Application (BCA)
- (v) Bachelor of Business Administration (BBA)
- (vi) Master of Technology in Computer Science
- (vii) Master of Business Administration

SEMINARS / CONFERENCES / WORKSHOPS / STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the Faculty	Title of the Conference/ Seminar/ Staff Development Programmes	Funding Agency	Organizers	Venue	Date
	S. Kanungo	Applications of Artificial Intelligence Techniques in Engineering & Research Department of Production Engineering and Research, BIT Mesra	BIT, Mesra	Department of Production Engineering and Research, BIT Mesra	BIT Mesra	September 23-27, 2013
2	Nidhi Tiwari	FDP on Research Methodology MNNIT	a description six	MNNIT, Allahabad	MNNIT, Allahabad	April 29- May3, 2013
3	Nidhi Tiwari	FDP on Teaching Methodology		MNNIT, Allahabad	MNNIT, Allahabad	May 20-26, 2013
4	Nidhi Tiwari	Workshop on Intellectual Property Rights		MNNIT, Allahabad	MNNIT, Allahabad	February 6-7, 2014
5	A.K. Mahanty	National Seminar on the Importance of Foreign Language (French) in Management Education and International Trade	BIT, Mesra	BIT, Mesra	BIT, Mesra	September 9, 2013
6	A.K. Mahanty	Workshop on Intellectual Property Rights	IPR Cell, MNNIT	MNNIT, Allahabad	MNNIT, Allahabad	February 6-7 , 2014

7	Anita Kushwaha	Seminar on Norbert Wiener, Cybernetics, Humanity & Technology, jointly organized by Computer Society of India, Division II (Software), Computer Society of India Allahabad Chapter, IEEE Computer Society India Council in association with Technical Committee — 9 ICT & Society at IIIT, Allahabad	Computer Society of India	Computer Society of India, Division II (Software), Computer Society of India Allahabad Chapter, IEEE Computer Society India Council in association with Technical Committee — 9 ICT & Society at IIIT, Allahabad	Computer Society of India, Division II (Software), Computer Society of India Allahabad Chapter, IEEE Computer Society India Council in association with Technical Committee – 9 ICT & Society at IIIT, Allahabad	March 9, 2014
8	Sunil Kumar Pandey	National Seminar on Marketing to Rural India – A Changing Paradigm	UGC & CRO, Bhopal, MP	UGC & CRO, Bhopal, MP	UGC & CRO, Bhopal, MP	August24 – 25, 2013
9	Sunil Kumar Pandey	National Seminar on Online Shopping Trends of India		UGC & CRO, Bhopal, MP	UGC & CRO, Bhopal, MP	August 25 – 26, 2013
10	Sunil Kumar Pandey	WinterSchool on Human Rights UGC	UGC			December 3 – 23, 2013
11	Naveen Trivedi	Workshop on Open Source Software for Library Management	Central Library, BIT Mesra	BIT Mesra	BIT Mesra	September 23 – 25, 2013
12	Pravin Chandra Behari	Short Term Course on Power Converter & Applications		Department of Electrical & Electronics Engineering, BIT Mesra	Department of Electrical & Electronics Engineering, BIT Mesra	July 4 – 6 , 2013
13	Pravin Chandra Behari	Workshop on Microcontroller Based Engineering Applications and Automation	UGC (SAP).	BIT, Mesra	BIT, Mesra	January 6 – 13, 2014
14	Prakash Chandra Srivastava	Advance Training in Mathematics on Topology & Geometry		HRI, Allahabad	HRI, Allahabad	December 16 – 28, 2013

15	Ratnesh Mishra	Workshop on Cryptology "NIWC- 2014	Department of Mathematics Motilal Nehru National Institute of Technology, Allahabad- 211004 (INDIA	Department of Mathematics Motilal Nehru National Institute of Technology, Allahabad- 211004 (INDIA	June 5 - 9, 2014
16	Ratnesh Mishra	Workshop on Data mining and Warehousing	Computer society of India, student branch & SHIATS, Deemed University, Naini.	Computer society of India, student branch & SHIATS, Deemed University, Naini.	April 16 -17, 2014
17	Ratnesh Mishra	Seminar on "Norbert Wiener, Cybernetics, Humanity & Technology	Computer Society of India CSI Allahabad Chapter CSI Div.II [Software] IEEE Computer Society IndiaCouncil In Association with 'Technical Committee 9 (TC9) ICT and Society', IIIT Allahabad, Devghat, Jhalwa, Allahabad- 211012	Computer Society of India CSI Allahabad Chapter CSI Div.II [Software] IEEE Computer Society IndiaCouncil In Association with 'Technical Committee 9 (TC9) ICT and Society', IIIT Allahabad, Devghat, Jhalwa, Allahabad- 211012	March 9, 2014
18	Ratnesh Mishra	Workshop on "Concept in Wireless Communication	BIT Mesra, Ranchi, Jharkhand	BIT Mesra, Ranchi, Jharkhand	December 2-7, 2013

19	Ratnesh Mishra	Workshop On " Web Technology		Computer Society of India	Computer Society of India	Aug. 10-11 2013
20	Prakash Chandra Srivastava	Refresher Course in Mathematics	UGC	UGC	Academic Staff College, Allahabad	May 24 – June 13, 2014

PUBLICATION:

INTERNATIONAL JOURNAL

- 1. S.C. Pandey, G.C. Nandi, TSD based Framework for mining the Induction Rules, International Journal of Computational Science, Elsevier, Vol. 5, pp 184 195, 2014
- 2. S.C. Pandey, G.C. Nandi, Artificial Endocrine System: A New Paradigm of Knowledge Discovery, International Journal of Information Acquisition, World Scientific, Vol. 9, nos. 3 & 4, 2013
- 3. Kamta Nath Mishra*, Prakash Chandra Srivastava, and Anupam Agrawal, Minutiae Fusion Based Framework for Thumbprint Identification of Identical Twins, International Journal of Intelligent Systems and Applications, Hong Kong, Vol. 6, No. 1, 84-101, 2014.
- 4. Dubey, A.M., Goel, G. and Sahu, G.P. (2013) 'Effective implementation of competitive advantage and sustainable competitive advantage: a conceptual model', Int. J. BusinessInnovation and Research, Vol. 7, No. 5, pp.519–535.
- 5. Pravin Chandra Behari, A Case Study of Improved Watermill using Power Electronics Devices for off grid Power Generation, Research Journal of Applied Sciences, Engineering & Technology, 7(2): 417 423, 2014, 2040 7459 indexed in ISI Thomson

NATIONAL PROCEEDINGS

1. A K Mahanty, Corporate Social Responsibility for Rural Development, Dimensions of Public Policies and Rural Development, 2014

STUDENTS' ACTIVITIES

Sl. No.	Name of the Activity	Students' Coordinator	Designation
1.	Industrial Visit for MBA II Semester Students	Dhiraj Kumar	March 24-28, 2014
	at HMT Factory, Pinjore Chandigarh.	Praveen Shukla	

OTHER IMPORTANT INFORMATION

- a. Master of Business Administration and Master of Technology in Computer Science were the two new courses added
- b. A new common room (Area 1400 sq ft approx.) has been built for the students. Facilities of few indoor games such as Carom and Chess have been provided in the common room.

DEOGHAR



Main Building

The BIT campus at Deoghar is one of the AICTE approved off campuses under the umbrella of BIT family and has, so far produced four batches of B.E. graduates in ECE, EEE, CSE, Mechanical and Production engineering. The campus was inaugurated on 3rd October 2007 by the Chief Minister of Jharkhand Mr. Madhu Koda at Ratanpur, Jasidih (Deoghar district). After BIT Patna and BIT Jaipur this was the third extension center of BIT Mesra imparting degrees in engineering. The intake of the first batch was 150, 50 in each streams CSE, ECE and EEE. Since the infrastructure was not ready at Ratanpur a temporary transit campus was made at Daburgram, Deoghar in Panchayat Training Institute. Mr. K.P. Sinha an ex-V.C. of BIT Mesra was appointed as the Director of the Institute. The campus spreads at Ratanpur across area of about 25 acres and is about 1.5 km away from the Jasidih rail station (an important junction on the Howrah-Patna route). The Institute contains an academic block, two boys' hostel, a girls' hostel and a health centre. The total intake of students each year is restricted to 270. The Institute has a well maintained library with a large number of academic books, magazines and scientific journals (both in Print and e- copies). Being located about 7 km away from the Deoghar town, the Institute provides a bus to the faculty and staffs during the office hours to facilitate transport connectivity in between the residential areas and the office. A few staff quarters are also available within the campus.

The Department of ECE offers a four-year undergraduate BE program in Electronics & Communications Engineering in eight semesters. The Department has several well-equipped laboratories including Analog & Digital Electronics lab, Instrumentation lab, Analog and Digital Communication lab,

Microprocessor lab, VLSI lab, Microwave lab, Optical Fiber Communication lab, Wireless communication & networking lab etc. Students also get exposure to developing technologies through virtual laboratory simulation packages like Multisim, Commsim, Ultiboard, Cadence, MATLAB, NI Signal Express with DAC. The Department has its own Training & Placement orientation module and so far Departmental placement record is highly satisfactory as successful student got placed in top MNCs and working all over the World. Student of ECE Department of BIT Deoghar regularly get selected for higher studies and internship in top level foreign universities. It is one of the elite Departments because of its modern infrastructure provided to the students. The Department has modern research facilities in all major areas of Electronics and Communication such as EMI/EMC, Computational Electromagnetics, Printed RF and Microwave Circuits, Wearable Microstrip Antenna, Wireless Communication, Wireless Networking, Fiber Optic Sensor, Image Processing, Signal Processing, Speech Processing, Biomedical Signal Processing, Ultralow Power Design of circuits and Systems, VLSI and Embedded System Design, MEMS and NEMS.

ECE Department of BIT Deoghar is also having R&D project sponsored by Department of Science & Technology, Government of India.

The Department of Electrical Engineering at BIT, off campus Deoghar offers a vibrant environment for under-graduate education in Electrical & Electronics Engineering. The vision of the Department is to provide the leadership to enable India's excellence in the field of Electrical & Electronics Engineering. The Department is committed to advancement of the frontiers of knowledge in Electrical & Electronics Engineering and to provide the students with a stimulating and rewarding learning experience.

The Department of Computer Science& Engineering was established along with the inception of the college in the year 2007. At present only Under Graduate program and Ph.d program in Computer Sc. & Engineering are offered. The Department has 3 spacious and well-designed laboratory, equipped with over 200-networked high-end P-IV personal computers with high speed Internet connectivity. CyberRoam™ is also available for controlling networking and distribution of bandwidth across campus. Couple of Dell servers are used for deploying client server softwares laboratories. Operational in an environment of Windows Server 2008/2003, Windows 7 Prof, Windows XP Professional, MS-Office 2010/2007 and UNIX. net, Python and Advanced Java with Visual C++ environment are available for application development. Open source application development using PHP, MySQL and Android applications are highly appreciated Department also has a niche flavour towards research and industrial implementation focussing Web based Auctioning, Developing Soft Computing based Utilities, System Biology integration, Development of Recomender System, Hybrid intelligence in security, Software testing and Reliability analysis of software Applications

The Department of Mechanical Engineering was introduced at the Institute in 2008. It offers a four-year undergraduate BE program in Mechanical Engineering in eight semesters.

All academic programmes offered by the Department are modular and structured, which helps students to gradually build on their knowledge and skills.

MAIN LABORATORIES OF THE DEPARTMENT INCLUDE:

- 1. Engineering Graphics Lab.
- 2. Fluid & Hydraulics Machinery Lab.
- 3. Measurement Lab.
- 4. Mechanics of Solid Lab.

- 5. Mechanical Engineering Lab.
- 6. Internal Combustion Engine Lab.
- 7. Energy Engineering Lab.
- 8. Heat Transfer Lab.
- 9. CADD Lab.
- 10. Thermal Engineering Lab.
- 11. Dynamics of Machine Lab.

The Department of Production engineering offers four-year B.E. programme in Production Engineering. The intake capacity at present is 30. Although, Production Engineering, as a branch, has been introduced with effect from 2008 session at this campus, it has been imparting training for workshop practice to students from earlier batches till then. The Department's goal is to impart knowledge in latest manufacturing technology and to develop managerial skills in students.

FACILITIES AND INFRASTRUCTURE AVAILABLE AT THE DEPARTMENT:

- 1. Pattern Making and Foundry Shop
- 2. Welding Shop
- 3. Machining Shop and Machine Tool Lab
- 4. Metal Forming and Fitting Shop
- 5. Metrology Lab
- 6. Metallurgy Lab
- 7. Tool Design Lab
- 8. Simulation Lab (Central facility)

The Department of Physics is engaged in teaching Physics at the BE level. It has one UG Applied Physics lab and a theoretical research lab. The faculty members are actively involved in R&D in the areas of plasma physics, theoretical non-linear optics, experimental condensed matter physics and nanotechnology.

The Department of Chemistry is a support Department for all BE programmes. It offers courses on Engineering Chemistry and Environmental Science.

At present the Department has water quality and fuel testing facilities and proposes to start need based consultancy and technical assistance to medium and small-scale industries in and around the Deoghar area. Its Research & Development agenda includes studies in the field of -

- 1. Non-linear Dynamics
- 2. Biofuels
- 3. Rain Water Harvesting
- 4. Solid Waste Management
- 5. Mapping of water quality parameters in Deoghar District.

The Department of applied mathematics conducts all the mathematics courses offered in different branches of engineering. The Department has a modern computer centre with latest scientific software such as MATLAB and MATHCAD. The faculty members are actively engaged in research and working on several projects in the Department.

SPONSORED PROJECTS

ONGOING PROJECTS

SI. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Investigation of coupled optical beam propagation in nonlinear media for soliton pair and breather pair formation	Dr. Ram Krishna Sarkar	UGC	March 25, 2013	10.56	3 Years
2	To develop a specially designed IR heating clothing and pad for elderly people	Mr. Prafulla Kumar Manoharan	DST, New Delhi	Jan 2012	15.85	2.5 years
3	Enhancing Material Removal Rate Through Control of Valence (Transition) in Multivalent Metals While Electrochemical Machining of Metal alloys	Prof. Dr. P. K. Srivastava	AR&DB		9.67	
4	Development of economicallyfavourable hollow sphere electrocatalystsfor hydrogen and oxygen production from water electrolysis using PEMWE system.	Dr. (Mrs.) J. Chattopadhdhay	SERB, DST		19.85 Lakhs	

SEMINAR / CONFERENCES / SHORT – TERM COURSES CONDUCTED BY THE DEPARTMENT

Sl. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses
1	Special session IEEE International Conference on Awareness Science And Technology iCAST 2013) Wakamatsu, Japan, Special Session on, Computing Social Awareness: Trends and Applications	Dr. Soumya Banerjee, Dr. Basabi Chakrabarty (Iwate Perfecture University, Japan)	IEEE Japan	November 2 -4, 2013, Aizu

2	One day workshop on 'Recent Trends in Manufacturing (RTM- 2013)'	Dr. A. K. Chakraborty and Ashutosh Kumar	BIT, Mesra	Oct.28, 2013
3	National Workshop on Recent Trends in Manufacturing (RTM'13)	Dr. Bappa Acherjee (Joint Coordinator) [Coordinator: Prof. Ashutosh Kumar of Mechanical Engineering Department]	Self financed (Jointly organised with Mechanical Engineering Department)	October 28, 2013

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

SI. No.	Name of the Faculty	Title of the Conference/Seminar	Funding Agency	Organizers	Venue	Date
1	Dr. Soumya Banerjee	Optimization in Engg, (OPT ENG) 2014- International Workshop, Bankura West Bengal	TEQIP - II	Bankura Unnayani & Computer Societyof India	Bankura, West Bengal	May 29-31, 2014
2	Ritesh Kumar Upadhyay	1. Recent trends in Manufacturing (RTM-2013) 2. Global Competitive-ness through quick responses in manufacturing				1. October -2013 2. Apr-2014
3	Ashutosh Kumar G. Srinivasa Rao	Two week ISTE workshop on Engineering Mechanics Organized by IIT, Bombay held at BIT, Mesra.				Nov. 26 - Dec. 5th, 2013.
4	Tapan Kumar Baug	Mechanical Engineering Emerging trends for sustainability				Jan. 29 - 31, -2014
5	Rana Jitendra Kumar Singh	Recent trends in Manufacturing (RTM-2013)				Sept. , 2013

6	Dr. Bappa Acherjee	Two week ISTE Workshop on Engineering Mechanics	MHRD	Prof. Deepak B. Phatak, IIT Bombay	BIT Mesara	Nov 26 - Dec 6, 2013
7	Dr. Bappa Acherjee	One week short term course on Micro- manufacturing: Materials, Processes and Systems (MMPS- 2014)	Self financed, supported by TEQIP phase II of MNNIT, Allahabad	Prof. Audesh Narayan and Prof. V. R. Koma Dept. of Mechanical Engineering, MNNIT Allahabad	MNNIT Allahabad	June 17-21, 2014
8	Sanjiv Kumar Tiwari	One week short term training program on "Applications of Artificial Intelligence Techniques in Engineering and Research".	Self financed, supported by TEQIP phase II of BIT, Mesra- Ranchi	Department of Production Engineering.	BIT, Mesra- Ranchi	September 23-27, 2013
9	Sanjiv Kumar Tiwari	One week short term training program on "Six-Sigma Tools and Application".	TEQIP and IIIE	Department of Mechanical Engineering.	MNIT-Jaipur	December 16-20, 2013
10	Dr. Manoj Kumar Dutta	International Conference on Electronics and Information Technology		Thapar University, Ptiala	Thapar University, Ptiala	October 4-5, 2013
11	Dr. S. Karmakar	National Symposium on Emerging Plasma Techniques for Materials Processing and Industrial Applications (N-SEPMI 2014)	Power Beam Society of India, Department of Atomic Energy, Govt. Of India	Power Beam Society, Govt. of India	Department of Physics, University of Pune	February 13- 15, 2014
12	Dr. P. K. Srivastav	"DST - Locked Martin India Innovation Growth Programme 2014"	Dept. Of Sci. and Tech. (DST) Govt. Of India	FCCI	Green Hotel, Ranchi	January 6, 2014

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. Chakraborty, C., Gupta, B., Ghosh, S. K., A review on telemedicine based WBAN framework for patient monitoring, Int. J. Telemed. and e-Health, Mary Ann Libert Inc. Vol 19, No. 8, Aug. 2013, 619-26.
- 2. Ghali, N., Banerjee, S., An improvement of chaos-based hash function in cryptanalysis approach: An experience with chaotic neural networks and semi-collision attack, Memetic Computing September 2013, Volume 5, Issue 3, pp 179-185
- 3. Sarkar, M., Banerjee, S.Hassanien, A., Searching DNS for Malicious Domain Registration: Identification through Hybrid Cuckoo Search Metaphor & Object Oriented Implementation, Inderscience Journal, Vol., 5, No. 4, September, 2013.
- 4. B. Acherjee, A.S. Kuar, S. Mitra and D. Misra, Finite element simulation of laser transmission thermoplastic welding of circular contour using a moving heat source, International Journal of Mechatronics and Manufacturing Systems, 6 (5/6), 2013, 437-454.
- 5. A. K. Singh, S. K. Jha, A. Prakash, Green Manufacturing (GM) Performance Measures: An Empirical Investigation from Indian MSMEs, International Journal of Research in Advent Technology, Vol.2, No.4, April 2014, Page No: 51-65.
- 6. S.K. Tiwari, R.K. Singh, S.C. Srivastava, "Six Sigma Project Selection Using Extent Fuzzy Ahp: An Empirical Study", International Journal of Research in Industrial Engineering, Volume 2, Number 2, 2013, pp. 50-63.
- 7. S.K. Tiwari, R.K. Singh, S.C. Srivastava, "Optimization of Green Sand Casting Process Parameters for Enhancing Quality of Mild Steel Castings", International Journal of Productivity and Quality Management, Accepted May 19, 2014.
- 8. Prasad, S., Sarkar, R.K., Medhekar, S., Coupled Tapering / Uptapering of Soliton Pairs in Nonlinear Media, Optik, 2013, 124, 6661.
- 9. Karmakar, S., Nawale, A.B., Kanhe, N.S., Sathe, V.G., Mathe, V.L. Bhoraskar, S.V., Tailored conversion of synthetic graphite into rotationally misoriented few-layer graphene by cold thermal shock driven controlled failure, Carbon, 2014,67, 534-545
- 10. Maurya, J.C., Karmakar, S., Barve, S., Bhoraskar, S.V. and Mathe, V.L. Assessing the purity of CNT from its composite with polymer- A new approach, Am. Inst. Phys. Conf. Proc., 2014, 1591, 534
- 11. Paul, R.K.,Investigation on the feasibility of fusion in a compressed beam of ions subject to an electrostatic field,J. Plasma Phys. 2014, (in Press, Impact Factor 0.7)
- 12. Dutta, M.K., Design and performance analysis of OBS network using hybrid contention resolution techniques, Int. J. IT. Knowledge Management, 2014, May, 219-24
- 13. P.K. Srivastava, Rohit Srivastava Chemical Chaos in a Sequential Oscillators o-hydroxyacetphenone Ce+4 BrO3 - H2SO4 System, The European Physical Journal Special Topics, 222,777-783 (2013).
- 14. Rohit Srivastava, P.K. Srivastava, Self-organized nanostructured spherulitic crystal pattern formation in Belousov–Zhabotinsky type reactionsystem, Chemical Physics 426 (2013) 59–73
- 15. P.K. Srivastava J Chattopadhyay, R Srivastava, Electrochemical performance of Ni/TiO2 hollow sphere in proton exchange membrane water electrolyzers system, Korean Journal of Chemical Engineering, 30(8)1571-1577, 2013
- 16. Rohit Srivastava and P.K. Srivastava, Multiple Patterns in Mixed Substrate B-Z System, Chemistry Journal (2013), Vol. 02, Issue 02,44-49.

- 17. P.K. Srivastava, NarendraYadav, Rohit Srivastava, Jayeeta Chattopadhayay, Growth of Nano structured Diffusion Limited Aggregation (DLA)-Grass Like Branched Patterns in a Belousov-Zhabotinskii (B-Z) Type Reaction System, International Journal of Chemistry, Vol.34, Issue.1, 1119-1129, 2013
- 18. P.K. Srivastava and R. K. Upadhyay, High rate anodic dissolution of Titanium workpiece during Electrochemical Machining, Elixir Mech. Engg. 61,17128-17132, 2013.
- 19. P.K. Srivastava and Rohit Srivastava "Nano-stractured Diffusion Limited aggregation Crystal in reaction micro-emulsion Pattern Formation, Advances in Natural Sciences: Nano-Science and Nanotechnology 2014,5, 015-018.
- 20. S. S. Majhi and P. K. Srivastava, Brown Color Band Polymer Formation Through Frontal Ploymerization, International J of Chemical Engineering Vol.31, Issue.1 1153- 1163, 2014.
- 21. R. Chattaraj, S.K. Samal, S. Debasis., Dispersion of torsional surface waves in anisotropic layer over porous half space under gravity. ZAMM Z. Angew. Math. Mech., (Wiley)., 2013, 1-9, DOI: 10.1002/zamm.201300025
- 22. R. Chattaraj, S.K. Samal., Love Waves in the Fiber-Reinforced Layer Over a Gravitating Porous Half-Space. Acta Geophysica (Springer). 2013,vol. 61, no. 5, pp. 1170-1183.

