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Director's Report

Honourable Chairman, Board of Governors of the Indian Institute of Technology Kanpur, Professor M. Anandakrishnan, Distinguished Chief Guest, Dr. E. Sreedharan, Members of the Board of Governors, Members of the Academic Senate, all graduating students and their family members, members of faculty, staff and students, invited dignitaries, guests, and members of the media: I heartily welcome you all on this occasion of the forty-fourth convocation of the Indian Institute of Technology Kanpur.

We are particularly happy to welcome Dr. E. Sreedharan, Padmavibhushan, former Managing Director of Delhi Metro, amongst us for today's forty - fourth convocation.

The academic year closing in May 2012 has been momentous, and I consider it a privilege to review our activities pertaining to this period.

ACADEMIC ACTIVITIES

The academic year 2011-12 has had a successful run. The number of graduating students at the undergraduate levels, 633 and the postgraduate levels, 401 shows a satisfactory trend. In addition, 101 Ph.D students have graduated over the last academic year.

AWARDS AND HONOURS

This year has brought many honours to the Institute. It has been ranked No. 1 amongst engineering institutes in India by ZEE News-DNA-IPSOS survey as well as by India Today.

The Institute has also received the India Today Award for making the most innovative use of technology by offering and using it in a way that enriched life.

I am delighted to inform you that SIDBI Innovation and Incubation Center (SIIC), IIT Kanpur has been selected for the National Award for Technology Business Incubators for the year 2011 by DST's National Science and Technology Entrepreneurship Development Board.

The many prestigious scholarships and awards received by our students have been a matter of pride and pleasure for us.

Dipendra Kumar Misra, Kartikey Asthana, Massand Sagar Sunil, Shikhar Sharma received the *O P Jindal Scholarship*. Ankit Kumar, and Ashish Gupta received the World Quant Scholarship. In addition, Shouvik Sachdeva, Anshul Kumar Rai, Akash Goel, have been conferred the Aditya Birla Scholarship. And this year also, all 8 Japanese *TODAI scholarships* were awarded to IITK students - Meenakshi Khosla, Anyesha Ghosh, Tanmay Gupta, Asish Mahapatra, Vishwas Aggarwal, Taun Kumar Baranwal, Siddharth Sharma, and Kartikey Asthana.

Our students' research work has also received significant recognition, both nationally and internationally. Mr. Puneet Singh and G Sriram (AE) won the American Helicopter Society student design competition for the best new entry. Mr. Rajesh Vasita (BSBE) received the Bajpai Saha Award for the best oral presentation at the Fourth Indo-Australian Conference on Biomaterials, Tissue Engineering and Regenerative Medicine. Mr. Chandra Shekhar Sharma (CHE) got the Innovative Student Projects Award 2011 from INAE, India. Mr. Ankur Verma (CHE) received the Shah-Schulman Award for the best Ph.D. Thesis in the area of Colloid and Interface Sciences at the CHEMCON 2011, Bangalore. Mr. Anurag Awasthi and Ms. Avani Nandini (CSE) won the Popular Choice Award for their project, and a Gold Medal at the Intel India Embedded Challenge (IIEC), 2011. Mr. Kewal Dharamashi (ME) received the first prize in ASME's Asia Pacific Competition as well as the Best Technical Paper Award. Ms. Shail Pandey (PHY) received the Buti Young Scientist Award in the 26th National Symposium on Plasma Science and Technology. The list of other awards received by the students is given at the end of this report. I congratulate all these students and their supervisors for these accomplishments.

Our faculty has played a significant role in pushing the frontiers of knowledge. And this has been duly recognized in the form of various awards and honours, including fellowships of professional societies and editorships of international journals.