PUBLISHED IN INTERNATIONAL PROCEEDINGS

- 1. Chinmay Chakraborty, A. Singh, Determination of self distance limit from cellular base station radiation exposure using SAR analysis. IJCA Proc. On Comp. Commun. And Sensor Network 2013, CCSN 2013(2):18-22, December 2013 published by Foundation of Computer Science, New York, USA.
- 2. Youakim Badr (INSA, Lyon, France) and Soumya Banerjee, Managing End-to-End Security Risks with Fuzzy Logic in Service-Oriented Architectures, IEEE 9th World Congress on Services, June 27 –July 2, 2013, Santa Clara, USA.
- 3. Soumya Banerjee& Aboul Ella Hassanien, Developing a decision support system for customer churn prediction in IEEE HIS Tunisia, December, 2013.
- 4. Soumya Banerjee, Hameed Al-Qaheri and Goldina Ghosh (Ph.d Scholar) Evaluating the Power of Homophily and Graph Properties in Social Network: Measuring the Flow of Inspiring Influence Using Evolutionary Dynamics at Science & Information Conference, IEEE & Springer October 7-9, 2013, UK.
- 5. N. Roy, A.S. Kuar, S. Mitra and B. Acherjee, "Optimized laser micro-drilling of SiC-30BN nano-composite using grey relation analysis", Proceedings of the 8th International Conference on Precession, Meso, Micro and Nano Engineering (COPEN-8:2013), 2, 2013, 740-745, ISBN: -978-93-82880-91-2.
- 6. Md. I. Iqubal, R. Kumar, R. K. Ohdar, "A grey-based Taguchi method to optimisie hot forging process," Proceedings of the 3rd International Conference on Material Processing and Characterization (ICMPC 2014), 8-9 March, 2014.
- 7. S. K. Jha, A. K. Singh, "Perspectives on green manufacturing", Proceedings of the All India Seminar On "Recent Advances in Manufacturing and its Management (RAMM-14)" on February 7th & 8th, 2014 Jointly Organized by B. I. T. Sindri, Dhanbad and Institution of Engineers (India).
- 8. S. K. Jha, A. K. Singh, "Comparative study of green manufacturing process in Brick Industries using AHP and Decision Tree", Proceedings of the 1st International Conference on Mechanical Engineering: Emerging Trends for Sustainability on 29th -31st, January 2014 at Department

of Mechanical Engineering, Maulana Azad National Institute of Technology Bhopal – 462 051, Madhya Pradesh, India.

PUBLISHED IN NATIONAL PROCEEDINGS

- 1. P.K. Srivastava and Rohit Srivastava, Self-organized nanostructured Diffusion-Limited-Aggregation (DLA) crystal pattern formation in Belousov-Zhabotinsky (BZ) type reaction system, Poster Presentation 09: Session –II ,8th Conference on , Nonlinear Systems and Dynamics, December 11th 14th, 2013, Indian Institute of Technology Indore.
- 2. S.S. Majhi, P.K. Srivastava, Color Band Polymer Through Frontal Ploymerization, National Conference on Recent Trends in Research in Chemical Ssience, Manipal University, Jaipur Feb.21-22(2014).

BOOKS:

- 1. Chinmay Chakraborty, ISTN-IP Telephony Gateway for Ensuring QoS in Heterogeneous Networks: Modelling, Analysis and Optimization, LAMBERT Academic Publishing, Germany, March 2014.
- 2. Soumya Banerjee, Youakim Badr (INSA, Lyon, France), and Eiman Tamah Al-Shammari (University of Kuwait): Analyzing Tweet Cluster Using Standard Fuzzy C Means Clustering. Social Networks: A Framework of Computational Intelligence. Spriger-Verlag, 2014: pp.377-406, July, 2013).
- 3. Soumya Banerjee, Sumit Singh Community Detection in Social Network: An Experience with Directed Graphs Encyclopedia of Social Network Analysis and Mining (ESNAM). Alhajj, Reda; Rokne, Jon (Eds.). Springer, June, 2014.

Students' Activities

SI. No.	Name of the Activity	Students' coordinator, if any	Date/Duration
1	Summer Technical Internship at AVI EDlogiq New Delhi	Aditya Kumar (6208/11)	May –July2013
2	Summer Technical Internship at Xperia Technologies Pvt. Ltd. New Delhi.	Tahseen Ahmad (6180/11)	May –July 2013
3	Summer Technical Internship at Indian Statistical Institute	Sudarsan Kumar (6155/10) & Anupama Baxla (6193/10)	May –July 2013
4	Summer Technical Internship at AVI EDlogiq New Delhi	Aditya Kumar (6208/11)	May –July2013

OTHER IMPORTANT INFORMATION

- a. Dr. Soumya Banerjee of CSE Department was involved in the following activities
 - Program Committee Member, 2014 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, Bejing, China.
 - Program Committee Member, The 9thInternational Conference on Bio-inspired Computing: Theories and Applications (BIC-TA 2014). 16th —19th October, 2014, Wuhan, China.
 - Member Program Committee, IEEE International Conference on Tools with Artificial

Intelligence (ICTAI) – 2013, November 4-6 2013, Washington DC, USA, http://www.cs.wright.edu/atrc/ictai13/committees.html

- Program Committee Member, the 2013 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, Canada August 25-28th 2013.
- b. Dr. S. Karmakar of the Department of Physics was one of the invited speakers and delivered a talk entitled "Phenomenological perspectives of formation of few-layer graphene in carbon arcs" during the National Symposium on Emerging Plasma Techniques for Materials Processing and Industrial Applications (N-SEPMI 2014) held at the Dept. of Physics, University of Pune held during 13-15 Feb 2014.
- c. The Literary Society of BIT, Deoghar organized its first Cultural Fest "AURORA '14" under the mentorship of Dr. S. Karmakar on 2nd April 2014. The one-day-fest hosted 11 different exciting events and was a grand success. The nominated students of the society also participated in "ROSTRA" the literary fest of BIT Mesra on 5th April 2014, and won A) 1st prize in Panchayati Raj B) Best Parliamentarian in Youth Parliament and C) 3rd prize in Vaad-Vivaad.

d. Library

The Learning Resource Centre is the nerve centre of BIT Deoghar. The Institute takes pride in its state-of-the art library infrastructure and resources. Well furnished and spacious reading room forms part of it. The library is entirely devoted to the academic needs of the students and Faculty.

It offers a wide range of books and over a number of printed and e-journals on the subject areas and other research materials. Important local, regional dailies in English and Hindi are also an important part of Newspaper section of the library.

The total number of volumes of books currently in the library is about 20,000.

i. Currently, the library is accessing 28 printed journals and a couple of e-journals published by IEEE, JGATE, ASTM Digital Library and Sciencedirect.

JAIPUR



provide quality education in Engineering, Applied Sciences and Management with technology and professional exposure through innovative programmes & practices. Driven by the mission that technology and innovative management practices will be the gateway to the future growth, it is today one of the leading Institutes of Rajasthan in the field of Engineering, Applied Sciences and Management.

BIT Jaipur Campus was established

in 1995. The focus of the Institute is to

Main Building

DEVELOPMENT VISION:

Development is a never ending process; undoubtedly, knowledge spread, innovative concepts, innovative practices and technology breakthroughs are at core of this process. In the professional education domain, it is a two dimensional need for upgrading knowledge and infrastructure - one to understand the fast happening conceptual and technology breakthroughs and second to facilitate new such breakthroughs to take place with more knowledge inputs and basic research. In the present competitive environment, it is now a willing compulsion for a capable and growth oriented organization to be a part of contemporary development process.

With excellent performance, progressive mind set and good will earned, the BIT Jaipur Campus has a long term vision to consolidate the strength and excel in engineering and management education and research in emerging areas. The BIT Jaipur Campus has good potential to be one of the leading technical Institutes in western part of the country as the BIT main campus is in the eastern part.

ACADEMIC PROGRAMMES:

Undergraduate:

B.E. in following branches of Engineering:

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

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

Postgraduate:

MBA, MCA, Masters in Animation Design, Integrated MBA and Integrated MCA

Doctoral:

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

MAIN FACILITIES AND EQUIPMENT

Building & Campus: The Institute is built up in about 5 Acre land (20000 Sq M). The built up area is about 6000 Sq M consisting of 13 class rooms, 15 lab halls, Mechanical workshop, Seminar Hall (150 Capacity), Common Computer/Internet Access Centre (30 Computers), library hall, canteen hall and administrative block.

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

SOFTWARE/SIMULATION TOOLS

For Electronics & Electrical Labs: CADENCE VLSI simulation tool, MATLAB, Xilinx ISE Foundation Tool, ComSim, MultiSim, Code Composer Studio, PCB Design Util Board

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 Telly

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

SPONSORED PROJECTS

ONGOING PROJECTS

SI. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Physical and Optical properties of aerosols over an urban site in north western India, Discipline: Climatology	PI : Dr Sunita Verma Co-PI: Dr. Swagata Payra,	DST, New Delhi, Govt. of India	July 20, 2010	32.54	Initially sanctioned for 3 years
2	Characterization of Land Cover using SARAL Altika Data"	Mr. B.K. Singh	EPSA, SAC (ISRO), Govt. of India	October 2013	7.09	2.years

SEMINAR / CONFERENCES / SHORT – TERM COURSES CONDUCTED BY THE DEPARTMENT/CAMPUS

Sl. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short - term Courses
1	Winter School on "Linear Algebra and Applications- Part I" for B.I.T. Jaipur Campus (For Undergraduate Students)	Dr. Gurminder Singh and Dr. Indra Kumar Dadheech	BIT, Jaipur	December 17-21, 2103.

2	Workshop on Digital Games By Mr. Rajat Ojha, CEO, The Awesome Game Studios, San Francisco, USA.	Dr. Vibhuti Pandya	BIT Jaipur	January 16- 17, 2014
3	Workshop on Improving English Language Communication Skills	Dr. RituPareek	BIT- Jaipur	March 29 –30, 2014
4	Short Term Course on "VLSI Design Using CADENCE Software Tool"	Mrs. Jyoti Sharma and Mr. Jitendra Saini.	BIT, Jaipur	May 19-31, 2014

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	J.B. Sharma	TEQUIP Sponsored Short-Term course on 'Recent Trends in Communication and Signal Processing'	TEQUIP	MNIT, Jaipur	MNIT, Jaipur	July 1-5, 2013
2	Aparajita Pandey	Short term Course on Telecommunication Networks with Tecommunications with state of the Art-Hands on Experiments	IIT Khargpur	IIT Khargpur	IIT Khargpur	July 8-13, 2013
3	Snehanshu Shekhar	Micro and Nano Electronic Systems and Devices-2013	DST Rajasthan and VIT, Jaipur	VIT, Jaipur	VIT, Jaipur	August 8-9, 2013
4	Sunita Verma	Stratospheric Sulfur and its Role in Climate (SSiRC)	_	World Climate Research Programme (WCRP)	Georgia Tech Atlanta, USA	Oct.28-31, 2013
5	Madhavi Sinha, Shripal Vijayvargiya, Subhash Chand Gutpa, Vishwambhar Pathak, Vivek Gaur and B. Pathak	National workshop on Challenges in Big Data Research	MNIT, Jaipur	Deptt. Of CSE, MNIT, Jaipur	MNIT, Jaipur	Nov. 9-13, 2013

6	Archana Bhatnagar	UGC Sponsored Refresher Course	UGC	Academic Staff College, Univ. of Rajasthan, Jaipur	Academic Staff College, Univ. of Rajasthan, Jaipur	Nov. 11- 30, 2013
7	Subhash Chand Gutpa	3rd National conference on computational and mathematical Science: Computatia-III, 2013	VIT, Jaipur	VIT, Jaipur	VIT, Jaipur	Nov. 25- 26, 2013
8	Manish Soni	Climate Modeling: Simulations and Analysis	DST, Govt of India	DST, Govt of India	CAS, IIT Delhi	Dec. 9-21, 2013
9	Aparajita Pandey	Network Security	CSI, Mumbai	CSI, Mumbai	CSI, Mumbai	Dec. 13- 14, 2013
10	J.B. Sharma and Gaurav Jain	Advances in adaptive signal processing	MNIT	MNIT, Jaipur	MNIT, Jaipur	Dec. 17- 21, 2013
11	Subhash Chand Gutpa, Vishwambhar Pathak and Vivek Gaur	National Workshop on Biometrics and Privacy Protection held at MNIT, Jaipur	MNIT, Jaipur	MNIT, Jaipur	MNIT, Jaipur	Dec. 23- 25, 2013
12	Divya Prakash	Winter School on Atmospheric Aerosol Physics, Measurements and Sampling Techniques	DST, Govt of India	DST, Govt of India	IIT Madras	January 3-16, 2014
13	Dheeraj Bhardwaj	Advancement in wireless & optical communication	AICTE	Poornima College of Engineering	Poornima College of Engineering Campus, Jaipur	January 18-19, 2014
14	Archana Bhatnagar and Dheeraj Bhardwaj	National Conference on Emerging Computing Technologies in Modern Era	AICTE, UGC	SS. Jain Subodh PG (Autonomous) College, Jaipur	SS. Jain Subodh PG (Autonomous) College, Jaipur	January 22-23, 2014

15	Aparajita Pandey	Power System Operation and Energy Management: Vision 2020	AICTE, Institution of Engineers	SKIT, Jaipur	SKIT, Jaipur	January 24-25, 2014
16	Ranjana Agrawal	Refresher course by UGC at Academic Staff College, University of Rajasthan, Jaipur	UGC	University of Rajasthan, Jaipur	Academic Staff College, UOR, Jaipur	January 27 - February 15, 2014
17	Anand Kumar Srivastava	101st Indian Science Congress	ISCA	ISCA, Kolkata	University of Jammu, Jammu	February 3-7, 2014
18	Shripal Vijayvargiya, Subhash Chand Gutpa, Vivek Gaur, Santosh K. Sharma and Santosh K. Agarwal	International workshop on Emerging Trends in Information Technology – 2014, organized by LNMIIT, Jaipur	LNMIIT, Jaipur	LNMIIT, Jaipur	LNMIIT, Jaipur	February 2-15, 2014
19	Aparajita Pandey	Privacy & Security Symposium	IIITD, IIT Kanpur, BITS, Pilani	IIIT Delhi, IIT Kanpur, BITS, Pilani	IIT, Kanpur	February 19-21, 2014
20	Piyush Gupta	International Advance Computing Conference (IACC'14)	IEEE	IEEE Delhi Section and Dept. Of Computer Sc. & Engg., ITM University, Gurgaon	Gurgaon	February 21-22, 2014
21	Anju Sharma and B. Pathak	8thINDIACom; 2014 International Conference on Computing for Sustainable Global Development	IEEE	Bharati Vidyapeeth, New Delhi (INDIA)	Bharati Vidyapeeth, New Delhi (INDIA)	March 5-7, 2014
22	Dheeraj Bhardwaj	1st International Conference on Innovative Advancements in Engineering and Technology (IAET),	Jaipur National University, Jaipur	Department of Electronics and Communication Engineering	Jaipur National University Campus, Jaipur	March 7-8, 2014

23	Archana Bhatnagar	National Conference on Management and I.T.	IIS University, Jaipur	ISIM, Jaipur	ISIM, Jaipur	April 11- 12, 2014
24	Vishwambhar Pathak	IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE-2014)	IEEE Delhi Section	Poornima University &Poornima College of Engineering, Jaipur	Poornima University, Jaipur	May 9-11 2014
25	Swagata Payra	MOZAIC-IAGOS Symposium, Toulouse France	-	IAGOS	Toulouse France	May 12- 15, 2014
26	Gaurav Jain	Recent Advances in Signal Processing and Communications	MNIT, Jaipur	MNIT, Jaipur	MNIT, Jaipur	May 19- 23, 2014
27	Sunita Verma	16th IGAC Conference	-	GEIA, IGAC	Boulder, USA	June 10- 11, 2014

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PUBLISHED IN INTERNATIONAL JOURNALS

- Agarwal, Santosh Kumar and Sinha, Madhavi, Multi Agent Adaptive E-Learning System. International Journal of Advanced Research in Computer Science and Software Engineering, July 2013, Vol 3, Issue 7,
- 2. Shekhar, Snehanshu, Lumped Control Virtual Instrumentation for Biomedical Applications, International Journal Publication-IJARSE, August 2013, Vol. 2, Issue 8, 62-66.
- 3. Pathak, V., Dhyani, Praveen and Mahanti, Prabhat, Autonomous Image Segmentation using Density-Adaptive Dendritic Cell Algorithm, International Journal of Image Graphics and Signal Processing, MECS Publishers, August 2013, Vol. 4, No. 10, 26-35.
- 4. Pandey, Aparajita, Identity Management in E-Governance, International Journal of Emerging Trends & Technology in Computer Science (IJETTCS), September-October 2013, Volume 2, Issue 5,
- 5. Sharma Roopali & Sharma Priyanshu, Exploring the Role of Gems and Jewellery Industry on Indian Exports, An International Journal- Asian Academic Research Journal of Social Sciences and Humanities, October 2013, Issue 16, Volume I, 209-215.
- 6. Bubna Pramod, Long Term Economic Effects of Food Security Bill in India-An Analysis, International Journal of advance research in management and social sciences, December 2013, Vol 2, Issue 12, 148-158.
- 7. Jhankal, A. K., Unsteady MHD Boundary Layer Flow and Heat Transfer over a Stretching Surface. International Journal of Physics and Mathematical Sciences, 2013, Vol. 3, Issue 2, 110-114.
- 8. Jhankal, A. K., Jat, R. N. and Kulhari, A. L., Swirling Jets of Conducting Fluids in the presence of

- a Transverse Magnetic Field. MATEMATIKA, 2013, Vol. 29, No. 1, 133-148.
- 9. Agarwal, Santosh Kumar and Sinha, Madhavi, Student Modeling in Distributed Adaptive Knowledge based E-Learning Environment, International Journal of Computer Applications, 2013, Volume 76, Number 14, (doi 10.5120/13317-0935).
- 10. Agrawal, Ranjana, Contamination of nitrate in ground water samples of Sawai Madhopur town, Rajasthan, International J of Green and Herbal Chemistry, 2013, 2, 60-64.
- 11. Verma, S., Payra, S., Gautam, R., Prakash, D., Soni, M., Holben, B., and Bell S., Dust events and their influence on aerosol optical properties over Jaipur in Northwestern India, Environmental Monitoring and Assessment, Springer, 2013, EMAS-D-12-11425, (DOI: 10.1007/s10661-013-3103-9).
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- 13. Prakash, D., Payra, S., Soni, M., and Verma, S, Aerosol particle behavior during Dust Storm and Diwali over an urban location in North Western India, Natural Hazards, 2013, 1-13. (DOI: 10.1007/s11069-013-0780-1).
- Payra, S., Verma, S., Prakash, D., Kumar, P., Soni, M. and Holben, B., Aerosols properties during dust-storm episodes over Jaipur, Northwestern India, AIP Conference Proceedings, 2013, Vol. 1527, 515–518.
- 15. Sharma, J. B., Sharma, K. K. and Sahula, Vineet, Digital image dual watermarking using self-fractional Fourier functions, bivariate empirical mode decomposition and error correcting code, Journal of Optics (Springer), 2013, Vol. 42, No. 3, 214-227.
- 16. Singh, G. and Chamkha, A.J., Dual solutions for second-order slip flow and heat transfer on a vertical permeable shrinking sheet, Ain Shams Engineering Journal, 2013, 4, 911-917.
- 17. Bhardwaj D. andSharma, Komal, Broadband rectangular patch microstrip antenna with rhombus shaped slot for WLAN applications, International Journal of Enhanced Research in Science Technology & Engineering, January 2014, Vol. 3 Issue 1, 389-394.
- 18. Bhardwaj, D., Jain, Nidhi and Sharma, Komal, Bandwidth Enhancement of Broadband Dual Resonator I-Shaped Antenna for C-Band Applications, IJECT, January-March 2014, Vol. 5, Issue 1
- 19. Bhardwaj, D., Verma, D. and Sharma, Komal, Design of dual band broadband modified rectangular microstrip antenna with air gap for wireless applications, International Journal of Enhanced Research in Science Technology & Engineering, February-2014, Vol.3, Issue2, 331-339.
- 20. Bubna Pramod, A Case Study of Challenges and Implementation the Central Govt. Social Project Food Security, Zenith international journal of business economics and management research, April 2014, Vol 4, Issue 4, 105-110.
- 21. Sharma Priyanshu & Sharma Roopali, Special Economic Zones In Rajasthan: A Study of Gems And Jewellery Segment In Jaipur, Zenith International Journal of Business Economics & Management Research, ZIJBEMR, May 2014, Vol.4 (5), 24-35.
- 22. Bhardwaj, D., Sharma, O. P., Dubey, C. K., Singh, B. V. and Sharma, Komal, Gain and Bandwidth Enhancement of Electromagnetic Gap-Coupled Assembly of Various Patches Forming Rhombus

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- 23. Bhardwaj, D., Sharma, O. P., Singh, B. V., Dubey C. K. and Sharma, Komal, Broadband Electromagnetic Gap-Coupled Assembly of Patches Forming Trapezoidal Microstrip Antenna for S-Band Application, Int. Journal of Engineering Research and Applications, May 2014, Vol. 4, Issue 5 (Version 1),
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- 25. Jhankal, A. K., Homotopy Perturbation Method for MHD Boundary Layer Flow With Low Pressure Gradient Over a Flat Plate, Journal of Applied Fluid Mechanics, 2014, Vol. 7, No. 1, 177-185.
- 26. Jhankal, A. K., Boundary Layer Flow and Heat Transfer over a Stretching Surface in the Presence of Magnetic Field.International Journal of Physics and Mathematical Sciences, 2014, Vol. 4(1), 215-219.
- 27. Singh, G. and Makinde O.D., Axisymmetric slip flow on a vertical cylinder with heat transfer, SiansMalaysiana, 2014, 43,3, 483-489.
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- 31. Bhardwaj, Dheeraj, Lakha, Maninder Singh and Sharma, Komal, Bandwidth Enhancement of Modified Rectangular Microstrip Antenna With W Shaped Slot For Wi-Max Application, SKIT Research International Journal, 2014, Vol 4, Issue 1, 78-81.
- 32. Srivastava A. K. and Prasad G., Characteristics of uniform parallel-plate and planar-surface dielectric barrier glow discharge at atmospheric pressure, J. Electrostatics, 2014, 72, 140-146.
- 33. Sharma, J. B., Sharma, K. K. and Sahula, Vineet, Hybrid Image Fusion using Self-Fractional Fourier Functions and Multivariate Empirical Mode Decomposition, 'Signal Processing', (Elsevier), 2014, Vol. 100, 146–159.

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- Sunita Verma, Sulfate Tropospheric Chemistry: An Interactive Global Climate Chemistry Modelling Approach, Stratospheric Sulfur and its Role in Climate (SSiRC), Georgia Tech at Atlanta, USA, 28-31, October, 2013.
- 2. Jhankal, A. K., Optimized design of layout for cellular manufacturing system. International Conference on Special Functions and their Applications & Symposium on Applications in Diverse Fields of Engineering and Technology, Department of Mathematics, National Institute

- of Technology, Jaipur, December 13-15, 2013.
- 3. Payra, Swagata, Ricaud, Philippe and Abida, Rachid, Jean-Luc Attié, Laaziz El Amraoui. Water Vapour Assimilation in the Upper Troposphere and Lower Stratosphere, 2-5, ADOMOCA Newsletter, 2014.
- 4. Parkash, Divya, Verma, Sunita, Soni, Manish and Payra, Swagata, Size characteristics of atmospheric aerosol using GRIMM over an urban environment, INTROMET, February 21-24, 2014.
- 5. Shekhar, Snehanshu, Gesture recognition system based on 3-D Accelerometer, International Conference on Innovative Advancements in Engineering and Technology, Jaipur National University, IETE, CEERI Pilani, DST Delhi, CSI, IEI (India), March 7-8, 2014.
- 6. Jhankal, A. K. and Kumar, M., Numerical study of MHD boundary layer flow induced by a permeable stretching sheet. Rajasthan Science Congress, Dr. K. N. Modi University, Niwai, Rajasthan, May 1-3, 2014.
- 7. Verma, Sunita, Prakash, Divya, Payra, Swagata and Soni, Manish,, Aerosols sources over Jaipur in Northwestern India from ground based AERONET measurements, MOZAIC-IAGOS Symposium, Toulouse, France, May 12-15, 2014.
- 8. Soni, Manish, Payra, Swagata, Kumar, Anikender, Verma, Sunita and Prakash, Divya, Validation of Aerosol retrieved Products obtained from AERONET with MODIS over an urban location, Jaipur, India, ICIMOD's SARAS workshop, Pokhran, Nepal, June 7-9, 2014.
- 9. Verma, Sunita, Kumar, Pramod, Payra, Swagata, Prakash, Divya and Holben, Brent, Size-resolved aerosols concentration during extreme events over a site in Northwestern India, 16th IGAC conference, Boulder, USA, June 10-11, 2014.

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- 1. Sharma, Roopali & Kumar, Santosh, An Empirical Analysis of Private Equity (PE) flows in India, Indian Streams Research Journal, December 2013, Issue 11, Volume 3, 1-6.
- 2. Arora, Ritu & Kumar, Mukesh, The impact of Market Orientation and Learning Orientation on a Firm's Performance, Indian Streams Research Journal, December 2013, Volume III, 1-4.
- 3. Pareek, Ritu & Bhatt, Preeti, A Reading of Angela Carter's 'Puss-in-Boots, Literary Insight. Thane: Pratik Offset, 2014. 120-125.
- 4. Payra, Swagata, Prakash D., Soni M., and Verma S., Size-Segregated aerosol Particles: an observational study at urban location in Northwestern India, Vayumandal, 2014

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- 1. Sharma Roopali, Changing Dimensions of Urban Drinking Water Supply Management System: A Case Study. In Proceedings of the National Seminar on Water Resource management- Challenges & Opportunities, organized by Department of Economics, University of Rajasthan, October. 3-4, 2013.
- 2. Jhankal, A. K., Mathematics in Alternative Energy Production. National Conference on Recent Trands, Technology & Challenges for Renewable Energy Sources & Systems, Jaipur Institute of Technology, Jaipur, December 21-22, 2013.
- 3. Jhankal, A. K., Boundary Layer Incompressible Flow Induced by a Permeable Stretching Sheet

- in the Presence of Transverse Magnetic Field. National Conference on Computational and Mathematical Sciences, VIT Campus, Jaipur, November 25-26, 2013.
- 4. Agrawal, Ranjana, Global warmingand its lethal effects. In Proceedings of the UGC sponsored National Conference on Environmental Issues, Toxicology and Exposure Science, Department of Zoology, Agrawal PG College, Jaipur, 2013.
- 5. Bhatnagar, Archana and Choudhary, S., TIZEN: A new operating system for the Smart devices. In Proceedings of the 3rd National Conference on Computational and Mathematical Sciences, COMPUTIA-III, 2013, Department of Computer Science & Engineering and Department of Mathematics, VIT, Jaipur, November 25-26, 2013.
- 6. Bhatnagar, Archana and Hembram, S., IPV6 the next generation protocol. In Proceedings of the 3rd National Conference on Computational and Mathematical Sciences, COMPUTIA-III, 2013, Department of Computer Science & Engineering and Department of Mathematics, VIT, Jaipur, November 25-26, 2013.
- 7. Jhankal, A. K., Numerical Study of Hydromagnetic Boundary Layer Flow over a Stretching Sheet. National Seminar on Innovations in Science & Technology for Inclusive Development, Dr. B. Lal Institute of Biotechnology (In association with Indian Science Congress, Jaipur Chapter), Jaipur, January 16-17, 2014.
- 8. Bhardwaj, Dheeraj, Jain, Nidhi and Sharma, Komal, Broadband Dual Resonator Uniform H-Shaped Microstrip Patch Antenna for C-Band Applications. In Proceedings of National Conference on Advancement in wireless & optical communication, held at March 18-19, January 2014.
- 9. Shekhar, Snehanshu, "Broadband traingular patch microstrip antenna with two rectangular slots for WLAN application," National Conference on Emerging Computing Technologies in Modern Era, S S Jain Suubodh P.G. College, AICTE & UGC, January 22-23, 2014.
- 10. Bhardwaj, Dheeraj, Jain, Nidhi and Sharma, Komal, Comparison of Simulated Radiation Performance of Uniform and Nonuniform H-Shaped Microstrip Patch Antennas Using IE3D Simulation Software. In Proceedings of National Conference on Emerging Computing Technologies in modern ERA, held at S.S. Jain Subodh College on January 22-23, 2014.
- 11. Bhardwaj, Dheeraj, Verma, Deepak Verma, Shekhar, Snehanshuand Sharma, Komal, Design of Modified Broadband Microstrip Rectangular Shaped Slotted Antenna For WLAN Application. In Proceedings of National Conference on Emerging Computing Technologies in modern ERA, held at S.S. Jain Subodh College on January 22-23, 2014.
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- 13. Bhardwaj, Dheeraj, Goyal, Gaurav and Sharma, Komal, Dual band Rectangular Microstrip Patch Antenna with Hexagonal and Y Shaped Slot for X-Band and C-Band Application. In Proceedings of National Conference on Emerging Computing Technologies in modern ERA, held at S.S. Jain Subodh College on January 22-23, 2014.
- 14. Sharma Roopali, Private Equity A Contemporary trend in Financial Market of India. In

- Proceedings of the National Seminar on "Society, Polity and Economy in Contemporary India" organized by Kanoria Kanniya Mahavidhyalaya, January 24-25, 2014.
- 15. Pandey Aparajita, Smart Grid Security, National conference on Power System Operation and Energy Management: Vision 2020, SKIT, Jaipur, January 24-25, 2014.
- 16. Jhankal, A. K., Numerical computation for MHD boundary layer incompressible flow over a flat plate. National Conference on Advanced Computing and Communication for Technologies, Regional College for Education Research & Technology, Jaipur, April 4-5, 2014.
- 17. Bhatnagar, Archana Emerging trends in cloud computing. In Proceedings of the National Conference on Emerging Computing Technologies in Modern Era, Department of Computer Science, SS. Jain Subodh PG (Autonomous) College, Jaipur, 2014.
- 18. Bhatnagar, Archana, Cloud analytics explored as a next generation affordable BI. In Proceedings of the 4th National Conference on Management & I.T., 2014, Department of Computer Science, ISIM, Jaipur, 2014.
- 19. Agrawal, Ranjana, Pre monsoon and post monsoon ground water quality near municipal waste dumping site at Jaipur w.r.t. physico chemical characteristics and heavy metals, In procceding of 101st Indian Science Congress, Jammu University, Jammu, 2014.
- 20. Srivastava A. K. and Prasad G., Design and Characeristics of atmospheric pressure dielectric barrier discharge plasma sources for daily-life requirements, In Proceedings of the 101st Indian Science Congress, University of Jammu, Jammu, 2014.

CHAPTER(S) IN EDITED BOOK

Aparajita Paney, The Archaean grey gnesisses and the genesis of continental crust. In Archaean Crustal Evolution (ed. Condie, K. C.), Elsevier, Amsterdam, 1994, pp. 205–259.

AWARD / RECOGNITION BESTOWED ON FACULTIES (STATE / NATIONAL / INTERNATIONAL):

SI. No.	Name of the Faculty	Title of the Award/ Honours	Organisation	Year / Duration
1	Dr. Vibhuti Pandya	One of the Jury Member in the Jaipur International Film Festival Awards 2014	JIFF India	February 1 - 5, 2014
2	Mr. Vivek Sharma	One of the Jury Member in the Jaipur International Film Festival Awards 2014	JIFF India	February 1 - 5 , 2014
3	Dr. Abhinav Dinesh	Invited as a panellist in panel discussion session in the International workshop held on the theme of – 'Emerging Trends in Information Technology'	LNMIIT, Jaipur	February 15, 2014
4	Dr. Anand Kumar Srivastava	ISCA Best Poster Presentation Award	Indian Science Congress Association, Kolkata	February 2014

5	Dr. Anand Kumar Srivastava	Bharat Shiksha Ratan Award	Global Society for Health and Educational Growth, New Delhi	February 2014
6	Dr. Abhinav Dinesh	Invited as an academician panellist in panel discussion session in the Seminar held on the theme of – 'Imperatives for growth in Rajasthan' at Jaipur	Jointly organised by FICCI, Delhi and Friedrich Ebert Stiftung (FES)	March 25, 2014
7	Dr Swagata Payra	Fellowship to work at Météo-France	French Meteorological Dept., France	One year (2013-2014)

STUDENTS' ACTIVITIES

SI. No.	Name of the Activity	Students' co coordinator, if any	Date/Duration
1	Cavorts: (Sport Fest) An event to develop Physical, Mental, Competitive and Team Spirit strength. All these significantly contribute in professional career.	Lakshya Arora, BE-VII Semester Vinita Chandwani, BE-VII Semester Vikas Verma, BE-V Semester Deepak Kashyap, BE-VII Semester Garvit Bothra, MBA-III Semester	October 23-24, 2013
2	Vibrations: (Cultural & Art Fest) An expression of vibrating enthusiasm and artistic talent of BIT Jaipur Campus students.	Gautam Saily , BE- ECE VIII Sem P. Pokarna, BE- ECE VIII Sem Navinika Wason, BE- ECE VIII Sem Akansha Gupta, BE- ECE VIII Sem Naman Mittal, BE- CSE VIII Sem Suyash Aditya, , BE- CSE VIII Sem Saurabh Sharma, BE- EEE VIII Sem	January 15-17, 2014
3	TechVibes: (Technical Fest) An event that stimulate minds to innovate and practically realize knowledge and ideas. The rich technical legacy of BIT gets new expressions in TechVibes.	Ankit Roy, BE-CSE VIII Sem Abhilasha Goyal, BE-CSE VIII Sem Vishal Jain, BE-ECE VIII Sem Akansha Grover, BE-ECE VIII Sem Mrinal Gupta, BE-ECE VIII Sem Aditya Mishra, BE-EEE VIII Sem Rajendra Kohli, BE-EEE VIII Sem	February 17-19, 2014

BOARD OF STUDIES(UG/PG)

- i) Dr. Vibhuti Pandya, Asst. Professor (Animation & Multimedia) was a member of BOS of following
 - B.Sc. Animation & Multimedia (UG Programme of BIT Mesra)
 - Master in Animation Design Programme (PG Programme of BIT Mesra)

- B.Sc. Animation & Graphics, Lovely Professional University, Panjab.
- ii) Mr. Vivek Sharma, Asst. Professor (Animation & Multimedia) was a member of BOS of B.Sc. Animation & Multimedia (UG Programme of BIT Mesra)

Academic Committee

Following are members of Academic Committee at Jaipur Centre

- 1. Dr. Abhinav Dinesh, Director
- 2. Dr. S.K. Sharma, Professor, applied Chemistry
- 3. Dr. Madhavi Sinha, Associate Professor, Computer Science Engineering
- 4. Dr. Roopali Sharma, Associate Professor, Management Studies

OTHER IMPORTANT INFORMATION

A. Invited talk/Lectures delivered by the faculty members at various organizations/ conferences/ STP/ Workshops:

 Invited talk by Dr. Anuj Kumar Jhankal in National Conference on Innovative Strategies for Science and Technology held at Department of Applied Science, Inderprastha Engineering College, Ghaziabad, U.P., India (November 30, 2013)

Title: Application of He's Homotopy Perturbation Method for Boundary Layer Incompressible Flow over a Flat Plate.

B. Doctoral Research at the Centre:

- a) Following faculty members have been awarded Ph.D during the period;
 - i. Dr. J.B. Sharma, Assistant Professor, ECE Department
 - ii. Dr. Vishwambhar Pathak, Assistant Professor (CSE)
- b) 28 Full Time/Part Time research Scholars at the centre have enrolled for the Ph.D Programme as on 30/06/13

C. Eminent persons visited our campus during the period:

Sl. No.	Name of the person	Purpose
1	Shri Kalicharan Saraf Hon'ble Minister – Education Government of Rajasthan	Chief Guest in the Annual function of the Institute
2	Shri A.K. Jain Managing Director Rajasthan Electronics & Instruments Ltd. (REIL)	Guest of honour in the Annual function of the Institute
3	Dr. S. Pal President IETE and distinguished Space Scientist	Chief guests in inauguration of Technical clubs & IETE/CSI student chapters
4	Mr. Gyan Prakash Director FICCI, Rajasthan Circle	Distinguished guest in inauguration of Technical clubs & IETE/CSI student chapters

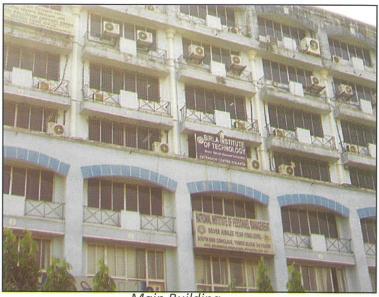
5	Mrs. Alpana Agarwal	Distinguished guest in inauguration of
	Senior General Manager (HR), BSNL	Technical clubs & IETE/CSI student chapters
	Prof. Lad Kumari Jain	Chief Guest in inauguration of Marathon on
	Chairperson, Rajasthan State Commission for	International Women's Day
	women	

Key Awards /citation received by students:

SI. No.	Name of the student	Particulars
1	Shreyata Sharma, BE- ECE VIII Semester	Participated as head of engineering student representatives in panel discussion session in the Seminar jointly organised by FICCI, Delhi and Friedrich Ebert Stiftung (FES) on the theme of – 'Imperatives for growth in Rajasthan' on March 25, 2014 at Jaipur.
2	Apurva Sharma , BE- ECE VIII Semester and Himalini Sharma, BE- CSE VII Semester	Selected as Google Student Ambassador
3	Mr. Lakshya Arora of BE VI Semester (ECE)	Participated in All India Inter University Atheletic Meet held at Patiala in December 2013
4	Hansjeet Duggal, Rishabh Banshkar, and Shuchi Sharma, B.Sc (Animation & multimedia)	An Animated Short Film "Dhannjanni" made by these students was awarded in Sikhnet Film Festival, New Jersey, USA

KOLKATA

BIT Kolkata Campus was established in 1995. This Centre offers academic programmes in Computer Science and Business Management, **Bioinformatics** and Electronics and communication. Mathematics & Computing. The Centre, located in the southern part of the City, is well connected with the rest of Kolkata. The extensive 30,000 sq feet premises of the Centre includes spacious computer laboratories with dedicated server rooms. several lecture rooms, a seminar hall, and a well-equipped library with books, journals and subscription to various e-journals. Faculty members and the student community have free access to online journals through ACM, IEEE, H.W. Wilson database and SIAM.



Main Building

The centre also have rich collection of E books of World Scientific, IET. The whole Centre is networked and Internet facilities are provided through a 3 Mbps and 10 Mbps dedicated line.

The computer laboratory has 230+ modern HP, Dell and Compaq machines, out of which 100+ machines are with the latest architectural features like Core-2 Duo processors, and TFT monitors. The network is well-protected through the latest Cyberoam 1000A firewall manager, and Quick Heal anti-virus software for each and every machine. The Centre will soon offer professional multimedia courses, for which the Dell PC's are specially configured. The latest software ranges from C, Turbo C++, Java, Visual Studio. Net, Microsoft Office suite, Oracle 10g, Photoshop 9, Adobe Writer, Macromedia Flash 8, Dreamweaver 8 and Rational Rose.

The campus has a placement cell to guide students about their career plan, to train them and to facilitate their placement in reputed organizations. The focus of the Placement Cell is to train and equip students through regular Competency Development Programmes (CDP) in such a way that they are gladly accepted by the best organizations & industry. The cell operates in close guidance with the Placement Cell of our main campus at Mesra, Ranchi.

Some of the recent placements for BBA/BCA batches were in reputed companies like : CTS, TCS, Satyam, Wipro Technologies, Reliance etc.

Students of MCA secured campus placements in reputed organizations such as Aricent, CTS,TCS, HP, Sapient, Tech Mahindra, I-Gate, Direct I,Oracle, Electra Design Automation, Birla Soft, IBM, Accenture, Tech Mahindra, Wipro, Head strong, Infosys, RS Software etc. All students are also encouraged to do in house projects in their fifth/sixth semester under the guidance of the faculty members.

The faculty at the Centre has a range of teaching, research experience in Digital Image Processing, Mobile Computing, Distributed and Parallel Computing, Agile Programming, Data Warehousing and Mining, Industrial Marketing, Corporate Finance, HR and Organizational Behaviour, Entrepreneurship, and Industrial Relations. Many of them are also actively involved in training and development programmes.

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Guest lectures are also delivered regularly by eminent faculties from IIT Kharagpur, Jadavpur University, Calcutta University, Burdwan University, B. E. College (Shibpur), University of Calcutta etc.

The BIT Kolkata Centre was a co-sponsor of the 1st, 2nd and 9th International Conference On Information Systems Security (ICISS2005 & ICISS 2006) held in December 2005, December 2006 and December 2013. The Centre was also one of the major technical sponsors, along with the IEEE and IEE, of an international conference organized by Computer Society of India, Kolkata Chapter in the year 2006, 2011 and 2013 respectively.

Programme offered: 1. MTech (CS) 2. ME (Wireless Communication) 3. MTech (Biotechnology) 4. MCA 5. MBA 6. BBA 7. BCA

SPONSORED PROJECTS

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 Dynamic GIS enabled Forward Cost Modelling (FCM) of Land Reclamation, Control and Monitoring of Acid Mine Drainage problems in the context of continuation and expansion of the Coal Mining in Assam — an (ICT) based Environmental Management Approach" Project Code — CIL/ R&D/4/07/2013	PI : Prof. Abhijit Kundu Co PI : Dr. R. T. Goswami	Coal India Limited/ CMPDI	Feb. 1, 2013	Rupees 95.68 lakh	2 years
2	"Development and follow up support for SHG level software" assigned to SHGPF by NABARD	PI : Prof. Abhijit Kundu Co PI : Dr. R. T. Goswami Consultant : Mr. Souvik Sarkar	Self Help Group Promotional Forum (SHGPF)	April 11, 2014	Rupees 72 thousand	6 months
3	"Management Issues: East Kolkata Wetland: Planning and Development Needs Assessment – A Pilot Study"	PI: Prof. Abhijit Kundu Co PI: Dr. R. T. Goswami Project Consultant: Mr. Asesh Sengupta	Sree Asim Burman (IAS, Retd.)	May 1, 2013	Rupees 6 lakh	12 months

PROJECTS COMPLETED

SI. No.	Project Title	PI / Co- PI/Collabo- rator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Date of com- pletion of the Project
1	"Management Issues:	PI : Prof. Abhijit	Sree	May 1,	Rupees 6	11 months
	East Kolkata Wetland:	Kundu Co PI : Dr.	Asim	2013	lakh	
	Planning and Develop-	R.T.Goswami Proj-	Burman			
	ment Needs Assess-	ect Consultant : Mr.	(IAS,			7
	ment – A Pilot Study"	Asesh Sengupta	Retd.)			-

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	S. Chaudhuri Ambar Dutta R T Goswami	"Tutorial on Essence - A Foundation for Software Development Games"	Indian Statistical Institute, Kolkata	Jointly organised by SEMAT India Chapter & Electronics and Communication Sciences Unit, Indian Statistical Institute, Kolkata	Indian Statistical Institute, Kolkata	June 4, 2014
2	Srabani Mukhopadhyaya (Attended in the role of invited lecturer)	National Workshop and Conference on Discrete Mathematics and its Applications		Department of Mathematics, Jadavpur University, Kolkata	Department of Mathematics, Jadavpur University, Kolkata	March 10- 14, 2014
3	Srabani Mukhopadhyaya (Attended as subject expert)	Refresher Course on Algorithms		Heritage Institute of Technology, Kolkata, WBUT	Heritage Institute of Technology, Kolkata, WBUT	July 22-26, 2013

4	Dr. Bharat Gupta	2nd National Conference on VLSI Signal Processing & Trends in Telecommuni- cation-VSATT 14	Nil	Department of Electronics and Telecommunication Engineering, C.V. Raman College of Engineering, Bhubaneswar.	C.V. Raman College of Engineering, Bhubaneswar.	May 09-10 , 2014
5	Dr. Bharat Gupta	INSPIRE	DST	Dept. of Physics, K M V, Jalandhar	K M V, Jalandhar	Dec. 3-7, 2013
6	T.K.Banerjee	21st West Bengal State Science Congress	DST, GoWB	DST, GoWB & Burdwan University	Golapbag, Burdwan	February 20-21, 2014
7	Rohit Kamal Chatterjee	SPIE's 2013 Remote Sensing and Security + Defence Europe International Symposia.	SPIE Europe	SPIE	Dresden, Germany.	September 23 – 26, 2013
8	Siba Mitra	Applications and Innovations in Mobile Computing (AIMoC) 2014	IEEE	School of Mobile Computing and Communication Jadavpur University	SMCC, Jadavpur University, Salt Lake, Kolkata	Feb. 27 – March 1, 2014
9	Siba Mitra	Invited Lecture on Energy Efficient Transmission Strategies for Sensor Networks with Energy Harvesting	WBUT	TEQIP, Finishing School, WBUT and IEEE Computer Chapter, Kolkata	WBUT Campus, Salt Lake, Kolkata	June 19, 2014
10	Sohini Ghosh	Shaping the Future of Business and Society		Symbiosis Institute of Management Studies (SIMS), Pune.	Symbiosis Institute of Management Studies (SIMS), Pune, India.	December 10-12, 2013

11	Sohini Ghosh	Attended Faculty Development Programme on "Team Player with a Positive Attitude".		Cognizant Technology Solutions,	August 20, 2013.
12	Sohini Ghosh	Attended a workshop on Multivariate Data Analysis".		Alipore Campus, Calcutta University, Kolkata, India	May 23 - 24, 2014

PUBLICATIONS

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. D. Das and S. Mukhopadhyaya, Distributed Painting by a Swarm of Robots with Unlimited Sensing Capabilities and Its Simulation. International Journal of Information Processing(IJIP), 2013, 7 (3), pp. 1-15.
- 2. Arijit Ukil, Debasish Jana and Ajanta De Sarkar, "A Security Framework in Cloud Computing Infrastructure", in International Journal of Network Security & Its Applications (IJNSA), September 2013, Vol.5, No.5, pp: 11-24.
- Sukalyan Goswami and Ajanta De Sarkar, "Service Oriented Load Balancing Framework in Computational Grid Environment" in International Journal of Computers & Technology (IJCT), July 2013, Volume 9, Number 3, pp:1091 – 1098. ISSN: 2277-3061
- 4. Chinmay Chakraborty, Bharat Gupta, Soumya K Ghosh, "A Review on Telemedicine-based WBAN framework for Patient Monitoring", International Journal of Telemedicine and e-Health, Mary Ann Libert inc., vol. 19, no. 8, August 2013, 619 626.
- 5. Ghosh, S. and Dutta, S., Mergers and Acquisitions: A Strategic Tool for Restructuring in the Indian Telecom Sector. In Procedia Economics and Finance 11, Elsevier, 2014 396 409.
- 6. On Hydromagnetic Channel Flow of an Oldroyd-B Fluid induced by Pulses of Longitudinal Impulses, Journal of Advances in Mathematics Vol. 9, No 2 pp.1902-1915, 2014.
- 7. On Hydromagnetic Flow of an Oldroyd-B Fluid near a Pulsating Plate in a Rotating System, International Journal of Mathematical and Computer Modelling, Vol.19(1) pp. 1124-1141 2014. ISSN: 2051-4271.
- 8. Alina Banerjee and Ambar Dutta, "Performance Comparison of Cosine, Haar, Walsh-Hadamard, Fourier and Wavelet Transform for shape based image retrieval using Fuzzy Similarity Measure", Elsevier Procedia Technology, Vol. 10, 623 627, 2013.
- 9. Banerjee T.K., Roy S. & Dey S. (2014). A GIS Solution for an Integrated Underground Coal Mine Management: A Conceptual Framework. Journal of Management Policies and Practises. 2(2). 110-125.