Prof. Kalyanmoy Deb (ME) received the *Infosys Prize 2011* in the category of Engineering and Computer Science. It gives me immense pleasure to tell you that we now have three faculty members and five alumni as Infosys Prize winners. Dr. Binod Sreenivasan (ME) has been awarded the *Swarnajayanti Fellowship* by the Department of Science and Technology. Prof. Sanjay G. Dhande (CSE & ME), Director of the Institute, has been awarded the degree of *Doctor of Science (honoris causa)* in recognition of his contributions in the fields of technical education and engineering research and technology by Uttarakhand Technical University, Dehradun. Prof. Sandeep Verma (CHM) and Dr. Yogesh M. Joshi (CHE) have been awarded the *DAE-SRC Outstanding Investigator award*. Prof. S. Ganesh (BSBE) received the *Rajib Goyal Award* for Young Scientist by the Goyal Foundation, Kurukshetra University. Dr. Tarun Gupta, (CE) (2011) and Dr. Pratik Sen (CHM) (2012) have been awarded the prestigious *Indian National Science Academy (INSA) young scientist medal*. Dr. Priyanka Ghosh (CE) received the *IEI Young Engineers Award* 2011-2012 by the Institution of Engineers (India). Dr. Shalabh (MATH) has been selected for the *Prof. C. R. Rao National Award* for Young Statisticians by the Ministry of Statistics and Programme Implementation, Government of India, for significant work in the field of statistics. Prof. Avinash Kumar Agarwal (ME) has received the *INAE Silver Jubilee Young Engineer Award*. Dr. J. Ramkumar (ME) has been selected for the *IEI Young Engineers Award* 2011-2012 in Production Engineering discipline. Dr. Kantesh Balani (MSE) has been selected by Elsevier as a recipient of the *Materials Science and Engineering C: Young Researcher Award* for the year 2011. Dr. Kantesh Balani (MSE) also received the Young Leader Professional Development Award, TMS, USA. Dr. Soumik Mukhopadhay (PHY) has been honoured with the *Young Achiever Award* in the 56th DAE Solid State Symposium in Dec 2011. Prof. Satyajit Banerjee (PHY) received the NASI-Scopus Young Scientist award for Physics, 2012 by the National Academy of Sciences, Allahabad. A special invited session in the Catalysis and Reaction Engineering Division was held in honour of Prof.

Santosh K. Gupta (CHE) during the Annual Meeting of American Institute of Chemical Engineering held in Minneapolis in Oct 2011. This honour is in recognition of the outstanding work by Prof. Gupta in the area of Polymer Reaction Engineering.

The year 2011 had been declared as the International Year of Chemistry by the UN. On this occasion, an empowered committee of DST identified the Top Chemistry Departments in the country and sanctioned Rs. 250 lakh to each for augmentation of their facilities. It gives me great pride to tell you that our department of Chemistry was chosen for this grant.

RESEARCH & DEVELOPMENT OVERVIEW

The number of externally funded ongoing projects has reached 522 with a sanctioned amount of is Rs. 344 crore. During 2011-2012, the Institute got sanctions for 107 sponsored projects worth Rs. 5871 lakh and 74 consultancy projects of value Rs. 727 lakh. The major grants sanctioned by various agencies during the year are DST Rs. 3160 lakh, DBT Rs.410 lakh, MOES Rs. 342 lakh, DRDO Rs. 189 lakh, MNRE Rs. 115 lakh, and MOEF Rs. 101 lakh. Some of the major industries which have funded projects are BHEL, NABARD, Thermax, TCS, L&T, IOCL, Samsung and GE. At the international level, organizations like EATON, P&G, Chevron, and Boeing have funded our research. A list of major projects is given at the end of the report.

During the year 2011-12, 15 technologies developed at the Institute were licensed for commercialization, while we filed 13 national patents (2 design patents). In the last financial year, our earnings from intellectual property are around Rs. 62 lakh. SIIC has come up with a comprehensive booklet on *Proprietary Technologies of IIT Kanpur*.

15 companies are currently being incubated at SIIC while 17 have already graduated. There are 4 current Incubate companies that have achieved a turnover of more than 100 lakh. More than 300 people work at these incubate companies at SIIC.

The Institute exercised its first Exit Option from its Incubate Company *Geokno India Pvt. Ltd.* The reputed infrastructure corporate GMR Projects Pvt. Ltd bought 13% equity stake of the Institute at a premium of 25%.

I am happy to inform you that the following technologies developed at the Institute have been recognized and launched at the national level.

SIMRAN, a GPS based Real Time Train Information System jointly developed by IITK and RDSO was inaugurated by the Hon'ble Minister of Railways in October 2011.

Jugnu Micro Satellite was successfully launched with the PSLV C18 rocket on October 12, 2011 from Sriharikota.