- 10. Banerjee T.K., Roy S. & Dey S. (2014). Location of Pit in Underground Coal Mining- A Geometrical Approach. International Journal of Management Studies and Research. 2(5). 99-108.
- 11. J. Mukhopadhyay, Rohit K. Chatterjee, "Post Mining Of Frequent Item Sets Using Mutual Information", Int. J. of Innovative Research and Development, Dec. 2013, Vol 2, Issue 12 (Special Issue),
- 12. R.T.Goswami, Debasis Goswami, "Identification of Corrupted Machines in the Network and its Defense Mechanism", International Journal of Computer Technology and Applications, Vol 5 (2), 786-793, March April 2014

PUBLISHED IN INTERNATIONAL PROCEEDINGS

- 1. Siba Mitra and Ajanta De Sarkar, "Energy Aware Fault Tolerant Framework in Wireless Sensor Network", in the Proceedings of Applications and Innovations in Mobile Computing (AIMoC 2014), pp: 144-148, Kolkata, February 2014.
- 2. Soumya Ray and Ajanta De Sarkar, "Resource Allocation Scheme in Cloud Infrastructure" in International Conference on Cloud & Ubiquitous Computing & Emerging technologies (CUBE 2013), Pune, November 2013, pp: 30-35.
- 3. Sukalyan Goswami and Ajanta De Sarkar, "A Comparative Study of Load Balancing Algorithms in Computational Grid Environment", in the Proceedings of Fifth International Conference on Computational Intelligence, Modelling and Simulation (CIMSim 2013), September 2013, pp: 99-104.
- 4. Vivek Kumar, Sravanth K. R, Bharat Gupta, "Performance Analysis of Swastika Slot UWB Antenna in Vicinity of Dispersive Human Layered Tissue Model", Presented in IEEE International conference IEEE TENSYMP-2014, 14-16 April, 2014.
- Vivek Kumar, Bharat Gupta, "Swastika Slot UWB Antenna for Body-worn Application in WBAN", Presented in IEEE International conference, International Symposium on Medical Information and Communication Technology, ISMICT-2014, 2-4 April, 2014.
- 6. Dutta, S., Financial Inclusion: Mainstreaming the Marginalized. In Proceedings of the International Conference on Education and Social Sciences, ICEASS, 2013, Singapore, September 2013
- 7. Dutta, S. and Munshi, D., Corporate Sustainability in Indian manufacturing Firms: Environmental initiatives for enhancing Business performance. In Proceedings of the 5th International Conference on Sustainability Management and the Power of Innovation, Gwalior, January 2014
- 8. Ranadeep Mukherjee and Ambar Dutta, "A Certified Email Protocol for Handling a Malicious TTP", Second International Conference of Computing and Systems, Burdwan, India, 2013
- Rohit K. Chatterjee, Avijit Kar, "A New Heterogeneity Scale to Improve Anisotropic Diffusion Based Speckle Filters in SAR Images", Image and Signal Processing for Remote Sensing XIX, edited by Lorenzo Bruzzone, Proc. of SPIE Vol. 8892, 88921C, on 12/10/2013 doi: 10.1117/12.2029427.
- 10. R.T.Goswami, Abhishek Bhattacharya, Surajit Goon "Spreading Behaviour of Viruses into Mobile Network: A Study", 3rd International Conference on Informatics, Electronics & Vision (ICIEV14), May 23 24 2014, Dhaka, Bangladesh

PUBLISHED IN NATIONAL JOURNALS

1. Ghosh, S. and Dutta, S., Impact of Mergers and Acquisitions in Indian IT Sector-A Comaparative Study, JIS Management Vista, 2013, Vol VII, No. I, 29-47, ISSN: 0974-0872

- 2. J. Mukhopadhyay, Rohit K. Chatterjee "Finding Frequent Item Sets on Post Mining data using Normalized Mutual Information", Gavesana: Journal of Management, Vol. 5 Issue. 1, June 2013.
- 3. Rohit K. Chatterjee, "Partial Differential Equation (PDE) Based Medical Image Processing", article published in CSI communications, Volume No. 37 Issue No. 10 January 2014.

PUBLISHED IN NATIONAL PROCEEDINGS

- Sen S, Garg H & Banerjee T.K. (2014). Petrol Pricing- A Comparative Study. In Proceedings of the "21st West Bengal State Science and Technology Congress". University of Burdwan. 20-21 February 2014.
- 2. Bharat Gupta, S. L. Maskara, "FIVE-GENERATIONS OF CELLULAR NETWORKING", 2nd National Conference on VLSI Signal Processing & Trends in Telecommunication- VSATT 14, Bhubaneswar, 09-10, May, 2014.
- 3. Bishakha Roy and Rohit K. Chatterjee, "Historical Handwritten Document Image Segmentation Using Morphology", pp 123, S. Sengupta et al. (eds.), Emerging Trends in Computing and Communication, Lecture Notes in Electrical Engineering (LNEE) 298, DOI: 10.1007/978-81-322-1817-3_14, Springer India 2014.

BOOK:

Edited Books

1. Call Admission Control in Mobile Cellular Networks (Studies in Computational Intelligence) Springer Berlin Heidelberg; 2013 ISBN: 978-3-642-30996-0.

Chapter(s) in Edited Book

- 1. Sarbani Roy, Ajanta De Sarkar and Nandini Mukherjee, "An Agent based E-Learning Framework for Grid Environment" Book Chapter has been published in book "E-Learning Paradigms and Applications", subtitle "Agent-based Approach", (ed. Prof. Mirjana Ivanovic) Springer, 2014 pp:121-144.
- 2. Dutta, S. and Munshi, D., Environmental Initiatives in Indian Manufacturing Firms for Enhancing Corporate Sustainability. In New Approach in Strategic and Operation Management (ed. Rawat, R. S., Manju, Dwivedi, R.), Bharti Publications, New Delhi, 2014, pp. 213-220.

AWARD / RECOGNITION BESTOWED ON FACULTIES (STATE / NATIONAL / INTERNATIONAL)

SI. No.	Name of the Faculty	Title of the Award/ Honours	Organisation	Year / Duration
1	Dr. R. T.Goswami	Vice Charman cum Chairman Elect	Computer Society of India, Kolkata Chapter	2013-14, One (1) year
2	Dr. R. T. Goswami	Chairman	Computer Society of India, Kolkata Chapter	2014-15, One (1) Year
3	Prof. Subho Chaudhuri & Dr. Ambar Dutta	Joint Editor and MC member	Computer Society of India, Kolkata Chapter	2013 – 2014 and 2014- 2015, two (2) year

MOUS / COLLABORATIONS

Sl. No.	Name of Organisation / University	Purpose / Area	Year / Duration
1	M/s EdGate Technologies Pvt Limited which is the Universi-	Establishment	2013-2014, one
	ty Program Partner of Texas Instruments ,India	of Lab	year

STUDENTS' ACTIVITIES

Sl. No.	Name of the Activity	Students' co ordinator, if any	Date/Duration
1	Paper Presentation in "21st West Bengal State Science Congress"	Sayantan Sen & Himani Garg	February 20-21, 2014
2.	Took the MBA Students for industrial visit at the Britannia Industries Ltd, Taratala, Kolkata.in May2014	Dr. Sandip Kumar Sengupta and Prof. Soumendra Bhattacharjee	May 2014
3	Chetan Debraj Memorial Inter College Cricket Tournament	Prof. Ranadeep Mukherjee and Prof. Khalid Ashraf	February 2014

LALPUR

The lalpur campus is located in the heart of Ranchi, the capital of Jharkhand. Spread across 7.2 Acres with adequate facilities and separate administrative & academic blocks.

• Excellently established library with books, journals & periodicals. Open access system for the faculty members, research scholars and the students. 8:30 AM to 8:00 PM on all working days. Electronic access through the internet to a large number of



Main Building

- online journals ieee (CS), ebsco (management)
- Two large computer labs with leased line connectivity and latest software.
- Approx 185 P 1V Computer systems, networked through LAN and Dell Server.
- Software includes: XP (OS), Linux (OS), Rational Rose besides MS Office, C, C++, Oracle, Java, Oracle 10g etc
- Language Lab-for communication development of students

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Anupma Sahai	Case Methodology Workshop & Facilitating Ethics Education in Business School, at IIM Calcutta		IIM Calcutta	IIM Calcutta	Feb. 13– 18th, 2014
2	Dr. Pranab Kumar	Training Course in Research Methodology & Computer Applications in Social Science, , A N Sinha Institute of Social Sciences, Patna		A N Sinha Institute of Social Sciences, Patna	Patna	Nov.19- 28, 2013
3	Dr. Pranab Kumar	IX International Conference on Finance and Business Management, University Dept. of Commerce & Business Management, Ranchi University, Ranchi;		Ranchi University, Ranchi;	Ranchi	July 11-12, 2014.

						
4	Dr. Pranab Kumar	International Conference on Exploring New Paradigms in Business, Central University of Jharkhand, Ranchi, 2014.		Central University of Jharkhand, Ranchi,	Central University of Jharkhand, Ranchi,	Feb. 6- 7, 2014
5	Dr. Pranab Kumar	Symbiosis Institute of Management Studies, Pune, Annual Research Conference		Symbiosis Institute of Management Studies, Pune	Symbiosis Institute of Management Studies, Pune	Dec.12- 13, 2013.
6	Dr. Pranab Kumar	National Seminar on Effectiveness, Ethics, and Sustainability-The Measures of Organisational Excellence; held at Indian School of Mines, Dhanbad.	,	Indian School of Mines, Dhanbad.	Indian School of Mines, Dhanbad.	Dec.6-7, 2013.
7	Mr. N. P. Tiwary	73rd Orientation Programme, UGC- Academic Staff College RUR		UGC- Academic Staff College RUR	UGC- Academic Staff College RUR	June 2013 (4 weeks)
8	Dr. Abhaya Ranjan Srivastava	International Conference on "Éxploring New Paradigms in Business at CUJ Ranchi		CUJ Ranchi	CUJ Ranchi	Feb 6-7, 2014
9	Dr. Abhaya Ranjan Srivastava	International Conference on Finance & Business Management 2014 at RU Ranchi		RU Ranchi	RU Ranchi	July 11- 12, 2014
10	Dr. Abhaya Ranjan Srivastava	Management Teachers Program on Managing Strategic Change and Transformation" during February 24-March 1, 2014				Feb.24- March 1, 2014
11	Dr. Abhaya Ranjan Srivastava	National Conference on "Arresting Slowdown in Economy-Strategies for Turnaround				Feb. 22- 23, 2014
12	Dr. Abhaya Ranjan Srivastava	National Seminar on "Effectiveness, Ethics and Sustainability - The Measures of Organizational Excellence				Dec. 6-7, 2013
13	Dr. Abhaya Ranjan Srivastava	Management Teachers Program on Inorganic Growth Strategy				October 22-26, 2013

14	Dr. Pradeep Munda	A workshop on NSS working and its Implemenattion			June 18 2014
15	Dr. Pradeep Munda	One Month Orientation Programme at UGC Academic Staff College Ranchi University Ranchi	Ranchi University Ranchi	Ranchi University Ranchi	May 18 - 21 June 2104

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. P. S. Bishnu and V. Bhattacherjee ,Volume Based Clustering for Arbitrary Shaped Clusters International Journal of Computational Vision and Robotics. Vol.3, No. 3, 2013;
- V. Bhattacherjee , Dr. S. Chakraborty and Madhumita S. Neogi ,Factors Influencing Software Development Models: A Statistical Outlook. International Journal of Software Engineering and Its Application (IJSEIA), ISSN: 1738-9984 (Accepted for November 2013 Issue)
- 3. Sanjay Kumar, Jaya Pal and V. Bhattacherjee Software effort prediction A Fuzzy logic Approach Global journal of Computer Science and Technology, Vol. 13, Issue 10, pp. 9-14 September 2013
- 4. V. Singh and V. Bhattacherjee; A new Complete Class Complexity Metric International Journal of Soft Computing and Software Engineering Volume 3 Number 9 September 2013 ISSN: 2251-7545
- 5. V. Singh and V. Bhattacherjee ,Identifying Coupling Metrics And Impact on Software Quality International Journal of Engineering and Technology "Volume 5 Number 4 August-September 2013. PP 3433 3438. (ISSN 0975-4024)
- 6. Manjhi, R., Jaffar, S.A. Priyam, A., et al., 2013, Face Recognition using Eigenface International Journal of Emerging Technology and Advanced Engineering, 3, 625-627.
- 7. Manjhi, R., Jaffar, S.A. Priyam, A., et al., 2013Biometrics Based Finger Print Security, International Journal of Research in Information Technology (IJRIT), 1, 91-98.
- 8. Manjhi, R., Jaffar, S.A. Priyam, A., et al., 2014, Enhancing Security and Privacy Issue in Airport by Biometric based Iris Recognition System using Matlab ACEEE, International Journal. on Recent Trends in Engineering and Technology, 10, 154-158.
- 9. Tigga, O., Priyam, A., 2014, An Application of Predictive Data Mining Technique for Classifying EcoGene Data, IJERT (International Journal of Engineering Research and Technology, 3, 371-375
- 10. Dash, S.P., Agarwal, V., Sinha. A., Inclusion of Human Capital in the Calculation of Weighted Average Cost of Capital, European Scientific Journal., 2013,9, 405-421.
- 11. Dash, S.P., Agarwal, V., Sinha. A., Impact of Human Capital Incorporation on Economic Value Added of Large Organizations A Conceptual Decision Making Approach., European Journal of Business Management, 2013,5,98-104.

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PUBLISHED IN INTERNATIONAL PROCEEDINGS

1. A.N. Jha; An Overview of it Power Sector-Focus on Distribution and Communication systems; International Conference on "Éxploring New Paradigms in Business" at CUJ Ranchi;

- 2. P. S. Bishnu and V. Bhattacherjee ,A New Modified K-Modes Clustering Algorithm 5th International conference on Pattern Recognition and Machine Intelligence, December 10-14 2013, ISI Kolkata.
- 3. Jaya pal and V. Bhattacherjee, Entropy-based fuzzy clustering: A Comparison Second International Conference on Computing and Systems-2013(ICCS-2013), Burdwan University, West Bengal, September 21-22, 2013

PUBLISHED IN NATIONAL JOURNALS

- 1. Traymbak Shruti, Kumar Pranab and Jha A N, Social Support: Moderator for Roles Stressors, Synergy: I.T.S. Journal of I.T. and Management, Vol.11, No.2, July-Dec., 2013; pp 36-46;
- 2. Srivastava, A. R. & Singh, S., Importance of Branding in Organised Retailing in Jharkhand., Bizcraft, 2013, Vol. 7, No.1,15-23 (ISBN-2231-0231)
- 3. Srivastava, A. R. & Singh, S., Role of Promotions in success of organised retail An Empirical study., PRASTUTI, 2013, Vol. 2, No.1, 84-91(ISBN-2320-2262)

PUBLISHED IN NATIONAL PROCEEDINGS

- Srivastava, A. R. & Singh, S., Significance of Services for Organised Retail- A Study of Jharkhand. In Proceedings of National Conference on Arresting Slowdown in Economy-Strategies for Turnaround, Department of Management, GLA University, Mathura, 2014
- 2. Srivastava, A. R. & Singh, S., Significance of Services for Organised Retail- A Study of Jharkhand. In Proceedings of National Seminar on "Effectiveness, Ethics and Sustainability The Measures of Organizational Excellence, Department of Management Studies, ISM Dhanbad, 2013

BOOKS / EDITED BOOKS

Srivastava, A. R. & Singh, S., Preference factors of Organised Retail-An Empirical study of Young Indian Adults. In The Next Leap: Exploring New Paradigms in Business (ed. Ghoshal,T.),Excel India Publishers, New Delhi,2014,pp 404-417.

Srivastava, A. R. & Singh, S., An Empirical Study of Preference factors of Organised Retail. New Approach in Human Resource Management and Marketing Management published by (ed. Prakash, V. & Sah, R.K.), Bharti Publications, New Delhi, 2014, pp 420-429.

CHAPTER(S) IN EDITED BOOK

Shukla Anupama and Kumar Pranab, Dimensions of Quality of Work-Life for Professional Females: An Analytical Study, The New Leap Exploring New Paradigms in Business; Excel India Publisheres, New Delhi, 2014; pp 147-157;

≡ ANNUAL REPORT ≡

NOIDA

Having felt the urgent need of a centre for diversified and advanced educational research, consultancy and training of human resources in IT and Management technology in the Northern Zone, BIT Mesra in the year 1998, has established one of its extension centres at NOIDA.

Since then the Institute has set landmark in four major areas of academic excellence - world-class infrastructure, highly accomplished faculty, a motivated student body and distinction in research. Through its commitment and professionalism, BIT Noida is nurturing management



Main Building

professionals who are more than ready to manage and lead in today's dynamic, volatile and challenging business environment. The center is well equipped with e-journals (Emerald, IEEE) and research software like MATLAB and dedicated internet facility for the research scholars.

The center is well equipped with e-journals (Emerald, IEEE, Science Direct), and research software like MATLAB and dedicated internet facility for the research scholars.

ANIMATION & MULTIMEDIA DEPARTMENT

BIT, Mesra launched the 3 year B.Sc. degree programme in Animation and Multimedia in the year 2005 in the Noida Campus which was upgraded to 4 years B.Sc (Hons.) from the year 2011. In the year 2009 the PG programm in Animation & Multimedia was launched.

BIT Noida Campus amongts other facilities, also has a studio for film shooting with proper lighting and chroma facilities. This studio is often used for professional advertisements or short film shoots.

COMPUTER SCIENCE DEPARTMENT

The Computer Science Department at BIT Noida campus endeavours to be an important regional, national, and international resource center for the development of computing and IT systems and applications. 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.

Department of Computer Science and Engineering launched 2 yrs M.Tech(CS) full time programme w.e.f. July 2013 with the curriculum specifically designed to reflect the depth and breadth of latest technologies, research and innovations in computer science. Department also offers 3 Yrs Full Time MCA Programme and 3 Years BCA .programme. 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 ComputerScience.

MANAGEMENT DEPARTMENT

Management Department offers 2yrs MBA Full time, 3yrs MBA Part time, 3 yrs BBA and 3 yrs BBE Programme . The curricula of all the credit based flexible programmes are carefully reviewed, updated, upgraded, diversified and in pace with the needs of the industrial scenario of this country, with the help of BIT main campus. The Department also offers Doctoral programme in management on both full time and part time basis with mandatory residential requirement of 6 months in campus. The Department also conducts research oriented activities like workshops and guest lectures for enhancing research acumen of the research scholars.

The pedagogy used (team-based projects, case-studies, field studies, formal and informal in-class presentations) are designed to cater to many of the specific demands coming from the private sector arenas, including problem-solving, creativity, communication, motivation and negotiation, the ability to make decisions and the capacity to learn from personal experience.

ONGOING PROJECTS

Sl. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Green Buildings in India: A study of Issues, Challenges & Prospects for Sustainable Development	Dr. Meenakshi Sharma	UGC	Jan. 4, 2013	6.54	2 Years
2	Smart use of Web Analytics and Data Mining technique for improving online Information Retrieval.	Dr Shruti Kohli	UGC	Jan. 4, 2013	10.40	3 years

SEMINAR / CONFERENCES / SHORT – TERM COURSES CONDUCTED BY THE DEPARTMENT/CAMPUS

Sl. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses
1	Research Issues and Simulation Tools in Wireless Technologies	Ms. Charu Wahi Co-Coordiantors- Mr. Anil K. Singh Mrs. Seema Sharma Mrs. Siba Mitra	CSIR	Sept. 23 - 27, 2013
2	Research Methodology workshop for BIT Research Scholars	(Prof.) Dr. Asha Prasad (Ph.D coordinator)	BIT Noida	Dec 6 -13, 2013

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Amresh Kumar,	Workshop on usage of Microsoft Excel in Data Processing and Analysis	Self	BVIMR- Delhi	BVIMR	June 28-30, 2014
2	Anil Kumar, Aruna Malik	National Workshop on Computational Intelligence	School of Computer Engineering, KIIT University, Bhubneswer, ORISSA	School of Computer Engineering, KIIT University, Bhubneswer, ORISSA	School of Computer Engineering, KIIT University, Bhubneswer, ORISSA	June 24-28, 2014
3	Prof. Asha Prasad	Workshop on Case Method of Teaching and Case Writing	BIT Noida	Academy of HRD	Ahmedabad	June 23-24, 2014
4	Dr. Vandna Sharma, Dr. Monika Bisht	Workshop on "Tools and Techniques for Data Analysis in Management Research"	Self	Department of Humanities and Social Sciences, JUIT, H.P.	Department of Humanities and Social Sciences, JUIT, H.P.	June 16 - 21, 2014
5	Pankaj Gupta	FDP on Data Mining & Big Data	Delhi Institute of Advanced Studies	Delhi Institute of Advanced Studies	Delhi	June 13 -14, 2014
6	Priti Sharma	Short-term Course On Recent Advance in Signal Processing & Communication	MNIT Jaipur	MNIT Jaipur	MNIT Jaipur	May 19-23, 2014

7	Aastha Kochar	MSME Conclave Cum Conference on " Sustainable Supply Chain Capabilities of MSMEs: Influences, Practices, Training needs and Employment Opportunities.	Self	Doon University, Dehradun	Doon University, Dehradun	May 10, 2014
8	Prof. Asha Prasad	8th National Research Conference	BIT Noida	AIMA,	AIMA, New Delhi	March, 19- 20, 2014
9	Charu Wahi	Wireless Network Simulation using NS-2	BIT Noida	Thapar University	Patiala	March 13- 15, 2014
10	Anil Kumar	International Conference On Recent Development in Computational and Information Technology (ICRDCIT), 2014	SRM University NCR Campus DRDO Delhi	SRM University NCR Campus Ghaziabad	SRM University NCR Campus Ghaziabad	March 7-8, 2014
11	Dr.Vandna Sharma	National Conference for Sustaianable Development & Inclusive Growth: Myths & Reality	AICTE	AICTE	Inderprastha Engineering College, GZB	Feb. 14-15 2014
12	Amresh Kumar, Pallab Sikdar, Chetna Kudeshia, Karnica Tanwar, Pooja Jha	Workshop on usage of Microsoft Excel in Data Processing and Analysis	Self	DSPSR-Delhi	DSPSR	Feb. 8-9, 2014

13	Anil Kumar	Issues and Challenges in Intelligent Computing Techniques (ICICT), 2014 International Conference	IEEE Delhi	Krishna Institute of Engineering & Technology , Ghaziabad	Krishna Institute of Engineering & Technology , Ghaziabad	Feb.7-8, 2014
14	Dr. Abhishek Singh	AICTE sponsored FDP on SAPM	Self	SMMDU	SMMDU	Jan 26, 2014
15	B.B. Sagar	Short-Term Course On Reliability & Availability Quantification	IIT- Gandhi Nagar	IIT- Gandhi Nagar	IIT- Gandhi Nagar	Jan. 20 -23, 2014
16	Chetna Kudeshia	International conference on social Media (ICSM)2014	Self	IIM, Raipur	IIM, Raipur	Jan. 10-11, 2014
17	Amresh Kumar, Pallab Sikdar, Md. Moddassir Alam	Capacity Building Programme For Social Sciences on Research Methodology	ICSSR	BIT-Patna	BIT-Patna	Jan. 8-18, 2014
18	Dr. Monika Bisht	FDP on Analytical Techniques For Research	Self	USMS, GGSIP University, New Delhi	USMS, GGSIP University New Delhi	Dec. 30, 2013 –Jan. 05, 2014
19	Smitha Jha	International Journal of Advances in Engineering and Technology	Indian Society for Technical Education (ISTE).	ACEEE, AMAE and ACEE	Gurgaon	Dec. 13-14 2013
20	Anil Kumar, Shruti Kohli	International Workshop On "Machine Learning and Text Analytics"	SAU New Delhi Dell Hexaware technology	South Asian University New Delhi	South Asian University New Delhi	Dec.15-23, 2013
21	Anil Kumar	National Workshop On "Challenges in BIG DATA research"	Department Of Computer Engineering, MNIT Jaipur	Department Of Computer Engineering, MNIT Jaipur	Department Of Computer Engineering, MNIT Jaipur	Nov.9 -13, 2013

22	Dr. Arun Mittal	International Conference on Emerging trends in Fashion Footwear Business management		FDDI, Rohtak	FDDI, Rohtak	Sept. 28, 2013
23	Smitha Jha	Faculty Development Programme on Research Issues and Simulation tools in Wireless technologies	CSIR	BIT NOIDA	BIT NOIDA	Sept. 23-27, 2013
24	B.B. Sagar	Seminar On Cyber Security & Threats	Ajay Kumar Garg Engineering College, Ghaziabad	Ajay Kumar Garg Engineering College, Ghaziabad	Ajay Kumar Garg Engineering College, Ghaziabad	Sept. 16, 2013.
25	Pallab Sikdar Md. Moddassir Alam, Chetna Kudeshia, Karnica Tanwar, Pooja Jha	FDP on Research Methodology Tools for Management and IT	Self	Rukmini Devi Institute of Advanced Studies (RD	RDIAS, Delhi	July 5-7, 2013

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. Sikdar P. & Makkad M., Shift from Basel II to Basel III A Reporting Perspective on the Indian Banking Sector, International Journal of Computational Engineering and Management (IJCEM), Vol. 17 Issue 1, 2014, (ISSN: 2230-7893).
- 2. Anil Kumar, Ashu Sharma, "Intelligent Content Based Image Retrieval System", International Journal of Computer Science Trends and Technology (IJCST) Volume 2 Issue 2, Mar-Apr 2014.
- 3. Pankaj Gupta, etl.."Control Mechanisms for Robust Data Security" Published In: International Journal of Computer & organization Trends (IJCOT), V6(1):43-47 March 2014. ISSN:2249-2593. IJCOT (http://www.ijcotjournal.orgl).
- 4. Anil Kumar, "An empirical study of selection of the appropriate color space for skin detection: A case of face detection in color images", IEEE Explore Digital Library, pp.725,730, 7th-8th Feb. 2014.
- 5. Charu Wahi, Sanjay Kumar Sonbhadra, "Survey of Security Issues in Routing of Mobile Ad Hoc Networks", International Journal of Computer Networking, Wireless and Mobile Communications (IJCNWMC), Vol.4, ISSN (P) 2250-1568, Feb. 2014.

- 6. Kohli, Shruti, and Ankit Gupta. "Information Retrieval: A Fuzzy Perspective." International Journal of Applied Research on Information Technology and Computing 5.1 (2014): 14-24DOI: 10.5958/j.0975-8089.5.1.002 ISSN:0975-8070(Print)/0975-8089(Online).
- 7. Jha, Smitha, Mallick, Dr. D.K, and Suri, Dr.R.K, A New Scheduling algorithm based on Priority for Grid Heterogeneous Sysem, In Proceedings of International Journal of Advances in Engineering and Technology, Gurgaon, Dec. 2013, published in Elsevier journal.
- 8. Kohli, Shruti, and Ankit Gupta. "Analysis of Regression Techniques for Improved Information Extraction from Real-Time Industrial Dataset." International Journal Of Data Mining And Emerging Technologies 3, no. 2 (2013): 51-57.DOI: 10.5958/j.2249-3220.3.2.007 ISSN: 2249-3212(Print)/2249-3220(Online)
- 9. Makkad M. & Sikdar P. Implementation of Basel III Guidelines A Study of Select Domestic & Foreign Commercial Banks in India. Readings Book of 15th International Conference of the Global Business & Technology Association (GBATA), USA (July, 2013) (ISBN: 1-932917-09-8).

PUBLISHED IN INTERNATIONAL PROCEEDINGS

- 1. Sikdar P., Kumar A. & Makkad M. (2014) Ethical Orientation in Management Education Evidence from the Indian National Capital Region. Proceedings of International Conference on Research and Sustainable Business (ICRSB) 2014, Department of Management Studies, Indian Institute of Technology (IIT), Roorkee (India) (ISBN: 978-93-83842-19-3) (March, 2014)
- 2. Shruti Kohli and Ankit Gupta. Article: Critical Regression Analysis of Real Time Industrial Web Data Set Using Data Mining Tool. IJCA Proceedings on 4th International IT Summit Confluence 2013 The Next Generation Information Technology Summit Confluence 2013(3):1-7, January 2014. Published by Foundation of Computer Science, New York, USA.
- Gupta, Ankit, Shruti Kohli, and S. Jha. "Performance of EDF-BF algorithm under QoS constraint in grid heterogeneous environment." In Information Systems and Computer Networks (ISCON), 2013 International Conference on, pp. 170-172. IEEE, 2013. DOI: 10.1109/ICISCON.2013.6524196,INSPEC: 13565215

PUBLISHED IN NATIONAL JOURNALS

- 1. Sikdar P. & Kumar A., Retail Service Quality Assessment A Scale Validation Study in Indian Perspective, AIMA Journal of Management and Research (AJMR), Vol. 8, Issue 1/4, 2014.
- 2. Malhotra, B. and Sharma, V. An Exploratory study on Successful Management of International Mergers and Acquisitions in IT Industry, Indian Streams Research Journal, Vol. 3, Issue. 4, 2013, ISSN:-2230-7850.
- 3. Mittal, A., Advertainment and Its Impact on Consumer Behaviour in Present Business Scenario: An Empirical Study, ABS Management Research- Articles and Application, Vol. 1, Issue 1, 2013, 22-28.
- 4. Amresh. Corporate social responsibility in organized retail: An insight into the initiatives of future group, International Journal of Retailing & Rural Business Perspectives (IJRRBP) Volume 2, Number 3, July September' 2013 (ISSN (P):2279-0934, (O):2279-0942.

PUBLISHED IN NATIONAL PROCEEDINGS

1. Amresh. et al FDI in Indian retail sector: An study of Issues, Challenges & impact of latest reform, Indian journal of Commerce volume 66, issue 3,2013 (ISSN: 0019-512X).

BOOK:

Single Authored

Dutta Suparna, Business Communication, PHI. Learning, New Delhi, ISBN No : 978-81-203-4818-9 Edited Books

Chapter(s) in Edited Book

Mehta Niket: Globalization and the world of new digital information communication, ISBN 978-93-83842-64-3, Excel India Publishers, New Delhi, Proceedings of seminar "Media and Globalization" took place at K.C. College, Mumbai

DEPARTMENTAL STUDENTS' ACTIVITIES

SI. No.	Name of the Activity	Students' co ordinator, if any	Date/Duration
1	Personality Development Session		September 19, 2013
2	Lecture on Career options -Mr. Deepak Jindal, IBM		Jan. 7, 2014
3	Industrial Visit of MBA IV –Orient Electricals, Fbd		Jan. 25, 2014
4	A Team Building Exercise- Dr. N.K. Kakkar, DU		Feb. 25 , 2014
5	Guest Lecture on Liberalisation & Career Counseling-Dr. P.L. Mehta, DU		March 8, 2014
6	Industrial Visit to Mother Dairy		March 25 , 2014
7	Seminar on "How to do well in Personal Interview"		April 10 , 2014
8	Orientation Program for Ph.D scholars		May 20, 2014

BOARD OF STUDIES(UG/PG)

Sl.No.	Name	Designation
1	Prof. Munish Makkad	Prof Incharge, BIT Noida (Chairman)
2	Sh. Sanjeev Dua	Addnl Registrar, BIT Noida (Member)
3	Dr. Suparna Dutta	Associate Professor, BIT ECN(Member Coordinator)
4	Mr. R.K. Srivastav	ED, NCDPD New Delhi (Member External)
5	Prof. Sahibani Azam	Jamia Milia Islamia, (Member External)
6	Prof. Hemant Joshi	IMJC, New Delhi (Member External)
7	Mr. Anurag Rana	(Member External)
8	Dr. Vibhuti Pandya	Assistant Professor, BITEC Jaipur (Member)
9	Mr. Niket Mehta	Assistant Professor, BIT Noida, (Member)
10	Mr. Lalit Mohan Bhatt	BIT ECN, (Member)
11	Mr. Kiran A. Shetti	BIT ECN, (Member)
12	Mr. Partha Acharya	BIT ECN, (Member)

ANNUAL REPORT	2013 - 14	
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13	Mr. Arup Kerketta	BIT ECN, (Member)
14	Mr. Obed Longvah	BIT ECN, (Member)
15	Mr. Rahul Dora	BIT ECN, (Member)
16	Mr. Manoj Kumar	BIT ECN, (Member)
17	Mr. Das Mohan Singh	BIT ECN, (Member)

DEPARTMENTAL ACADEMIC COMMITTEE

ACADEMIC COMMITTEE (ANIMATION & MULTIMEDIA)

Sl.No.	Name	Designation
1	Prof. Munish Makkad	Prof Incharge, BIT Noida (Chairman)
2	Dr. Suparna Dutta	Associate Professor, BIT ECN(Member Coordinator)
3	Mr. R.K. Srivastav	ED, NCDPD New Delhi (Member External)
4	Prof. Sahibani Azam	Jamia Milia Islamia, (Member External)
5	Prof. Hemant Joshi	IMJC, New Delhi (Member External)
6	Dr. Vibhuti Pandya	Assistant Professor, BITEC Jaipur (Member)
7	Mr. Niket Mehta	Assistant Professor, BIT Noida, (Member)
8	Mr. Lalit Mohan Bhatt	BIT ECN, (Member)

DEPARTMENTAL ACADEMIC COMMITTEE (MANAGEMENT)

1.	Dr. Munish Makkad, Professor & Director	- Ex Officio Chairman
2.	Dr. Asha Prasad, Professor	- Member (Management)
3.	Dr. Vandana Sharma, Associate Professor	- Member (Management)
4.	Dr. Ila Sahay, Associate Professor	- Member (Comp. Sc.)
5.	Dr. Shruti Kohli, Assistant Professor	- Member (Comp. Sc.)
6.	Dr. Nawal Kishor, Professor, SOMS, IGNOU	- External Member (Management)
7.	Dr. Rajiv Nag, Chairman, CyberQ Consulting	- External Member (Computer Sc.)

PATNA



Main Building

Birla Institute of Technology, Mesra, Ranchi was founded by the industrialist and philanthropist Late Shri B.M. Birla in 1955. A sprawling Patna Extension Campus came into existence through Public-Private Partnership mode in the year 2006 along with the initiative of Government of Bihar. A Memorandum of Understanding was signed between the Institute and the Govt. of Bihar in December 2005. Subsequently, the Govt. of Bihar allotted 25 acres of land beside the Jai Prakash Narayan International Airport at Patna and released the requisite fund for establishing the centre. The Foundation Stone of the Centre was laid on 24 December 2005 and construction started in April 2006. BIT, Patna, by far, is one of the best equipped, technically sound professional colleges in the state of Bihar. It has a Wi-Fi enabled campus. The infrastructure includes 3.25 lacs sq. feet of academic space.

COURSES OFFERED

The Patna Campus currently offers 4 Years B.E. programs in the following disciplines:

Computer Science & Engineering

Electronics & Communications Engineering

Electrical & Electronics Engineering

Production Engineering

In addition to above BIT Patna Campus offers following courses:

Bachelor of Architecture

Civil Engineering
Information Technology
Mechanical Engineering

ANNUAL REPORT =

Integrated M.Sc. in Physics and Mathematics Ph.D. in Engineering, Science & Management

FACILITIES

State-of-the-art Auditorium,

Seminar Hall,

Dispensary,

Ultramodern Laboratories,

Central Library,

Play Ground,

Well equipped Workshops,

Wi-Fi Campus,

Cafeteria,

Staff- Canteen

Language Lab,

Gymnasium,

Guest-House,

Staff Quarters,

Transport facility for students & staffs

CENTRAL LIBRARY

The Learning Resource Centre is the nerve centre of BIT Patna. The Institute takes pride in its state-of-the- art library infrastructure and resources. The full air-conditioned Lab., well furnished and spacious reading room forms part of it. The library is entirely devoted to the academic needs of the students and faculty.

It offers a wide range of books and over national & international journals, periodicals on the subject areas & other research materials. Important local, regional and national dailies in English and Hindi are also an important part of Newspaper section of the library.

Library is well equipped with LIBSYS software and having 33,881 books (all bar-coded). The facility for video conferencing is established and E- library is being developed.

ONLINE RESOURCES

EBSCO Art & Architecture (complete) is accessible in E-library. IEEE, ASCE and ASME online journals are under subscription process.

Print Journals

39

Magazines

18

COMPUTER LABORATORY

The heart of the Institute is the large Computer Centre with 200 P4 Computers with a DELL Server connected to LAN to support multi user software. There is a provision for a second centralized Computer Lab with another 200 Computers. At present, the students are using System Software's like C++, MSDN, ORACLE, Rational Rose & Application Software like Auto CAD 2009, Auto CAD Raster Design, Auto CAD Electrical, Auto CAD Inventor, MATLAB, Multisim, Comsim, Xiling, Active HDL etc. Computers are on LAN and managed with cyberoam security for Internet.

TRAINING & PLACEMENT CELL

The Training & Placement office at Patna is well equipped and designed to smoothly handle and support the Campus placement procedure at every stage. Arrangements for Interviews, Pre-placement talks, Group discussions and Tests are handled by the T&P Cell staff and Student placement coordinators. We are equipped with the following facilities to aid the process:

Four well furnished centrally air-conditioned cabins for Interviews and one room for Group discussions.

The Training and Placement Cell round the year organizes Training & Career Development Programs for the students of BIT Patna who are aspiring to enter the corporate world and introduces them to the prospective employers according to their aspirations and background.

SPONSORED PROJECTS

ONGOING PROJECTS

SI. No.	Project Title	PI / Co- PI/ Collaborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Duration of the Project
1	Scale-up of the process to fabricate acid catalysed polyfurfuryl alcohol based biopolymers sheets	P.I Dr. Rajnish Kr. Co-P.I. – Dr. Rakesh Kr.	UGC	March 8, 2013	6.00	2 Years
2	Flow of fluids over a stretching surface: theoretical and experimental considerations	P.I Dr. Rajnish Kr. Co-P.I. – Dr. Rakesh Kr.	UGC	March 8, 2013	6.00	2 Years
3	A Study on Imperatives for Quality and Effective Teaching in Indian- B-Schools	P.I Dr. S.L. Gupta Co- P.I Dr. Vijay Agrawal	UGC	Nov. 23, 2012	5.14	2 Years
4	EDUSAT	Prof. M.A. Hassan	Bihar Govt.	2011	10.00	03 years
5	Six Weeks Entrepreneurship Development Programme on Food Processing Technology	Dr. S.I. Gupta Dr. Vijay Agrawal (Coordinators)	NMFP Dept. of Industries Govt. of Bihar	Sept. 12, 2013	2.00	1 Year

PROJECTS COMPLETED

Sl. No.	Project Title	PI / Co- PI/Col- laborator, if any	Funding Agency	Date of Sanction	Sanctioned Amount (Rs. in Lacs)	Date of com- pletion of the Project
1	Preparation and Charecteriza- tion of doped Lithium Titanate pebbles for low activation ener.	Dr. S.K. Sinha	BRFST (Dept. of Atomic Energy) Govt. of India	Aug. 2010	30.00	Sept. 2013

2	"Capacity Build- ing Programme on Research Methodology"	Dr. S.L. Gupta (PI) Dr. Vijay Agrawal (Co-PI)	ICSSR	Oct.9, 2013	4.95	Jan. 19, 2014
3	"Entrepreneur- ship devel- opment pro- gramme"	Dr. S.L. Gupta (PI) Prof. K.C. Bajpai (Coordinator) Dr. Vijay Agrawal (Coordinator)	DST	Sept. 12, 2013	2.00	Jan. 28, 2014

SEMINAR / CONFERENCES / SHORT – TERM COURSES CONDUCTED BY THE DEPARTMENTS

Sl. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Department	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses
1	BIT - ADMERIT National Student conclave -2014 "Challenges of New Millennium" (NSC-2014)	BIT Patna	Dr. Nirmala Soren (Organizing Secretary of EEE Deptt.)	BIT Patna & ADMERIT COLLEGE Patna Bihar	April 5-6, 2014
2	Workshop on Soft skill GD+PI		Dr.Vijay Agarwal Mr. Raj Kumar	Self-Finance	July 15-18,2013
3	FDP on RM and SPSS		Dr. S.L. Gupta	Self-Finance	July 20-21,2013
4	Symposium on Bihar Vision 2020 Industry Academia Interface		Dr. Vijay Agrawal, Mr. Shridhar Kumar	MSM, ARIHANT NATURE CORP AND NSIT	Aug. 21-22, 2013
5	Workshop on Importance of E-Business in TechnologialPerpective		Dr. Vijay Agrawal	BIT-Patna	Sept. 21-28, 2013
6	HR-Conclave		Dr. Vijay Agrawal, Mr. Ifthkhar Aahmad	NHRD-Patna Chapter	Oct.19-20, 2013
7	Workshop on "Lean Management for Enhancing Productivity"		Dr. Vijay Agrawal	BSPC	Feb.13, 2014
8	Workshop on Business Simulation "Sim-Venture"		Dr. Vijay Agrawal	DST	Feb. 8-9, 2014
9	National Students Conclave-2014		Dr. Vijay Agrawal	Self-Finance	April 5-6, 2014

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED:

SI. No.	Name of the Faculty & Dept.	Title of the Conference/Seminar	Funding Agency	Organizers	Venue	Date
1	Mr. Shahiruddin (ECE)	Concept in Wireless Communication	Self	BIT Mesra	BIT Mesra	Dec.2-7, 2013
2	Ms. Poonam Priyadarshini (ECE)	Signal and System	National Mission on Education	BIT Mesra	BIT Mesra	Jan. 2-14, 2014
3	Dr K. Sharma (Applied Chemistry)	Nanotechnology: Synthesis, Characterization and Applications	BIT Patna	NIT Patna	Patna	March 4-8, 2014
4	Dr. R. Kumar (Applied Chemistry)	i) Recent Advances on Polymer Technology (RAPT 14) ii) International Conference on Polymer and Allied Materials (ICPAM 14)	i) UGC, New Delhi ii) UGC, New Delhi	i) University of Calcutta ii) IIT Patna	i) Calcutta ii) Patna	i) January 21-24, 2014 ii) May 30- 31, 2014

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS:

- 1. Yadav, Chhaya and Lal S.P., Innovation-Driven Sustainability Modeling for Poverty Alleviation Initiatives in Rural India: A Mathematical Approach. December, 2013, Volume 4 Issue- 11, 334-343.
- 2. Yadav , Chhaya etal., Instructive Indicators of Sustainable Livelihood in Poverty Moderation: A Case Study. January, 2014, Volume 19, Issue 1, 127-142.
- 3. Yadav, Chhaya and Lal. S.P., Innovative Strategical Approaches to achieve Sustainable Livelihood in Rural India, April 2014, Volume 2, Issue 3,444-491.
- 4. Yadav, Chhaya and Lal, S.P., A Novel education structure for poverty diminution in India, May 2014, Vol., Issue-2, 129-133.
- 5. Sudhanshu Verma, and Preetam Kumar, "Printed Newton's Egg Curved Monopole Antenna for Ultrawideband Applications," IET Microwave, Antennas and Propagation, vol. 8, no. 4, pp. 278-286, Mar. 2014. 2.
- 6. Sudhanshu Verma, and Preetam Kumar, "Printed Egg Curved Slot Antennas for Wideband Applications," Progress In Electromagnetics Research PIER B, vol. 58, pp. 111-121, Feb. 2014. 3.
- 7. Sudhanshu Verma, and P. Kumar, "Printed Inverted-L Shaped Monopole Antenna with Parasitic Inverted-F Element for Dual Band Applications," Microwave and Optical Technology Letters, Wiley, vol. 56, no. 5, May 2014. 4.
- 8. Sudhanshu Verma, and Preetam Kumar, "Compact triple-band antenna for WiMAX and WLAN

- applications," IET Electronics Letters, vol. 50, no. 7, pp. 484-486, Mar. 2014. 5.
- 9. Sudhanshu Verma, and Preetam Kumar, "Miniaturised Arc Shaped Antenna for Multiband Wireless Applications," IET Microwave, Antennas and Propagation, 2014 (Accepted)
- 10. Megha Dadel, K P Tiwari, "Design of a Compact Triangular Ring Antenna and its Array using Log Periodic Property", Microwave and Optical Technology Letters, Vol. 56, Issue 1, pp. 41-46, 2014
- 11. R K Badhai, Nisha Gupta, "Compact Dual Sinc-Shaped Monopole Antenna for Dual Band Wireless Application", Microwave and Optical Technology Letters, Vol. 55, No 12, pp. 2883-2888, 2013
- 12. S. P. Dash, V. Agrawal, A. Sinha, "Inclusion of human capital in the calculation of WACC", European Scientific Journal, Vol. 9, No.28 (2013) 405-421.
- 13. Agrawal Vijay (2013), Factors to be Reported for Sustainability Reporting in Indian Chemical Industry— The Way Industry Thinks-International Journal of Accounting and Financial Management Research (IJAFMR) ISSN(P): 2249-6882; ISSN(E): 2249-7994 Vol. 3, Issue 5, Dec 2013, 11-24.
- 14. Mitra Pradip Kumar and Agrawal Vijay (2013), Importance and Perception Towards Sustainability Reporting A study through Literature Overview. in Paripex Indian Journal Of Research Vol.2 No.5 Feb, 2013 (pp.35-39). Sara Publishing Academy, Ahmedabad. ISSN: 2250-1991
- 15. Ahmad, I. (2013). 'Major impediments in the growth of B2B e-commerce market in Kuwait: An empirical study from industrial perspective', International Journal of Business Management and Research, Vol. 3; Issue 6, pp 57-65.
- 16. Banerji. Julee, Dr. Ramesh Mittal., Role of Emotional Intelligence in Teaching, Journal of Royal Society for Research & Development, July 2013
- 17. Banerji. Julee, Dr. Ramesh Mittal., Future of Green Marketing, International Journal of Retailing and Marketing, Vol.5, no.2, July 2013,p.25

PUBLISHED IN INTERNATIONAL PROCEEDINGS:

1. Yadav, Chhaya and Lal, S.P., ICT for all: Role of Engineers to cross the Digital Divide.In Proceeding of the International conclave on Innovations in Engineering and Management, BIT, Patna campus, Patna, 2013.

PUBLISHED IN NATIONAL JOURNALS:

- 1. Kumar, Rakesh, Josse, C., Anandjiwala, R.D., Dry and wet mechanical properties of polylactic acid in the presence of canola oil. Asia Pacific Journal of Chemical Engineering, Online March 2014, doi 10.1002/apj.1807.
- 2. Kumar, Rakesh, Moyo, D., Anandjiwala, R.D., Viscose fabric bonded with soy protein isolate by foam application method. Journal of Industrial Textiles. Online January 2014, doi 10.1177/1528083713518087.
- 3. Kumar, Ranvijay, Sharma K., Effect of acrylate structure on the properties of acrylate-grafted psyllium. Asia Pacific Journal of Chemical Engineering, Online March 2014, doi 10.1002/apj.1811.

- 4. Tiwary, K. P., Choubey, S.K., Sharma, K., Structural and optical properties of ZnS nanoparticles synthesized by microwave irradiation method. Cjalcogenide Letters, 2013, 10, 319-323.
- 5. Singh, A., Deo, B., Singh, S. P., Risk assessment on the use of Damodar river water for domestic/drinking water purposes. International Journal of Current Engineering and Technology, 2013, 3 (5)
- 6. Singh, A., Deo, B., Singh, S. P., Risk analysis on the use of Damodar river water for drinking water purposes. International Journal of Current Engineering and Technology, 2014, 4 (1).
- 7. Kumar, Rakesh, Silver nanoparticles incorporated soy protein and chitosan based biomaterials. Nano Trends: A Journal of Nanotechnology and its Applications, 2014, 16, 1-6.
- 8. Gupta, N. and Agarwal, V., 2013a "A study of the Constituents of domestic savings and investments in urban cities with special focus on Mumbai and Delhi" Indian Journal of Finance. 7(2), 17-26.
- 9. Agarwal, V., Gupta, N. and Sachdeva, J., 2013. Interrelationship among stock indices, economic indicators and quality of Life: A study through review of literature. "Growth" A Quarterly Journal of Management Training Institute of SAIL, Ranchi. 40 (4), 1-8.
- 10. Gupta, N. and Agarwal, V., 2013b. "Savings and Investment Pattern in Largest Cities of India" in "The Alternative" Biannual Journal of Management Studies and Research, BIT, Mesra, Ranchi. XII (2), March Sept 2013.

BOOKS:

- Modelling and simulation of Diffusive processes- Methods and Appication, Chapter Title "Two
 dimensional solute transport from a varying pulse-type point source" Premlata Singh, Sanjay
 Kumar Yadav, Perig, A.V. (Accepted, order no.86330043), Springer.
- 2. A Text Book of Nanoscience (Publisher: Kataria & sons, ISBN- 9350144042) 2013 by Dr. Rakesh Kumar and Dr. K. P.Tiwary
- 3. ECR etching of II-VI compound Semiconductors (Publisher: Scholar's Press, Germany. ISBN 3639518063) 2013.
- 4. Formwork for Civil Engineering Construction Works by Dr.J.Jha and Prof. S.K.Sinha, Laxmi Publication, New Delhi, 2013.

BOOKS EDITED

- 1. Fossil Fuels: Sources, Environmental Concerns and Waste Management Practices (ed Kumar, Rakesh), Nova Publisher (ISBN: 978-1-62808-412-2), USA, August 2013.
- 2. Kumar, Rakesh, Modified biomass based alternative fuels. InFossil Fuels: Sources, Environmental Concerns and Waste Management Practices (ed. Kumar, R.), Nova Publisher (ISBN: 978-1-62808-412-2), USA, August 2013, Chapter 4, pp 129-144.
- 3. Kumar, Ranvijay, Sharma, K., Kumar, Rakesh, Psyllium, natural and grafted: therapeutic and controlled drug release systems. In Encyclopedia of Biomedical Polymers and Polymeric Biomaterials, Taylor and Francis, UK, Online April 2014, doi 10.1081/E-EBPP-120050015.
- 4. Fossil Fuels: Sources, Environmental Concerns and Waste Management Practices (ed Kumar, Rakesh), Nova Publisher (ISBN: 978-1-62808-412-2), USA, August 2013.