Digital Mandi for Indian Kisan was inaugurated by Mr. Kapil Sibal, the Hon'ble Minister of Communications and Information Technology and Minister of Human Resource Development in August 2011.

Further, several Softwares have been developed during the year. They are structural dynamic analysis of helicopter rotor blades (developed and transferred to RWR&DC HAL) (AE); a code that combines CPMD and GULP to perform QM/MM calculations of periodic solids and polymers (CHM); MTA a Plug-In utility for quantum chemical ab initio Software, Molecular Cluster (CHM); Brihaspati3 (EE); Brihaspati Sync (EE); EMS (EE); Strategic Innovation Game (IME); Real-time web-based simulation game to study Entrepreneurial decision Making (IME); Virtual Production Shop Simulator (IME); Web-based production shop simulation software (IME) and indigenously developed Engine Endoscopy Technique (ME).

Several Technologies have been developed during the year. They include an arrangement for jet engine to reduce noise (AE); Low flow prototype denuder using non-selective membrane (CE); Composite reusable adhesive (CHE); Miniature lenses, systems and methods of making the same (CHE); Micropattern generation with pulsed laser diffraction (CHE); Cancer detection system (CHE); Integrated Bragg Gratings for CWDM communications (EE); first Prototype of Electronic Fuel Injection Diesel Locomotive for Indian Railways (ME); A process for improving mobility of a pentacene based thin film transistor by field assisted deposition (MSE); Formulation and inkjet printing of TiO2 nanoparticle incorporated organic dielectric ink (MSE); preparation of fine grained Cu-Al-Ni shape memory strip from pre-alloyed argon gas atomized powder or elemental powder mixture, via hot densification rolling of powder performs (MSE) and Integrated Bragg Gratings for CWDM communications (LTP).

Major projects sanctioned during 2011-12

I am happy to inform you that DRDO has sponsored a project on Aero-Elastic Study of Turbo-Machinery Blades under GATET Scheme. The project will involve validation and optimization of a theoretical model of turbo-machinery aero elasticity already developed at IIT Kanpur, experimental study of forced response of a cascade, and development of a laboratory cascade model to simulate cascade flutter.

MOES India and NERC UK has sponsored a project on the structure and dynamics of groundwater systems in northwestern India under past, present and future climates. India is the largest agricultural user of groundwater in the world. In fact, northwestern India is now a hotspot of groundwater depletion, with 'the largest rate of groundwater loss in any comparable-sized region on Earth'. This project is based on the premise that we must first understand the geology and geometry of the aquifer system before we can hope to estimate the way it will respond to a complex set of future stresses.

The project entitled Generation of Solar Hydrogen is a multi-institutional initiative, coordinated by IIT Kanpur and supported by the Technology Systems Development Program of DST, New Delhi. Participating Institutes include IIT Madras, DEI Agra, IIT Jodhpur, CECRI Karaikudi and BARC Mumbai. The project aims at developing workable designs of a solar hydrogen generation system using multiple technologies. The project aims at conducting research to develop and identify the best possible photo-electro-catalysts suitable for large scale applications. Apart from the photocatalytic route, an electrolyzer integrated to a PV module and a thermochemical approach will be developed for hydrogen generation.

DST has funded a project on Research and Development of Ingazno4 (IGZO) large area Electronics and its applications to Active Matrix Flat Panel Displays. In contrast to the microelectronics industry, large area electronics is still an emerging technology in which India has the capability to join the race. This project will be a step in that direction.

DST has also funded a project Thematic Unit of Excellence on Soft Nanofabrication with applications in Energy, Environment and Bioplatforms as a 2nd phase of the Unit on Nanosciences. The Unit has many state-of-the-art resources for nanofabrication and characterization (e.g., SEM, e-beam, photolithography, nanoimprinting, profilometers, micro-Raman, NSOM, SPMs, LB/BAM, XRD, SAXS, ellipsometer, PECVD, sputtering, imaging, etc.). The basic thrust of the Unit involving participation of around ten faculty groups spread over different departments is in developing soft materials, structures and devices within 100 nm size and exploit their applications in three areas: energy, environment and bio-applications/health.

In addition, DST has sponsored a project to set up five different PV technologies of mono-crystalline, multi-crystalline, amorphous thin film silicon, CIGS thin film and multi-junction high efficiency concentrators with trackers to monitor and collect data objectively, analyze their performance and to find levelized cost of Electricity (LCOE) of each of these technologies.