- 5. Kumar, Rakesh, Modified biomass based alternative fuels. In Fossil Fuels: Sources, Environmental Concerns and Waste Management Practices (ed. Kumar, R.), Nova Publisher (ISBN: 978-1-62808-412-2), USA, August 2013, Chapter 4, pp 129-144.
- 6. Kumar, Ranvijay, Sharma, K., Kumar, Rakesh, Psyllium, natural and grafted: therapeutic and controlled drug release systems. In Encyclopedia of Biomedical Polymers and Polymeric Biomaterials, Taylor and Francis, UK, Online April 2014, doi 10.1081/E-EBPP-120050015.

BOOKS PROCEEDINGS

- 1. Kumar R., Polyfurfuryl alcohol absorbed/adsorbed soy protein based materials. In Recent Advances on Polymer Technology (RAPT 14), 21-24 January, 2014, Calcutta, India, pp96-98.
- 2. Kumar R., Polyfurfuryl alcohol a thermoset natural polymer –state of art, challenges and opportunities. In International Conference on Polymer and Allied Materials (ICPAM 14), 30-31 May, 2014, Patna, India, pp155.

STUDENTS' ACTIVITIES:

SI. No.	Name of the Activity	Andrew Commence of State of St	Students' co ordinator, if any	Date/Duration	Dept.
1.	Abhivyakti' 13 "Synergy of Technology With Nature" Organised by IEEE Student Branch BIT, Patna	**	Dr. Nirmala Soren, Branch Counsellor	5th – 6th Oct. 13	EEE

OTHER IMPORTANT INFORMATION

- Apart from above, BIT Patna Campus trying Hands on experience with the most powerful CAD tool for Integrated Circuits design 'CADENCE 180nm technology':- The software tools have been purchased and successfully installed and the ECE fraternity have submerged themselves immensely towards exploring the intricacies of this CAD tool.
- The Energy Cell was set up vide letter no BITP/92/12-13 dated 13.10.12 for undertaking various activities related to Energy Conservation, Energy Audit and Renewable Energy.
- A proposal is in the pipeline to establish a Solar Testing Centre in the Campus of BIT, Patna by Bihar Renewable Energy Development Agency, Energy Department and Government of Bihar. Nearly 1800 sq ft space for this centre has already been marked. The officials of the Department have already visited our campus site.

OFF-SHORE CAMPUSES

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MUSCAT

Waljat College of Applied Sciences (WCAS) in academic partnership with Birla Institute of Technology as its International Centre was founded by H.E. Dr. Omar Bin Abdul Muniem Al Zawawi in 2001 with an aim to promote high international quality education that prepares students for modern, high quality employment and occupies a pride of place among the technical colleges in the Sultanate of Oman.

The College campus is located in Knowledge Oasis Muscat, Rusayl with state-of-the art teaching facilities, laboratories, library and student services. All academic programs are conducted in English and admissions are open to all nationalities.



Students at Main Building

WCAS vision is to attain academic excellence and be a preferred choice of students aspiring for quality learning experience. Wisdom, Commitment, Achievement and Service are the core values to realize our vision. We believe in the holistic development of our students and offer a content and activity rich curriculum with emphasis on knowledge development, communication and interpersonal skills, projects and training activities.

The College has leveraged technology to provide a quality learning experience to its students and has introduced Smart Classrooms which are equipped with interactive whiteboards, PCs, and advanced audio visual equipments. This innovative use of technology promotes possibilities of sharing of knowledge and experience in the peer group of students to bring out the best in them. The Video Conferencing System at the College is now been successfully utilized to have virtual class room and seminars with BIT, India and engagement of Washington State University, USA is in progress. Additional Wi-Fi hotspots have been provided in the College.

WCAS was included in The Guide to Excellence: Global Education and Opportunities, 2013 Edition published by Cambridge University Students' Union. It was also incorporated in Socrates Almanac of world universities published from Oxford, UK in 2013, from this part of the world. The Engineering entrance test of WCAS has been recognized by Technical Universities in Austria (NIMSA) for admission of sponsored Omani students.

THE COLLEGE OFFERS THE FOLLOWING ACADEMIC PROGRAMMES OF THE INSTITUTE:

1. Bachelor of Engineering in

Biotechnology

Computer Science

Electronics & Communication Engineering

- 2. Bachelor of Computer Applications (Hons.)
- 3. Bachelor Business Administration (Hons.)

- 4. Bachelor of Computer Applications
- 5. Bachelor of Business Administration*
- 6. Masters of Business Administration
- 7. Executive MBA*
 - * Also offered with evening classes to working candidates.

RESEARCH ACTIVITIES

The research activities in various Departments have been initiated and laboratories are being modified to carry out meaningful R&D activities. The Research Council (TRC), Oman has accepted our College as a Research Centre and the hub has been created in the college to interact with the TRC.

DEPARTMENT OF BIOTECHNOLOGY

Department of Biotechnology was actively involved in providing the quality education and research environment to its students, besides exposure to related Industries. The course BE Biotechnology offered by the Department trains students for employment in biotechnology related processes and products industry and higher education and research. The undergraduates strengthen their knowledge by studying core subjects in Cell & Molecular Biology, Genetic Engineering, Microbiology, Immunology, Enzyme Technology, Protein Engineering, Genomics, Chemical Engineering and subjects with application of Chemical Engineering to Bio-systems industrial processing like Bioprocess Engineering, Bioreactor Design, Bioseparations Engineering and Biological Waste Management. The Department imparts knowledge through class room interaction, experimental exposure and practice in laboratory facilities and finally implementing the learning outcomes for project work.

The laboratory facilities consist of Microbiology, Molecular Biology, Cell Biology, Genetic & r DNA technology, Biochemistry, Immunology, Bioinformatics Labs, Bioseparations Technology Lab, Environmental Technology labs, Bioprocessing Labs, and Chemical Engineering Labs that include Fluid Flow, Heat Transfer, Mass Transfer studies. The major Equipments & Kits and Software available are Bench Top 3 I Fermentor, UV Spectrophotometer, Multifuge, Refrigerated centrifuge, Omni PAGE Mini, Gel documentation system, Horizontal electrophoresis unit, Elisa strip Reader, Thermocycler, TLC Unit, Bacteriological Incubator, Laminar Flow Chamber, Inverted Microscope, COD and DO meters etc.

The Biotech Department has successfully recycled paper in its lab and is further working on it to improve the paper quality. The Department presented the First Hand- Made paper from waste to mark the Environment Day in the College.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

The Department offers quality graduate courses and programs in Computer Science & Engineering. Consistent with the objectives the Department gives high priority to quality research and effective teaching.

The Department gives importance for faculty research & advanced learning of new Computer Science technologies to build up strong academic programs. The Department also believes that combining scientific research with teaching raises the quality of teaching and the learning experience of students.

As the requirements of Computer Industries are continuously changing, various new courses and electives are offered in CSE Department from time to time.

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

The Department of Electronics & Communication Engineering has well qualified and experienced faculty members and technical staff. Students can avail dual degree program with the University of Leeds, UK. The Department has augmented its existing laboratory facilities by adding digital storage oscilloscopes, function generators, simulators, FPGA trainer kits, microwave benches, communication trainer kits etc. This will enable students to carry out a wide range of experiments related to their course curriculum and keep them up-to-date with the developments in the field of electronics, communication, fiber optics, control systems.

Faculty members are involved in research activities in the areas of MIMO estimation, SOI MOSFET modelling, neural network, embedded technology, smart antenna, plasma physics, non-linear dynamics etc.

Recently, National Instruments' software LabView has been added in the lab to strengthen the Department's research activity. Department is in the process to set up Virtual as well as VLSI lab to further augment its existing lab facilities.

DEPARTMENT OF MANAGEMENT

The Department of Management offers academic programs at Bachelor and Master level leading to BBA and MBA degrees. The EMBA program is also offered to executives and working professionals. Faculty members are actively engaged in conducting research in the areas of E-Marketing, Value Chain, Data Envelopment Analysis, Performance Management, Work Life Balance, Barriers to Career Advancement for Women in the Sultanate of Oman, Customer Satisfaction in Online Banking, E-Commerce in Middle East, Tourism Service Quality, Women's Labour Force Participation, Word of Mouth & Trust in Online Media and Online Social Networking.

DEPARTMENT OF MECHANICAL ENGINEERING

The Department is committed to support the other engineering Departments as per the requirement of curriculum. The objective of the Department is to develop best academic facilities and active interaction with industry to make the course perfectly suitable for the industry. The Department offer the core subjects like, Engineering Mechanics and Principle of Mechanical Engineering to the students of engineering programmes.

The Department has three laboratories, and a workshop viz., Engineering Mechanics Lab., and Engineering Graphics Lab, and CAD Lab. All the laboratories are fully equipped with the modern equipments as per the requirements of syllabus. Our workshop is a state-of-the-art facility with the required infrastructure.

DEPARTMENT OF MATHEMATICS

The Department of Mathematics offers comprehensive courses in different fields of applied mathematics for various disciplines of main course and for Foundation Program. It offers support to other Departments to conduct various quantitative and mathematical courses. The main aim of the Department is to prepare a sound mathematical background for students of various disciplines for better understanding of respective discipline.

LEARNING RESOURCE CENTRE (LRC):

Our Library and Learning Resource Centre (LRC) has more than 40,000 volumes of books, periodicals and project reports and has added 1,450 new volumes of text and reference books besides a number of

periodicals and e-journals. A large number of online databases through The Research Council of Oman portal are also accessible for all. LRC has also subscribed to more than 25 core journals and implemented RFID system. A separate section for Electronic Learning Resources, Audi Video Room and dedicated discussion rooms have also been created.

SMART CLASSROOMS:

The College has smart classrooms, which are equipped with interactive whiteboards, PCs and advanced audio visual equipments. Smart classrooms facilitate teachers to use their creativity to make the classes more interactive. Both the students and teachers benefit from using a Smart Board in the classroom. This innovative technology promotes interaction and offers a world of learning possibilities. Teachers can reach out to students of all classes and learning levels in a language they clearly understand.

VIDEO CONFERENCING SYSTEM:

The College has an advanced multipoint video conferencing system, Polycom HDX 8000, for distant learning, with 4 dedicated ISDN lines. Video conferencing facility helps to enable interaction between students and remote faculty during research or conference, guest lecturers to interact in the classroom from distant locations / other institutions, and faculty and the administration to collaborate with colleagues at other institutions.

LANGUAGE LAB:

The College has established a new advanced Language Lab with 36 computers, necessary software and audiovisual equipments for the students to learn the language using advanced methods. Robotel SmartClass+ is a new age, highly-flexible language lab platform that was developed to address all learning environment variations and support both the instructor-led and self-study situations. The language laboratory is very useful for assessing students' knowledge of the language through listening and speaking. It provides students with the technical tools to get the best samples of pronunciation of the language. The student will get the experience of interacting with native speakers through the laboratory.

Seminar / Conferences / Short – term Courses Conducted by the Department/Campus

SI. No.	Title of Seminar / Conferences / Short – term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses
1	Workshop on Behavioural Studies	Dr. Abhijit Das	WCAS	Sept.19 ,2013
2	Being Entrepreneurial	Mr. Arindam Dutta	WCAS	Oct.6, 2013
3	From Sage on Stage to Student-Centered Learning	Mr. Mithun Shrivastava	WCAS	Oct.10, 2013
4	Shell Oman's Intilaaqah Entrepreneur Development Programme (IEDP)	Mr. Hashim Mushaimil Al -Hasani	WCAS	Nov. 15, 2013
5	Database Management System	Mr. Satish Chander	WCAS	Oct. 31, 2013

6	MathCad - a tool for Analytical Modeling in Research	Dr. Alok Kumar Kushwaha	WCAS	Nov.7 ,2013
7	Applications of Cloud Computing	Mr. Sanjay Kumar	WCAS	Nov.14, 2013
8	Telecom Sector	Mr Khalfan Alfawahi	WCAS	Nov.25 ,2013
9	How to be a successful businessman	Mr. Hashim Mushaimil Al – Hasani	WCAS	Dec.4, 2013
10	Impact of Social Media	Dr. Niraj Mishra	WCAS	Dec.5 ,2013
11	How to cope up with stress in our day to day life	Mr. Arbind Kumar Choudhary	WCAS	Dec.12 ,2013
12	Team Work	Mr.Jyoti Chandel	WCAS	Dec.18 ,2013
13	Nanoscience and Nanobiology- Prospects and Relevance	Prof. Muraleedharan Damodaran	WCAS	Dec.19 ,2013
14	Recent Trends in Banking The adoption of direct banking channels	Mr. Prashant Kumar Singh	WCAS	Dec. 19, 2013
15	Nanomedicine To Fight Cancer-Todays Focus	Ms. Akhila Rajan	WCAS	Dec.26, 2013
16	GREEN MARKETING :Way Ahead to Sustainability	Dr. Prashant Rastogi	WCAS	Jan. 2 ,2014
17	A Very very Basic Introduction of abc Conjecture	Dr. Prabal Datta	WCAS	Jan.9, 2014
18	Embedded Systems	Mr. Akhilesh Roy	WCAS	Jan.16, 2014
19	Multimedia Teaching & Learning	Mr. Salim Ali Al- Gufaily	WCAS	Jan.23, 2014
20	Relaxation & Breathing Techniques	Mr. Arbind Kumar Choudhary	WCAS	Jan.27, 2014
21	Personal Strategic Planning	Mr. Issa Al Noobi	WCAS	Feb. 4, 2014
22	Tips to become a better leader	Mr. Jyoti Kumar Chandel	WCAS	Jan.30, 2014
23	Workplace Ergonomics	Ms. Anu Manchanda	WCAS	Feb.6, 2014
24	Business Management	Prof. Naval Kishore Bhargava	WCAS	Feb.12, 2014
25	e-Commerce: A Mechanism to Ensure the Pre-Purchase Decision Security of the Online Customers	Mr. Umair Ujala	WCAS	Feb.13, 2014
26	Common Methods of Teaching	Mr. El Amin El Nur	WCAS	Feb. 20, 2014

27	Wireless Networks	Dr. D. Satyanarayana	WCAS	Feb. 26, 2014
28	Creativity and Success:What's in between	Mr. Sushil Kumar	WCAS	Feb.27, 2014
29	Mars Bar - Work Rest and Play, The 21st Century Dilemma	Ms. Blossom Christina	WCAS	March 6, 2014
30	Smart Grids and Smart Energy Consumers	Ms. Seema Arora	WCAS	March 13, 2014
31	Self Development	Dr. Ismael Baqi Mohd	WCAS	March 18, 2014
32	Facts about Lipids & Cardiovascular Disease	Ms. Sharmila Queenthy	WCAS	March 20, 2014
33	Origins of Biotechnology	Mr. David Mandepudi	WCAS	March 27, 2014
34	Cybercrime-The dark side of internet	Mrs. Akrati Koul	WCAS	April 3, 2014
35	Sensors	Mr. Salim Al Mahrouqi	WCAS	April 6, 2014
36	Memory Enhancement	Dr. Nupur Sen	WCAS	April 10, 2014
37	An Overview of Oil and Gas Industry	Ms. Sameena Begum	WCAS	April 17, 2014
38	Deploying & Managing Windows Server 2012 R2	Mr. Majid Al Sinani	WCAS	April 24, 2014
39	Web Technologies	Mr. Anubhav,	WCAS	April 24, 2014
40	How to think like Leonardo Da Vinci"	Mr. Jyoti Kumar Chandel	WCAS	April 24, 2014
41	e-Commerce: A Mechanism to Ensure the Pre-Purchase Decision Security of the Online Customers	Mr. Umair Ujala	WCAS	May 1, 2014
42	Turn Down the HEAT - Mission Possible	Mrs. Smitha Felix	WCAS	May 8, 2014
43	Procrastination- Opportunity's Assassin	Mr. Roby Varghese	WCAS	May 15, 2014
44	Breathe Right, Stay Happy, Lifelong	Mr. Arbind Kumar Choudahry	WCAS	May 27, 2014
45	Mechanical Testing of Materials	Mr. Kuldeep Gupta	WCAS	May 29, 2014
46	Multiple Intelligence	Mr. Sultan Khan	WCAS	June 5, 2014
47	Applications of Bio- electronic Instrumentation	Mrs. Priya C Rajan	WCAS	June 12, 2014

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Mr. Jyoti Chandel, Dr. Srilekha Goveas, Mrs. Vijaya, Mr. Satish Chander, Mr. A.K. Choudhary, Mr. Sanjay Kumar.	Various subjects on Oman's Manufacturing Sector	N.A.	Public Establishment for Industrial Estate	Muscat	Aug. 20, 2013
2	Mr. Arbind Kumar Choudhary	Industrial Relations Workshop	Investors in People & International Quality Solutions	Public Establishment for Industrial Estate	Muscat	Sept.22, 2013
3	Dr. Padmini, Mrs. Hannah Murugan	Institutional Programme Standards	WCAS	Oman Academic Accreditation Authority	Muscat	October 30- 31,2013
4	Dr. Sadaf Zehra, Mrs. Atiya Tabassum,	Biotechnology	WCAS	Sultan Qaboos University	Muscat	December 21,2013
5	Mrs. Atiya Tabassum, Mrs. Sharmila Queenthy, Mrs. Akhila Rajan	Mycology and Biotechnology Applications	WCAS	DARIS Centre for Scientific Research and Technology Department, University of Nizwa	Nizwa	February 3-4, 2014
6	Mrs. Vijaya, Mr. Satish Chander, Mr.Sounak Paul	Research and Development Challenges for Intelligent Clouds	WCAS	German University of Technology	muscat	February 24- 25,2014
7	Dr. Alok Kushwaha, Dr. Niraj Mishra, Mrs. Hannah Manogaran	Learning by Sharing: Challenges Post Institutional Quality Audits	Oman Quality Network in Higher Education	Oman Medical College	Bowshar, Muscat	March 25,2014

8	Dr. Seema Varshney, Ms. Vijaya, Ms. Cimi Thomas,	Effective Research Practices	WCAS	Arab Open University	Muscat	March 27,2014
9	Dr. Seema Varshney	Panel Data Analytics	WCAS	Institute of Management Technology	Ghaziabad, India	April 4-6,2014

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. Anu Manchanda and Saurabh Mukherjee A review of Information System Success Model International Journal of Innovative Research in Technology and Science, Vol. 1, No. 3, 2013.
- 2. S. Paul, and B.K. Mishra, PolyS: Network-based signature Generation for Zero-day Polymorphic Worms, International Journal of Grid and Distributed Computing, Vol. 6, No.4, August 2013.
- 3. Arvind Hans, Soofi Asra Mubeen and Amal Said Al Ghabshi, A study on Locus of Control and Job Satisfaction in Semi-Government Organizations in the Sultanate of Oman, The SIJ Transactions on Industrial, Financial & Business Management (IFBM), The Standard International Journals (The SIJ), Vol.1, No.2, 2013, pp. 93-100.
- 4. Sen N, and Kandpal, D. and Tinani K. Road to the Top-Barriers Faced by Women in the Financial Section in Oman Research Journal of Management Sciences, ISSN:2319-1171.2 (9), 2013, 1-6. www.isca.in/IJMS/Archive/v2/i9/I.ISCA-RJMS-2013,075.pdf
- 5. Rehab H. Alwa and Anasuya V Patil, New Matrix Approach to Improve Apriori Algorithm, Internal Journal of Computer Science & Network Solutions, Vol. 1., No. 4, 2013.
- 6. S. Sharmila Queenthy and Babu John, Diosmin exhibits anti-hyperlipidemic effects in isoproterenol induced myocardial infracted rats, European Journal of Pharmacology Elsevier 718, 2013, pp. 213-218.
- 7. A. Prakash, Trend and Growth in Advances, Outstanding and Recovery Position of Bhutan Development Finance Corporation Ltd., International Journal of Application or Innovation in Engineering Management (IJAIEM), September, 2013.
- 8. Sadaf Zehra, Greeshma Unnikrishnan and Hajira Sadaf, Study of Antioxidant properties of Green tea and Medicinal Plant leaves extract on BSA, International Journal of Biotechnology & Biochemistry, Vol.9, No.1, 2013, pp.127-135.
- Sen N, Kandpal D and Tinani K, A Study of Career Advancement of Women in the Hospitality Sector in Oman, EXCEL International Journal of Multidisciplinary Management Studies ISSN 2249-8834 EIJMMS, Vol.3, No.9, 2013.
- 10. P. Vijaya, G Raju and Santosh Kumar Ray, S-MSE: A Semantic Meta Search Engine Using Similarity and Reputation Measures, Journal of Theoretical and Applied Information Technology, Vol 60, No.2, 2014.
- 11. Mohammad Mohatram, Seema Arora, Samreen Sami, Syeda Assiya Mariam and Zuha Zubair, Intelligent Water Level Monitoring System, International Journal of Electronics, Electrical and

Computational System, IJEECS, ISSN 2348-117X, Volume 2, issue 1 January 2014. pp. 45-48.

PUBLISHED IN INTERNATIONAL PROCEEDINGS

1. Akrati Koul and Sushila Madan, "Capability Maturity Model Based Quality Management System" – International Conference on Management and Information Systems, Bangkok, Sept 22-24, 2013

PROCEEDINGS

 Shahid Ali Khan, Sujeet Kumar Sharma and Praveen Dhyani, Measuring the correlation between mixed data sets with missing values for data mining applications, 2nd International Conference on Applied Information and Communication Technology" – ICAICT 2014, held at Middle East College, Muscat.

STUDENTS' ACTIVITIES

SI. No.	Name of the Activity	Students' co ordinator, if any	Date/Duration
1	Ozone Day	Environmental Club	Sept. 16, 2013
2	Student Council Election		Nov.18, 2013
3	Paper Recycling Campaign		Nov. 20, 2013
4	National Day Celebration		Nov. 25, 2013
5	Semesters Futsal Football	Sports	Feb-Mar14
6	Waljat Football Tournament	Sports	Feb. 25-26, 2014 Final March 2, 2014
7	Students Picnic	Social	Feb. 27, 2014
8	Traditional Day/Talent Hunt	Music/Cultural	March 6, 2014
9	Mothers Day/ Photo Exhibition	Cultural/Photography	March 9, 2014
10	English Day	English	March 9, 2014
11	In door games (Table Tennis, carom, chess)	Sports	March 9, 2014
12	Environmental Day Programme		March 11, 2014
13	Edraak Campaign		March 14, 2014
14	Discover Oman – Nokia app. Competition		March 24, 2014
15	Earth Hour/Trekking	Environment / Adventure	March 27, 2014
16	Cricket	Sports	April 1-3, 2014
17	C38 Geological Trekking	Adventure Club	April 3, 2014
18	Badminton	Sports	April 15-17, 2014
19	Career Fair		April 16, 2014
20	Earth Day/Plantation	Environment	April 22, 2014
21	Blood Donation Camp		April 25, 2014
22	Technical Day	Tech	April 27- 28, 2014
23	Music Competition	Music	April 27- 28, 2014

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24	Open Day/English Drama	All	April 27- 28, 2014
25	Theme Based Photography Competition	Photography	April 27- 28, 2014
26	Football League for colleges and universities Oman	Sports	April -14

BOARD OF STUDIES: (UG/PG)

Under Graduate Programmes

Dr. Mohan Varma	Chairman
Dr. Padmini Padmanabhan	Member
Mrs. Vijaya P	Member
Mr. Akhilesh Kumar Roy	Member
Mr. Jyoti K Chandel	Member Secretary

Post Graduate Programmes

Dr. Mohan Varma	Chairman
Dr. Padmini Padmanabhan	Member
Dr. Santosh Kumar Ray	Member
Dr. G.P. Mishra	Member
Dr. Rajeev Kumar	Member Secretary

DEPARTMENTAL ACADEMIC COMMITTEE

Department	Chairperson	Members
BIOTECHNOLOGY		Dr. Sadaf Zehra
		Mrs. Sharmila
		Dr. Rajeev Kumar
		Mrs. Vijaya
COMPUTER SCIENCE	Mrs. Vijaya P	Mr. Sounak Paul
		Mr. Sanjay Kumar
		Mr. Vikash Sharma
		Dr. Prabal Datta
ELECTRONICS & COMMUNICATION ENGINEERING	Dr. Alok Kushwaha	Mr. Akhilesh Roy
		Dr. Rajeev Kumar
		Mr. Mohd. Mohatram
		Mrs. Vijaya

ANNUAL REPORT	 2013 - 14

MANAGEMENT	Mr. Jyoti Chandel	Dr. G.P. Mishra Mr. Mithun Shrivastava Mr. Vikash Sharma Dr. Prabal Datta
ENGLISH	Mrs. Indrani Basu	Mr. David Manohar Mrs. Smita Prasad Mrs. Vijaya P Dr. Prabal Datta

OTHER IMPORTANT INFORMATION

- 1. 9th Convocation Ceremony was held on 19th January, 2014. A total of 336 students received the Degrees and Diplomas in their respective disciplines, of which 222 were Graduate Degree awardees, 36 were given Diploma and 78 received Post Graduates Degree.
- 2. Waljat College of Applied Sciences name has been included in the sections Global Colleges and Universities in the prestigious Socrates Almanac, 2013-2014 edition published by Oxford, U.K.

RAS AL KHAIMAH



Main Building

BIT International Center at Ras Al Khaimah, UAE started its operation from September 2005, where it impartsUnder Graduate programs (as approved by Technical Council of BIT Mesra,) "BE" in Electronics & Communication Engineering, Electrical & Electronics Engineering, Computer Science & Engineering, along with "B Arch" in Architecture and "BBA" in Management. It also offered "Diploma" in Engineering after ten years of schooling. Apart from this, Post Graduate programs of "MBA" and "EMBA" are also offered inthe Center, where MBA is a regular program and EMBA

is a week-end program. However, since 2013-14, the center is also started offering three new courses ie. BE and Diploma in Mechanical Engineering and BCom, in commerce discipline. In order to facilitate Mechanical Engineering students, a new Workshop-cum-Laboratory is being set-up in the center.

As per law of the country the campus is not allowed to own any property on permanent basis. Thus, the campus had started operating based on the agreement & License of "RCAST" in RAK. However, due to some acts of commission/omissions on part of RCAST, BIT had to start looking for the alternatives. In the process, with the support of "RAK Free Trade Zone" authority, BIT could associate with a new strategic partner i.e. "CORE international Institute of Higher Education FZE". Thus since February 2012, the International Center of BIT has been offering the same academic program, in the same premises but with a new name "BIT Offshore Campus, RAK" based on the agreement with BIT Mesra and License issued to the new strategic partner by RAK Free Trade Zone.

SEMINAR / CONFERENCES / SHORT - TERM COURSES CONDUCTED BY CAMPUS:

Sl. No.	Title of Seminar / Conferences / Short - term Courses / Workshop	Coordinator	Funding / Sponsoring Agency	Date of Seminar / Conferences / Short – term Courses
1	International Research Conference on Engineering, Science & Management (IRCESM – 2014)	Co-coordinated by EEE Deptt. of BIT Offshore Campus, RAK along with Zelus International	Zelus International, Dubai, UAE	June 4 – 5, 2014
2	BITFEST, 2014 An Inter-school Science, Creative ability and Quiz competition for senior level School students of UAE	CORE-BIT Campus	CIIHE	May 15, 2014

3	Workshop on Transactional Analysis by: Dr. Ajay Sudhir Radke	Deptt. of Management	CIIHE	Oct 24, 2013
4	The Ph.D. Decision: When to start and how to finish your Ph.D. by Dr. Hala Taweel, Director CORE-Middle East & Africa	CORE-BIT Campus	CIIHE	May 1, 2014
5	Research Methodology - An Introductory Workshop to investigate with different prospective by Dr. Ravishankar Dudhe, Associate Professor, Manipal University Dubai,	CORE-BIT Campus	CIIHE	Feb. 13, 2014

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the Faculty	Title of the Conference/Seminar	Funding Agency	Organizers	Venue	Date
1	Dr. PK Upadhyay	Sixth International Conference on Developments in e-Systems Engineering —DeSE2013		IEEE	Abu Dhabi, UAE	Oct. 16, 2013
2	Mrs.Reshma Gopi.R and Mrs.Chetna Nagpal	International Conference on Modern Trends in Science,Engineering and Technology (ICMTSET 2013)			Dubai, UAE	Sept. 25-26, 2013
3	Mrs.Reshma Gopi	International Conference on Electrical Engineering (ICEE-2013) held at Hyderabad,India			Hyderabad, India	July 6 – 7, 2013

PUBLICATIONS

PUBLISHED IN INTERNATIONAL JOURNALS

1. Published in International Proceedings: Mathematical modelling and Simulation of Solar Photo Voltaic cell by Reshma Gopi, published in Conference Proceedings (ISBN 978-93-82359-22-7) of International Conference on Electrical Engineering (ICEE-2013) held at Hyderabad, India.

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STUDENTS' ACTIVITIES

SL. No.	Name of the Activity	Students' coordinator, if any	Date/Duration
1	BIT Fest 2014		May 15.05.2014
2	Annual Day (BLAZE), 2014		March 7, 2014
3	Intra-collegiate Cricket Tournament, 2014		Feb. 20, 2014
4	Various Intra-Collegiate Sports & Cultural Events of the campus		Throughout the year
5	Inter-Collegiate Sports & Cultural Events conducted by various colleges in UAE		Throughout the year

UNIVERSITY POLYTECHNIC



Main Building

With growing popularity, it has become the first choice of students for Technical education at diploma level which is evident from the fact that the percentage of cut off marks for admission was as high as 88.33% for Unreserved and OBC category and 65.33 & 72.67 percent respectively for ST & SC category students.

Admission process for both Diploma in Engineering & Medical Lab Technology courses for 2013 batch was completed as per schedule and their regular classes started off in July, 2013. Detailed list of students registered in Diploma and MLT courses is mentioned in Annexure-I of the report.

Students of Automobile Engineering branch were sent for one month training at Tata Motors. Students had undergone summer training at Usha Martin, Schenk Process & Controls, Ranchi, BSL, Bokaro, BSNL Advanced Training Centre, Ranchi, Jharkhand Govt. Mini tool Room, Ranchi etc. and companies like Schenk Process & Controls, Ranchi, GMMCO, Super Kindo Equipment Pvt. Ltd., Mumbai, Sterlite India Pvt. Ltd., Mumbai recruited Diploma students through campus interview.

Books worth Rs. 1,98,953.00 (Rs. One Lac Ninety Eight Thousand and Nine Hundred Fifty Three only) were supplied to the library by the Welfare Department, Government of Jharkhand

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ANNUAL REPORT ====================================	2013 - 14 =

PROGRAMME OFFERED:

SL. No.	Programme Offered	Year of Introduction	Sanctioned Strength
1	Diploma in Automobile Engineering	2001	60
2	Diploma in Electronics Engineering	2001	30
3	Diploma in Computer Engineering	2003	30
4	Diploma in Manufacturing Engineering	2003	30
5	Diploma in Electrical & Electronics Engineering	2010	30
6	Diploma in Mechanical Engineering	2010	30
7	BMLT	2005	60

STUDENTS' ENROLMENT: DURING THE YEAR 2013-14, A TOTAL OF 649 STUDENTS WERE REGISTERED IN VARIOUS PROGRAMMES. THE PROGRAM-WISE DETAIL IS:

SI. No.	Programme	No. of Students Registered
1	Diploma in Automobile Engineering	134
2	Diploma in Electronics Engineering	82
3	Diploma in Computer Engineering	78
4	Diploma in Manufacturing Engineering	88
5	Diploma in Electrical & Electronics Engineering	84
6	Diploma in Mechanical Engineering	81
7	BMLT	102

ADMISSIONS: DURING THE YEAR 2013-14, TOTAL OF 225 STUDENTS WERE ADMITTED IN VARIOUS PROGRAMMES. THE PROGRAM-WISE DETAIL IS:

SI. No.	Programme	No. of Students Admitted
1	Diploma	196
2	BMLT	29

TRAINING AND PLACEMENT

Industrial Visits

- 1. Schenck Process & Controls Ltd., Ranchi
- 2. Jharkhand Government Tool Room & Training Center, Ranchi
- 3. Alcast, SIRTDO, Industrial Estate, Mesra, Ranchi
- 4. Transgeitz Ltd., SIRTDO, Industrial Estate, Mesra, Ranchi

Training

1. A one months training was arranged for Automobile Engineering students, 2011 batch students at TATA MOTORS Ltd., Jamshedpur.

- 2. Usha Martine Industries Ltd., Ranchi
- 3. Patratu Thermal Power Station, Patratu, Hazaribagh
- 4. Bokaro Steel Limited, Bokaro
- 5. Steel Authority of India Limited, Bokaro
- 6. Advanced Training Center, BSNL, Ranchi

Placement

Companies like Schenk Process & Controls, Ranchi, GMMCO, Super Kindo Equipment Pvt. Ltd., Mumbai, Sterlite India Pvt. Ltd., Mumbai recruited Diploma students through campus interview.

SPONSORED PROJECTS

Ongoing Projects

SI. No.	Project Title	PI/ Co-PI/ Collaborator (if any)	Funding Agency	1. 1. 20 年代 安文公司公司中央管理		Duration of the Project
1	Evaluation of Antimicrobial Activity of Cationic Lipidic Emulsions	Mrs. Neeru Singh	UGC	July 30, 2012	1.61 Lakhs	02 years

CONFERENCES/ SEMINARS/ WORKSHOPS/ STAFF DEVELOPMENT PROGRAMMES ATTENDED

Sl. No.	Name of the Faculty	Title of the Conference/ Seminar	Funding Agency	Organizers	Venue	Date
1	Dr. Satish Kumar	Workshop on Software in Chemical Science, Education & Research	TEQIP	Deptt. of Applied Chemistry	BIT Mesra	Oct. 03, 2013
2	Mr. Manish Oraon, Mr. Rakesh, Mr. Ramkesh	ISTE workshop on Engg. Mechanics	ICT (MHRD)	IIT Bombay,	BIT Mesra	Nov.26 - Dec.06 , 2013
3	Mrs. Meena Singh, Md. Maqbool Hossain, Dr. T. K. Parashar	ISTE workshop on Signals & Systems	ICT (MHRD)	IIT Khargpur	BIT Mesra	Jan. 02-12, 2014
4	Mrs. Meena Singh, Mr. Ramnish Sinha	Microcontroller- based Engineering Applications & Automation	Self	Department of Electrical & Electronics Engg., BIT	BIT Mesra	Jan.6 – 13 , 2014

5	Mrs. Neeru Singh	2nd IAPST International Conference	Nil	Jadavpur University, Kolkatta	Jadavpur University, Kolkatta	January 2014
6	Mr. Manish Oraon, Mr. Shankar Kumar, Mr. P. R. Mahto, Mr. Manoj Kumar	ISTE workshop on fluid mechanics	ICT (MHRD)	IIT Khargpur,	BIT Mesra	May 20-30, 2014
7	Dr. Satish Kumar	UGC-Orientation Program	UGC	UGC- Academic Staff College, Shimla	UGC- Academic Staff College, HP University, Shimla	June 2 – 28, 2014
8	Mr. Ramnish, Mr. Niraj Kumar	ISTE workshop on Computer Neworking	ICT (MHRD)	IIT Bombay,	BIT Mesra	June 23 - July 05, 2014

PUBLICATIONS:

PUBLISHED IN INTERNATIONAL JOURNALS

- 1. Oraon M., Sharma V., "Effectiveness of tool profile in sheet metal incremental forming", 5th International Scientific and Expert Conference of the International TEAM Society, TEAM 2013, Vol.No.1, November 2013., 55-59, ISSN 1847-9065
- 2. Singh, N., Verma, S.M., Singh, S.K., Verma, P.R.P., "Consequences of Lipidic Nanoemulsions on Morphology and Membrane Integrity of Staphylococcus aureus Using Transmission Electron Microscopy", Material Res Express 1 (2014) 025401, DOI: 10.1088/2053-1591/1/2/025401.

PUBLISHED IN INTERNATIONAL PROCEEDINGS

1. Singh, N., Verma, S.M., Singh, S.K., "Cationized Lipidic Nanoemulsion: Evaluation as Antimicrobials" In Proceedings of the 2nd IAPST International Conference, Jadavpur University, Kolkatta, January 2014

DIFFERENT COMMITTEES AT UNIVERSITY POLYTECHNIC

Examination: Mr. Ramnish Sinha (Coordinator), Mr. N. K. Mukherjee (Jt. Coordinator), Dr. Sumana Kumari (Jt. Coordinator)

Admission: Mr. Rakesh (Coordinator), Mr. Niraj Kumar (Jt. Coordinator), Mr. N. K. Mukherjee (Jt. Coordinator)

Semester & Registration: Mr. Niraj Kumar (Coordinator), Mr. Maqbool Hossain (Jt. Coordinator), Mr. Rajender Mahto (Jt. Coordinator)

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Training & Placement: Mr. Ramnish Sinha (Coordinator), Mr. Niraj Kumar (Jt. Coordinator), Dr. Satish Kumar (Jt. Coordinator), Mr. Chanchal Kumar Mishra (Member)

Cultural Committee: Dr. Sandhya Rani (Coordinator), Mrs. Neeru Singh (Jt. Coordinator), Mohd. Neyaz Ahsan (Member)

Engineering Society: Mr. Pradeep Toppo (Coordinator), Dr. Satish Kumar (Jt. Coordinator), Dr. T. K. Parashar (Jt. Coordinator)

Annual Report: Mr.Ramnish Sinha (Coordinator), Dr. Sandhya Rani (Jt. Coordinator)

AICTE, NBA- approval/ accreditation committee: Mr. Rakesh (Coordinator), Mr. Niraj Kumar (Jt. Coordinator)

Scholarship/ Stipend for Students: Mr. Abhay Kumar (Coordinator), Mrs. Meena Singh (Jt. Coordinator), Mr. Shankar Kumar (Member)

Time-table cum Classroom Committee: Mr. Niraj Kumar (Coordinator), Mrs. Rekha Mehta (Jt. Coordinator)

Souvenir Committee: Dr. B. N. Sanyal (Coordinator), Dr. G. M. Ansari (Jt. Coordinator), Mr. Rajendra Mahto (Jt. Coordinator)

STUDENTS' ACTIVITIES

- Two-day Technical Fest, Anveshan 2014, was organized in April 2014. Dr. Satish Kumar was the coordinator of the program.
- Robotryst-2014, a workshop on Android Application Development was organized by the Training and Placement Cell on 15-16 February, 2014.
- Training and Placement Cell organized a workshop on Communication Skill & Personality Development for the outgoing batch during SP/2014. It was comprised of five sessions. The program was coordinated by Mr. Ramnish Sinha in association with Dr. (Mrs.) Sandhya Rani and Mr. Abhay Kumar.

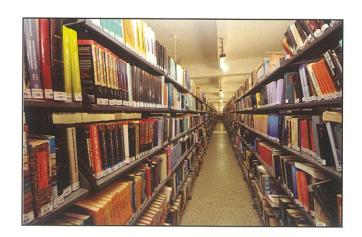
CULTURAL EVENTS

Art-and-craft exhibition & cultural programme Unifesto '14 was organized on 3rd & 4th March, 2014. Large number of students had participated in the programme.

ANNUAL ATHLETIC MEET 2014

University Polytechnic organized its 7th Annual Athletic Meet on 14th and 15th February, 2014. Mr. L.Khiangte, Special Secretary, Department of Welfare, Govt. of Jharkhand and Dr. M.K.Mishra, Vice-chancellor distributed the prizes. Computer branch stood as the winning team. Mr. Rupesh Kumar (Electronics branch) and Ms. Simran Kumari (EEE branch) were individual champions in Men and Women categories respectively.

CENTRAL LIBRARY, BIT-MESRA





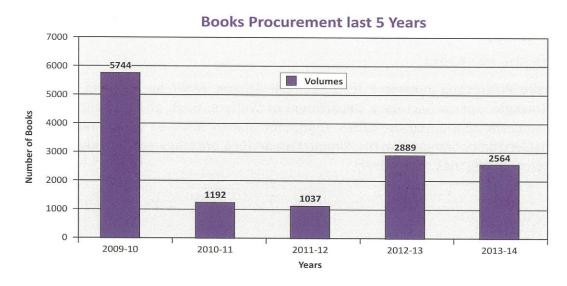
CENTRAL LIBRARY, BIT-MESRA

(Let knowledge cherish from BIT-Central library to end-user; and so be human life enhanced)

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 INDEST-AICTE & UGC-INFONET 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. 10 MBPS leased line connectivity has been installed exclusively for e-library through BSNL India under UGC-INFONET scheme.



Year wise Books Procurement (including Book Bank)

LIBRARY MISSION

The mission of our central Library is to provide comprehensive information to fulfill the needs of the BIT community and to support the Institute's mission to contribute to society through the pursuit of education, teaching, learning and research at the premier levels of excellence.

LIBRARY VISION

BIT Central Library make certain that its collections remain forward-looking, diverse in girth and form, unlock to browsing with internationally renowned quality. Through promotion, the Library makes its users aware of the resources available to them, and through innovation, it makes access to these resources easier. To serve potential users, the Library conserves information across all formats and ensures effectual storage and deliverance scheme. The Library's cooperation with expanding circles of associates vields unified access, broadening knowledge, and enhanced services.

PRINT BOOKS

Total Volumes : 1,40,213

Total Titles : 44,052

Print Journals/Magazine : 30

Indian : 30

Foreign : 00

Magazine : 00

Electronic Journals, Conference

Proceedings, Standards : 17947

CD/ DVD : 3,200

Bound Volumes : 18,512

Library home page : http://bitmesra.ac.in/library/default.asp

Library Services : The following services are offered by Central Library:

Bibliographic services, Document Lending Services, E Document Delivery Services, Inter Library Loan, Language Laboratory, Literature search, New arrivals, News clippings, Off Campus Service, ON/Off line database search, Reference, Referral and Reprographic services

LIBRARY WORKING HOURS

Monday to Friday : 08.00 AM to 08.00 PM

Saturday : 08.00 AM to 03.00 PM

Sunday : 09.00 Am to 1:00 PM

ISSUE / RETURN TIMINGS

Monday through Friday : 08.15 – 17.00 hrs

Saturday : 08.15 – 13.00 hrs

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	08	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 Category	1	1 Day

LIBRARY CONSORTIUM

Central library enrolled its membership for following consortium

- ➢ AICTE-INDEST
- UGC-INFONET

Institutional Membership

- American Library Kolkata
- ➢ DELNET, New Delhi

Department wise Books as on March 2014

SI. No.	Course	Titles Available	Volumes Available
1	Chemistry	2009	8193
2	Mathematics	2102	9201
3	Mechanics	2893	5691
4	Physics	2642	7132
5	Architecture	1663	2341
6	Biotechnology	1825	3167
7	Civil Engineering	2522	7262
8	ECE	2872	12536
9	CSE	5966	22077
10	IT & MIS	3288	8627
11	EEE	2507	9651
12	Environmental Science & Engineering	772	1311
13	НМСТ	581	2967
14	Management	2341	12293
15	Mechanical Engineering	2371	10492
16	Pharmacy	2753	6279

21 Others Total		674 44,052	1815 1,40,213
20	Space Engineering & Rocketry	645	1106
19	Remote Sensing	591	1085
18	Production & Engineering	2438	3307
17	Polymer Engineering	597	3680

Details of Print Journals/ Magazines

SI. No.	Title of Journals	IND/INT	Jr./Mag
1	Journal of Scientific & Industrial Research	IND	Jr.
2	Indian Journal of Chemistry Section-A	IND	Jr.
3	Indian Journal of Chemistry Section-B	IND	Jr.
4	Indian Journal of Experimental Biology	IND	Jr.
5	Indian Journal of Pure & Applied Physics	IND	Jr.
6	Indian Journal of Chemical Technology	IND	Jr.
7	Indian Journal of Engineering & Materials Sciences	IND	Jr.
8	Indian Journal of Biochemistry and Biophysics	IND	Jr.
9	Journal of Intellectual Property Right	IND	Jr.
10	Medicinal & Aromatic Plants Abstracts	IND	Jr.
11	Indian Journal of Radio & Space Physics	IND	Jr.
12	Indian Journal of Radio & Space Physics	IND	Jr.
13	Indian Journal of Fibre & Textile Research	IND	Jr.
14	Indian Journal of Marine Sciences	IND	Jr.
15	Indian Journal of Traditional Knowledge	IND	Jr.
16	Indian Journal of Natural Products and Resources	IND	Jr.
17	Annals of Library and Information Studies	IND	Jr.
18	Indian Science Abstracts	IND	Jr.
19	CSIR News	IND	Jr.
20	Journal of Chemical Sciences	IND	Jr.
21	Proceedings-Mathematical Science	IND	Jr.
22	Journal of Earth System Science	IND	Jr.
23	Sadhana- Engineering Science	IND	Jr.
24	PRAMANA-Journal of Physics	IND	Jr.
25	Journal of Biosciences	IND	Jr.
26	Bulletin of Materials Science	IND	Jr.
27	Journal of Astrophysics and Astronomy	IND	Jr.
28	Journal of Genetics	IND	Jr.
29	Resonance - Journal of Science Education	IND	Jr.
30	Current Science	IND	Jr.

Abstract/ Full Text Online Journals/books/thesis & dissertations

SI. No.	Publishers	Web Link
1	American Chemical Society	http://pubs.acs.org
2	American Institute of Physics	http://www.aip.org
3	American Physical Society	http://www.aps.org
4	ASCE Journals	http://scitation.aip.org/browse/by_publisher#ASCE
5	ASME (including AMR)	http://scitation.aip.org/browse/by_publisher#ASME
6	Annual Reviews	http://www.annualreviews.org
7	Bentham Science	http://www.ingentaconnect.com/content/ben
8	Cambridge University Press	http://journals.cambridge.org
9	Cambridge Online Books	http://ebooks.cambridge.org
10	Ebrary(online Books)	http://site.ebrary.com/lib/bitmesra
11	EBSCO Databases (Business Source Elite, Art & Architecture, Hospitality & Tourism Complete	http://search.epnet.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	GALE Gale Cengage Learning	http://lr.cengage.co.in
16	IEL Online (5 Users)	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
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	Web of Science (Bibliographic Database)	http://apps.webofknowledge.com
30	Wiley-Blackwell	http://onlinelibrary.wiley.com

LIBRARY STATISTICS OF 2013-14

Total Books Added Title - 672 & Volumes – 2,564

Total Journals Procured Print - 30 & Online - 17,947 Total Number of Membership enrolled : 1,448

Total Number of Books Issued : 75114

Total Number of Books Returned : 72667

New Implementation : 5New Computers procured for Digital Library.

LIBRARY ACHIEVEMENTS:

1. Workshop Director for 3 days national workshop training on "Open Source Software: A Tool to Manage Research Outputs" during September 23-25, 2013, held at Central Library, Birla Institute of Technology, Mesra, Ranchi, Jharkhand, INDIA (NASSDOC-ICSSR Sponsored).

INVITED LECTURES

Dr. Vijayakumar M

- Soft Skills for Jharkhand Library Professionals, National Seminar on "Next Generation Libraries/ Librarians, jointly organised by Jharkhand Information & Library Association and International Research & Development Association (IRDA) on September 1, 2013 at Ranchi.
- Open Archives Initiative-Protocol for Metadata, 3 days national workshop training on "Open Source Software: A Tool to Manage Research Outputs" during September 23-25, 2013, held at Central Library, Birla Institute of Technology, Mesra, Ranchi, Jharkhand, INDIA (NASSDOC-ICSSR Sponsored).
- 3. Consortia approach to Academic Library Systems in Digital Environment, UGC Sponsored 4th KSCLA National Conference on Impact of Information Technology on Library Services during December 27- 28, 2013, Shimoga, Karnataka, India

CONFERENCES/ WORKSHOP PARTICIPATED

- 1. UGC Sponsored 4th KSCLA National Conference on Impact of Information Technology on Library Services during December, 27-28, 2013, Shimoga, Karnataka, India
- 2. National Workshop on Web-Scale Discovery Services: Single Window Access to Library e-Resources held at Central Library IIT Kharagpur on Jan. 10, 2014.

Mr Debojyoti Nath

1. National Workshop on Web-Scale Discovery Services: Single Window Access to Library e-Resources held at Central Library IIT Kharagpur on Jan. 10, 2014.

PUBLICATIONS

- 1. Nath, Debojyoti and M, Vijayakumar (2013), Detecting integrity of scholarly communication: an approach through TURNITIN. INFLOIB, 7 (1-4), Pp.153-156, (ISSN 0974686).
- 2. M, Vijayakumar (2013), Consortia approach to academic library systems in digital environment. INFLOIB, 7 (1-4), Pp.24-29, (ISSN 0974686).
- 3. M, Vijayakumar et all. (2013),Open source software: A gift to develop libraries. INFLOIB, 7 (1-4), Pp.132-137, (ISSN 0974686).