RESEARCH INFRASTRUCTURE DEVELOPMENT

The Institute strives to provide state-of-the-art equipment to its faculty, students and staff to facilitate cutting edge research in the frontier areas of science and technology.

Nanoscale Imaging Facility

The Institute is in process of setting up a facility for materials and biological science at a cost of about Rs. 15 crores. The facility will house a HRTEM and a cryo-TEM along with the complete infrastructure/accessories for materials and biological sample preparation. The HRTEM will be FEI make Titan G2 60-300 model, the world's most powerful commercially available STEM/TEM. The microscope will have the most advanced, most recent technology detectors, attachments and imaging system with state of the art capability for imaging at sub-Angstrom scale, and diffraction and X-ray spectroscopy at nanometer scale. The facility will be commissioned and available for researcher by the end of 2012.

During the year, the Institute has procured the following facilities under its CARE scheme: A Distributed Fiber-Optic Strain and Temperature Sensing System, Contact Angle Goniometer, FTIR based Emission Measurement System for Air Pollutant measurement, Plasma Cleaning System: A TEM sample preparation accessory, Autoclave for curing of Polymer Matrix Composites. It also granted funds for upgradation of the old console for 400 MHz high resolution NMR Spectrometer under CARE.

In addition, to give a boost to infrastructure for research, the Institute provided a grant of Rs. 2.5 crore to each department. This has led to wide spread augmentation of equipments and facilities across the Institute.

Some laboratories established in the Institute are virtual instrumentation laboratory (AE); a Flame/Fire dynamics laboratory (AE) and a general purpose laboratory for Production Shop Simulation and Smart Systems and Operations Laboratory (IME).

INTERNATIONAL ACADEMIC COLLABORATIONS

For promoting scientific and academic co-operation, the Institute has entered into MoUs with the University of Rhode Island, USA, Brown University, USA, the Université libre de Bruxelles, the University of Melbourne, Australia, Pontifícia Universidade Católica do Rio de Janeiro, Ecole Centrale Nantes, University of Applied Science, and Politecnico Di Torino, Italia.

FINANCIAL RESOURCE MOBILIZATION

The year 2011-12 has continued the upwards growth in financial resources of the Institute. The total Grant-in-aid received during the financial year from MHRD, Govt. of India, under non-plan was Rs. 186.60 crore and under Plan Rs.187.00 crore.

The year was good for fund raising as well. The Institute received Rs. 5.83 crore from 888 donations made by 690 donors (334 donors from India and 356 donors from abroad). A total of 421 donors (164 donors from India and 257 donors from abroad) contributed Rs. 60.5 lakh under the Annual Gift Programme (AGP). Donations received under AGP have been utilized for providing travel support to the students for attending international conferences, rewarding students for publishing research papers in high quality journals, travel support to international visiting faculty, filing of patents, students scholarships and other activities supporting and encouraging excellence in the Institute. During the financial year 2011-12, the Institute provided travel support to 114 students for attending international conferences, and cash awards to 129 students for publication of their research papers in reputed ISI Web Journals.

The Class of 1986 has contributed their batch fund for establishing Tinkering Lab that will provide basic mechanical and electrical tooling facilities. Once the lab gets going, there is a possibility of substantial additional funding from DST to make it a national innovation lab.

Several individual and corporate donors have created chairs and awards to recognize excellence in the Institute. Mr. Jageet S. Bindra, donor of Mrs. & Mr. Gian Singh Bindra Faculty Research Fellowship has converted this fellowship to Mrs. & Mr. Gian Singh Bindra Memorial Chair in the Department of Chemical Engineering. Mr. Kamalesh Dwivedi (BT/EE/79) and Mrs. Rita Dwivedi have instituted Pandit Girish Ranjan & Sushama Rani Pathak Chair. Housing and Urban Development Corporation Ltd (HUDCO) has instituted HUDCO Chair.

Mr. Bogineni Chenchu Rama Naidu (MT/MSP/82) has created the Bogineni Chenchu Rama Naidu Merit Award; Mr. Khairati Lal Chaudhary has created the Lalit Kishore Chaudhary Memorial Award; Mr. Cherian Mathew (BT/CSE/08) has created the Dr. Elizabeth & Dr. Varkey Cherian Scholarship and award, and Mr. Sanjeev Narayan Khadilkar (PHD/CSE/95) has created the Gurubandhu Challenge prize.