- 4. Vijayakumar M, MARC: A Tool to share bibliographical information of Jharkhand Libraries, INFLOIB, 2013, Vol 6 (1-2) p 6-9 (ISSN 0974686)
- 5. Use and Perception of IT Applications by R&D Library Professionals: A Survey, paper presented in the UGC Sponsored 4th KSCLA National Conference on Impact of Information Technology on Library Services during 27th 28th December, 2013, Shimoga, Karnataka, India.
- 6. Nath, Debojyoti and Karn, Bhaskar (2013), Ranking of institutions in jharkhand for their scholarly output during last ten years 2004 to 20013. INFLOIB, 7 (1-4), Pp.174-178, (ISSN 0974686).
- 7. Nath, Debojyoti and M, Vijayakumar (2013), Detecting integrity of scholarly communication: an approach through TURNITIN. INFLOIB, 7 (1-4), Pp.153-156, (ISSN 0974686).
- 8. Nath, Debojyoti and Paul, Mahua (2013), Information seeking behavior of users in BIT Mesra: a study. INFLOIB, 7 (1-4), Pp.157-161, (ISSN 0974686).
- 9. Amitabh Kumar Manglam and Kumar, R and Singh, J P,(2013), RFID: the growing importance of technology among the educators. INFLOIB, 7 (1-4), Pp.184-189, (ISSN 0974686).
- 10. Brajesh Kumar and Madhu Bala, Delivery and exchange of services through electronic-document delivery system and management: present scenario, INFLOIB, 2013, Vol 7 (1-4), p 30-34, (ISSN 0974686).

LIBRARY TEAM

Name	Designation
Dr. Vijayakumar M	Librarian — Acting
Ms Rita Sinha	Assistant Librarian
Mr. Debojyoti Nath	Information Scientist
Ms. Shamida Lakra	Assistant Librarian
Mr. Mohan Mahto	Senior Library & Information Assistant
Mr. Amitabh Kumar Manglam	Library & Information Assistant
Mr. Brajesh Kumar	Library & Information Assistant
Ms. Rameswari Pandy	Library & Information Assistant

TRAINING & PLACEMENT DIVISION

Campus Recruitment Programme 2013-14

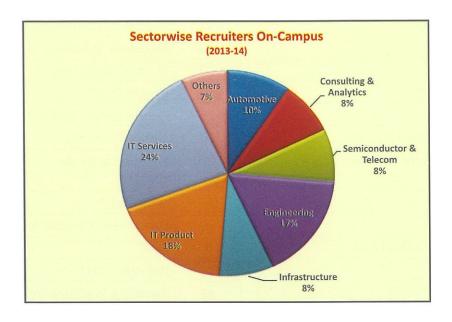
The Campus Recruitment Programme 2013-14 saw an active participation of 79 recruiters from across different sectors of the industry.

Major recruiters ranging from Investment Banks to Consulting and Analytics, Automobile to Heavy Engineering and Infrastructure, IT Product to IT Services companies visited the campus and recruited from the BIT talent pool. The Recruitment programme has generated a total of 1101 offers and several meritorious students have also received multiple offers. 14 recruiters visited BIT campus for the first time this year and the process yield satisfactory results.

The BE students, a total of 410 eligible students, received a total of 473 offers. 89% students from Comp. Sc., 90% from Electronics & Comm. & 86% from Information Technology have got placed in highend Consulting & Analytical and IT Product & Services companies. 69% of the Mechanical Engineering, 71% of Production Engineering and 85% of Electrical Engineering students got offers from different Core Engineering companies and high-end Consulting-Analytical & IT companies. Likewise, 67%, 65% and 54% of students from Chemical & Polymer, Civil and Biotech Engineering respectively opted for jobs in different Core & IT sectors.

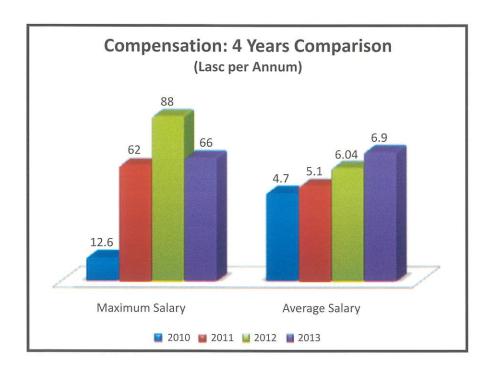
SECTOR-WISE SCENARIO

In terms of representation from the Sectors, the industrial slow down impacted both the number of recruiters as well as the number of selects per recruiter in the Infrastructure, Power and Automobile sector. The Pharmaceutical sector which has lately seen a lot of internal re-organisation with regulatory mechanisms coming of age with the impact of the Direct Price Control Order (DPCO) reflected a decline in the fresher recruitment and was more inclined towards hiring through Internships or off-campus processes. The slowdown has also reflected over the past two years on the recruitment of the Post-Graduate students and this is reflected across all major institutions as much as BIT. However, the recruiters with their limited targets were largely inclined towards selecting BE students who performed up to the desired level of expectations and even received multiple offers.



COMPENSATION

The average salary for the BE students this year was 6.9 lakhs per annum which is more than the average 6.04 lakhs of the year 2012-13. The highest compensation was INR 20.5 lakhs and in terms of the international offers, the highest salary achieved by a BIT student US\$ 1.09 lakhs



LIST OF RECRUITERS ON CAMPUS

Sl. No.	Name
1	AbsolutData – Intelligent Analytics *
2	Airtel
3	Amazon
4	AppPerfect *
5	Aricent Group
6	Avtec Ltd.
7	Axis Bank
8	Bharti Infratel
9	Cognizant
10	Cybage Software Pvt. Ltd.
11	D. E. Shaw India Software Private Limited
12	DHFL *
13	Directi
14	Electrosteel Steels Limited
15	EPIC
16	ERA Group

Sl. No.	Name
17	Maruti Suzuki India Limited
18	Microsoft
19	Mitsubishi Electric India Private Limited *
20	Musigma
21	National Engineering Industries Ltd.
22	Neucleus Software
23	Nomura Services
24	Oracle OFSS
25	Oracle Server Technologies Group
26	Orient Cements
27	Orient Electricals
28	OSSCube *
29	Pantaloons Fashion And Retail Ltd. *
30	PWC
31	ReInspire Tech
32	Samsung Research Institute *

33	Ericsson India Global Services Pvt. Ltd.		57	Samsung SISO
34	Exide Industries Ltd.		58	Sap Lab
35	EXL Services		59	Sapient
36	Facebook		60	SGE Consultancy *
37	Flipkart		61	Shapporji Pallonji & Co. Ltd. *
38	Fluor Daniel India Pvt. Ltd.		62	Siemens
39	Freescale Semiconductors		63	Stellium Consulting India Pvt Ltd.
40	Gammon India		64	Sterlite Technologies Ltd.
41	Gmmco Ltd.		65	Tata AIG
42	Goldman Sachs	7	66	TATA Consultig Engineers Ltd.
43	HCL Infosystem		67	Tata Hitachi Construction Machinery
			***************************************	Comp. Ltd.
44	Hero MotoCorp Ltd.		68	Tata Motors
45	Hyundai Motor India Limited		69	Tata Steel
46	IBM		70	Tech Mahindra
47	ICICI Securities		71	Tejas Network
48	Idea Cellular Ltd.		72	Trident Group
49	Info Edge (I) Ltd.		73	Unisys Global Services India
50	Infosys		74	Uttam Galva Steels Ltd. *
51	Jain College *		75	VE Commercial Vehicles Ltd.
52	L&T Construction		76	Verizon Data Services India Pvt Ltd.
53	Magneti Marelli India Pvt. Ltd. *		77	Visa Steel
54	Mahindra & Mahindra		78	Vodafone *
55	Mahindra Comviva		79	Wipro
56	Mahindra Finance *			

 $[*]These\ companies were\ the\ "First\ time" participants\ in the Campus Recruitment Programme of BIT.$

TRAINING & ASSESSMENT

As in earlier years, a PAN-BIT assessment process was conducted by the Training & Placement Division in which all the Pre-final year students participated. Individual scores were given to the students and the results, branch-wise were shared with all Departmental Heads and the Directors of all the Extension Centres of BIT.

Rigorous training sessions were conducted in Soft Skills throughout the 6th Semester for both UG and PG students.

Other Activities:

- 1. T&P Division, with Cognizant Technology Solutions organised the 'Cognizant CEO's Challenge' Programme and the 5 selected students shall be given the opportunity to work on a live project.
- 2. The Regional Rounds of 'Mahindra Auto Quotient Quiz' was organised at the Mesra Campus.

- 3. Workshop on Mahindra Advance Driving Skills was conducted at BIT Mesra Campus for students as well as employees of BIT.
- 4. Student Workshops in Technical & Non-Technical areas were organised. Details are as follows:
 - Pursuing Higher studies at US Anish Mitra, Alumnus
 - Service oriented Architecture Mr. Subhojit Ghosh, TCS
 - Cloud Computing on Emerging Business. Mr. Jaspal Singh, TCS
 - ERP-Oracle Application by Mr. Abhijit Banerjee TCS
 - Soft Skill Training Workshop by Sapient
- 5. The academic interface programme of TCS to give away the Best Student and Best Project Awards consisting of Gold Medals and cash prizes is under process.

Ranking

The first rankings of the year are out from the publication, DATAQUEST which is the most respected publication of the technical sector and provides overall and parameter-wise rankings to all major Institutes in India. In the parameter pertaining to Placement, BIT Placements have ranked 7th and in terms of HR perception, BIT has ranked 9th, thereby coming in the Top 10 for the first time in two parameters.

DATAQUEST CMR		
Placement		
Institutes	Score	Rank
International Institute of Information Technology Hyderabad (IIIT-H)	31.11	1
Netaji Subhas Institute of Technology	24.35	2
Indian Institute of Technology, Guwahati	22.66	3
Indian Institute of Technology, Madras	22.42	4
Institute of Technology, Banaras Hindu University	22.12	5
Indian Institute of Technology, Bombay	21.89	6
Birla Institute of Technology	20.79	7
Maharaja Agrasen Institute of Technology	20.75	8
Sri M Visvesvaraya Institute of Technology	20.10	9
IIT Kharagpur	20.08	10
As for as placement parameter is concerned IIIT-H scoured maximum whereas Netaji Subhas Institute	e of Technology followed	at #2
HR Scores		
Institutes	Score	Rank
IIT Kharagpur	13.99	1
Indian Institute of Technology, Madras	13.98	2
Indian Institute of Technology, Bombay	13.98	3
Institute of Technology, Banaras Hindu University	13.07	4
Birla Institute of Technology and Science, Pilani	12,22	5
Indian Institute of Technology, Guwahati	12.17	6
International Institute of Information Technology Hyderabad (IIIT-H)	11.86	7
Bharti Vidyapeeth Deemed University College of Engineering, Pune	10.20	8
Birla Institute of Technology	09.92	9
National Institute of Technology Karnataka, Surathkal	08.57	10

IIT Khargpur	scored th	e highest sc	ore in the HR ranking surpassing even IIT Madras				
Rank 2013-14	Rank 2012	Change	Institutes	City	Score	HR Perception	Total Score
1	1	0	Indian Institute of Technology, Madras	Chennai	55.66	13.99	69.65
2	7	5	IIT Kharagpur	Kharagpur	52.93	13.98	66.92
3	3	0	International Institute of Information Technology Hyderabad (IIIT-H)	Hyderabad	52.79	11.86	64.65
4	4	0	Indian Institute of Technology, Bombay	Mumbai	49.57	13.98	63.56
5	8	3	Indian Institute of Technology, Guwahati	Guwahati	49.03	12.17	61.20
6	5	-1	Institute of Technology, Banaras Hindu University	Varanasi	42.53	13.07	55.60
7	11	4	Birla Institute of Technology and Science, Pilani	Pilani	42.95	12.22	55.17
8	9	1	Netaji Subhas Institute of Technology	New Delhi	43.21	7.52	50.73
9	12	3	National Institute of Technology, Karnataka	Surathkal	41.70	8.57	50.27
10	10	0	Dhirubhai Ambani Institute of Information Communication Technology (DA-IICT), Gandhinagar	Gandhinagar	42.57	6.82	49.39
11	15	4	National Institute of Technology, Rourkela	Rourkela	42.04	7.20	49.24
12	17	5	Institute of Technology, Nirma University	Ahmedabad	43.45	5.72	49.17
13	13	0	Birla Institute of Technology	Ranchi	39.10	9.92	49.02
14	14	0	College of Engineering, Pune	Pune	37.43	5.75	43.18
15	21	6	Maharaja Agrasen Institute of Technology	New Delhi	34.78	5.30	40.08

ALUMNI RELATIONS

The Alumni Relations Group made a concerted effort to increase the engagement with the alumni spread all over the world by way of fortifying the alumni databases and organization of alumni Re-unions this year.

Prominent alumni events organized during the year 2013-14 were:

Reunions

- o The 1959-63 Batch of Alumni celebrated their "Golden Jubilee Reunion" at the BIT Mesra Campus during October 24-26, 2013.
- o Silver Jubilee Alumni Meet of the MBA Batch of 1986-88, celebrated on December 24 25, 2013.
- o The 1984-88 Batch celebrated their "Silver Jubilee Reunion" at Ranchi with some activities at the Mesra Campus on December 26- 27, 2013.
- o The 1963-69 Batch celebrated their "Golden Jubilee Reunion" at the BIT Mesra Campus during February 17 -19, 2014.
- o The 1964-69 Batch celebrated their "Golden Jubilee Reunion" at Ranchi with a day's activity at the Mesra Campus on February 22, 2014.

Alumni Lecture Series

The first lecture of the series was delivered by our Distinguished Alumni, Shri Sanjay Nayak, Chief Executive Officer & Managing Director, Tejas Network. This was organized on October 25, 2013.

STUDENTS' ACTIVITIES



Birla Institute of Technology, Mesra Ranchi has around 18 clubs and societies. Every calendar year these clubs/societies organize events round the year. The Association for Computing Machinery (ACM) organized a 7-day workshop for the underprivileged students was carried out by the ACM student's chapter from the 23rd January , 2014 to 29th January ,2014 , under the supervision of the faculty advisors , Dr.K.S. Patnaik and Prof. Bhaskar Karn. The workshop was aimed at teaching the students daily DTP work, and provides a general awareness of computers. Further ACM organized a Code Quotient Matches (CQMs) on weekly basis and Algorithm week for the students of BIT, Mesra. Three events were conducted in Pantheon 2013. These were Bug hunt, Codzilla and Byte. IEEE organized various events during Pantheon, Vertechx and BITOTSAV, they are Up in the air, Cash flow, Puzzler, Mock cat, 4 pic 1 word, and Tech-charades. IEEE members were given the responsibility of inviting guest lecturers and they were successful in bringing in famous personalities such as Mr. Nachiket More, Mr. Pranjal Modi, Mr. Mohd. Nawab, Mr. Kushal K Banerjee, Mr. Sumit Sharma, Mr. Prajakt Raut, and Mr. Arvind Sinha. The different workshops organized by IEEE were Mock CAT by BYJU (Participation Number:100), C and Data Structures workshop (Participation number: 250) and Photoshop workshop.

SAE organized Auto Quizzes in BITOTSAV and Pantheon 2013. Workshop on Computer aided Engineering (CAE) using CATIA software was conducted by SAE with an objective of explaining the basics of 3-D designing to the students. They organized an event GO GREEN in which the teams were asked to come up with an idea for making the exhaust of an automobile less polluting and eco-friendly. It saw a participation of 40 students. Team Srijan participated in FSAE Italy held at Varano de' Melegari Racing

=== ANNUAL REPORT ====

Circuit. The team was successful in putting up a satisfying performance. MOC CAT was also organized by SAE in association with T.I.M.E. Team Firebolt 4.0 after qualifying the virtual round participated in BAJA SAE INDIA '14 held at NATRAX Pithampur, Indore. The team claimed a spot in top 10 in Cost and CAE events and returned back with an inspiring performance.

The Environmental Protection and Awareness Club(EPAC) organized successfully a two day training programme on Disaster Management in September 2013. It focuses on evacuation and wall climbing's using ropes and protective measures. The event had more than 100 participants. Yet another grand event was the "Jharkhand Science and Environment Festival (JSEF)" organized every year in January. JSEF is a platform for school going students of Jharkhand to showcase their models on environmental sustainability. Apart from model making, JSEF conducts debate, and quiz competitions for the students. This year JSEF witnessed participation of 19 schools and more than 300 participants from across Jharkhand. EPAC organizes clean drive and green modeling during Pantheon and Bitotsav. IETE organized IETE National Student Congress 2014 during 1st to 2nd February 2014. Among other events IETE organizes Control Circuit Design Workshop, TI Analog & Embedded Technology, a seminar on Texas Instruments Microcontrollers & Analog Portfolio was devoted to deeper understanding of system design being organized by Cranes Technologies; PCB DESIGNING : It helped acquiring of skills for making a PCB for the circuit designed. Infinity Groups has taken the onus of conducting this event, and PLC and SCADA Workshop (2nd Sept. to 14th Sept. 2013) conducted by PROLIFIC. Guest Lectures by Dr. Surendra Pal (President, IETE New Delhi) Mr. Pratyush Anand (Engineering Specialist, ST Microelectronics) was also conducted. During Pantheon and BITOTSAV they organized event Circuit Design and Techno Sight respectively.

IET Students chapter organized workshops on networking, Mat lab, C/C++, Linux, Advanced Linux, and Python. IET conducted three events during Pantheon'13 namely "ultimate engineer", "ad mad" and "blitzkrieg". During Bitotsav the club got the chance to organize two events namely "Google it out" and "Blitzkrieg". IET also organized successfully a 2 day tech fest, VERTECHX, along with 4 other technical clubs namely ACM, SAE, Team Robolution and IEEE. The aim of IET has been of sharing and spreading knowledge and of providing a platform where the technical skills of the students can be groomed.

Photographic Society a two day photography event called 'PHOTOFEST 13' in which various photography events were organized and put up an open air photo gallery, which was also appreciated by Hindustan Times. The society also organized two Photography workshops and one Photo editing workshop with a participation of about 250 students. Further Photographic society carried out the Annual Batch Photography, and provided full coverage in PANTHEON 13' and BITOTSAV 14', CONVOCATION 2014 and visit of dignitaries including Chairman CK Birla. LEO club started their annual events with Blood Donation Camp that was organized on 11th August 2013 in collaboration with Rotaract Club and NSS, the camp saw participation from BIT college students and Ranchiets. This was followed by Dandiya Night (organized on 5th October, 2013), and Deepotsav (5th November, 2013). The last event, Esperanza was on 14th January, 2014. They also participated in Pantheon and BITOTSAV. The Fine Arts Society (FAS) prepares the Staircase welcome poster every year. It also conducted pencil and charcoal painting, Dandiya Nite, Deepotsav, JSEF in association with other clubs. FAS organized "Exuberance", a one day event based on Halloween in association with Rotaract club. FAS play an important role in decorating the inner campus and stages during Convocation, BITOTSAV and PANTHEON every year.

Dance Club organized Raazmataaz, an intra-college dance competition where teams battle for the most famous 'Sindhuri trophy'. Team Infection Crew and Ms.Sumanjima Das won the competition in the respective group and solo dance genres. On the occasion of the New Year ESPERANZA' 14 was organized in association with Leo and Rotaract Club. Groovaloose, an inter-college group dance competition and was

conducted during the Dance Nite of BITOTSAV'14. The Nite also witnessed the breathtaking performances of India's Best Dubstep Dance group, the 'D-Maniax' from Dehradun. The competition was judged by the 'D-Maniax' Group. Teams Zenith & Anarchists stood as the top 2 dance teams of the competition. Informal events like 'Chance Pe Dance' and 'Footloose' were conducted as a part of day events during the fest.

BIT's first ever Literary Library started in August, 2013 by the Literary Society. It is a self-funded library, which started with only a few students willingly contributing a part of their literary collection to the library. Now it has a decent collection of more than 120 novels in Hindi and English. The central library also has a literary section now, based on books recommended by the Literary Society. Aastha Suneja a professional writer discussed her bestseller novel with the students. All the writers and speakers in the college were invited. Corporate exposure was provided to them and moreover it was an inspirational talk for all those writers and speakers who wanted to polish their skills. Literary Society also participated in All India Essay Competition organised by United Nations and Sri Ram Chandra Mission. Out of the seven entries that were shortlisted by the Society, Deboshree Banerjee received award for Zonal Best Entry in English, Sushant Kumar and Ezaz won regional awards for Hindi and English respectively. Mr. Ayush Srivastava won the first prize in English Short Story Writing event in the Green Beans event held at Kamala Nehru College, New Delhi. Mr. Rahul Saxena won the first prize in National English Impromptu event in the Spring Fest, IIT Kgp. Doordarshan(Ranchi) had invited Literary Society for anchoring of Doordarshan's regular event "Yuvadarshan". Mr. Ayush Srivastava interviewed an author and that show was telecasted in May.

The Dramatics society has been regularly performing Nukkad Natak on Independence Day and Republic Day on social issues like Unity in Diversity or discussing today's education system in our country. One of the very popular nukkad of this society has been the one on women's harassment in the backdrop of Delhi's barbaric December incident which was played on the Republic Day at BIT. The Dramatics Society also contributes to the intracollege fest Pantheon and intercollege fest Bitotsav with its opening night. Here, we showcase Mime in which action speaks instead of words. Mime performances on "Donate Your Eyes", "Race of Life"; have effectively touched the hearts of people with heart throbbing enactments. After these heart touching mimes, we have Musical Skits to lighten up the mood with full entertaining skits. The participants from Dramatics society won the Spring Fest at IIT Kharagpur. Nukkad Natak on "Misguiding Media" and Play on "30 Days in September"- showcasing to raise our voice against molestation, were terrific enacts last year which touched the heart of Institute fraternity. This helped them to win third position in nukkad and second position in play, and overall winning the Spring Fest.

News and Publication Society (NAPS) published three issues of the official college newsletter 'BIT by BIT' this year. The first issue aimed at making the fresher batch acquainted with the Institute and its norms, basic facilities, favorite hangouts and gave them a glimpse of all the activities carried out by the various clubs and societies of the Institute. The issues that followed focused mainly on the Technical Fest of the Institute, Pantheon. Whereas the second issue enlisted the various events to be conducted throughout the fest and enclosed a schedule for the same, its successor presented highlights of the journey and comprised of a number of interviews, them being of the guest lecturers for Pantheon. NAPS started its own intra college radio, 'BIT Radio Reverb' and broadcasted five shows, which were much appreciated by all. The most creative and possibly the most fun idea that NAPS came up with this year was setting up its own photo booth, the fanfare desk, in Pantheon and Bitotsav, where people were invited to get themselves clicked along with various props and placards. The club also organized the event 'Watchammacallit' in Bitotsav, where teams were required to guess a word on the basis of the sentences describing the word, given by one of the members of the team, but the sentences were not to include certain banned words.

ANNEXURE

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24.	Dr. Arbind Kumar-I, Prof. In-charge, Energy Management
25.	Dr. T. Ghose, Dean (Sponsored Research)
26.	Dr. Bijay Kr. Singh, Dean (Pot Graduate & Research)
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28.	Dr. Kunal Mukhopadhyay, Professor & HoD, Bio-Engineering
29.	Dr. A.P. Krishna, Professor & HoD, Remote Sensing
30.	Dr. Utpal Baul, Professor & HoD, Management
31.	Dr. Amar Nath Jha, I/c. Lalpur Off campus
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5	Dr. Swapan Konar	Physics		
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13	Dr. Utpal Baul	Management		
14	Dr. B. N. Sinha	Pharmaceutical Sciences & Technology		
15	Dr. Vinay Sharma	Production Engineering		
16	Dr. A. P. Krishna	Remote Sensing		
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3	BIT Off Campus, Jaipur B.S.I.R. Campus 27, Malviya Industrial Area Jaipur – 302017 Phone: 0141-4019798/4019812 Fax: 2751614	8	BIT Off-Shore Campus, Muscat Waljat College of Applied Science P.O. Box No. 197, Rusayal Postal Code – 124 MUSCAT, Sultanate of OMAN Phone: 00968-24449193 Fax: 00968 - 24449196		
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XXIV CONVOCATION, April 9, 2014