In addition, several donors have instituted new scholarships during the financial year 2011-12. To mention only a few: AIM FOR SEVA [Mr. Arun Kapoor (BT/ME/67)] has instituted the Padma Kapoor Memorial Scholarship; Ministry of Steel has instituted 5 scholarships named Ministry of Steel Scholarship; Mr. Ashish Shukla (MSc5/MTH/97) has instituted the Giridhar Gopal Shukla Memorial Scholarship; Mr. Saibal Dutt (BT/EE/77) has instituted the Smt. Neela Dutt Scholarship; Dr. Ashok Jain (MTech/CE/1971, PHD/CE/78) has instituted the Sri Babu Ram Jain Memorial Scholarship in memory of his father.

Dr. Shashi M. Kuppa (BT/CE/85) has instituted a Distinguished lecture series in the Department of electrical engineering in the name of his father, Prof. M. Ramamoorthy.

Mrs. Asha Jadeja has donated US$ 2.01 lakh towards the Rajeev Motwani Building for CSE department.

The 1972 batch has donated towards establishing the yoga and aerobics hall in the new student's sports complex, which has been renamed as the *1972 Batch Yoga and Aerobics hall*.

The SURGE program was conducted during summer 2011 with applications invited from 122 institutes. 95 students participated in the program. 72 faculty members participated from IIT Kanpur as mentors. The selection of student participants was very competitive as 2600 applications were received from various institutions in the country, which gives a clear indication of its increasing popularity.

Using the alumni donations, the Institute has also created a *Scholar in Residence* program under which eminent scholars are invited to come to IIT Kanpur and interact with students and faculty. The first visitor under this was Mr. Michael Danino, an eminent historian.

Furthermore, the Institute has created Department Excellence Funds for every department to support excellence in academics and research.

The Institute is working on an ambitious plan for raising substantial resources to increase the research and development activities on campus and hopes to launch the drive in the year 2012-13.

STUDENTS' ACTIVITIES

IIT Kanpur continues its drive to encourage an equitable balance between academics and extra-curricular activities among its students. Our vision is to create future leaders in their fields of interest and not just technically accomplished individuals. The

Institute strongly believes that an abiding social and humane engagement is the hallmark of its student body. To translate such a belief into reality, the Institute nurtures social, cultural and sporting activities pursued by the students' gymkhana and other student groups. With a firm belief in self governance, Students' Gymkhana continues to provide a platform to all students to pursue their interest. The coming year will also witness the *Golden Jubilee of Students' Gymkhana.*

A variety of activities are pursued by various clubs coming under the broad ambit of the councils of the Students' Gymkhana. They range from clubs like *Prayas,* where students teach children coming from socially disadvantaged and economically deprived backgrounds, to the *Dramatics* club which stages thematically inspired and socially relevant plays. The *Music club* is actively working on launching a music album of its own, a first of its kind initiative by any student group in India. It has composed three patriotic songs and is working on composing Anthem for IIT Kanpur. Apart from these, Vox Populi, the campus newspaper provides news from every aspect of the campus community. Efforts to establish a full-fledged studio for photography are also being made and progress has been made in this regard. Our students' talents and achievements in such activities have received national level recognition. The Institute's quiz team secured third place (first among IIT's) in *Nihilanth'12* (inter-IIT-IIM quiz competition). And this year the Institute's cultural team won the *Overall Championship* at Antaragni as well as IITD's cultural festival.

Other technically oriented student groups as part of the Science And Technology Council are engaged throughout the year in pursuing special interests such as robotics, electronics, astronomy, aero-modeling, business, programmimg, HAM, Rubik's cube. This time we have successfully completed many challenging projects such as Microsoft Touch Table, Hexapod (six legged robot bot), and *India's first student made in house Planetarium* which is all set to enter the Limca book of records. Also, we have put up a splendid show in IITB's Technical festival and in the Intel Embedded Challenge. We have also successfully set up the IIT Kanpur chapter of the Society of Automative Engineers and are all set to take part in Formula SAE 2012 which is going to be held in December.

The overriding objective of large-scale events such as *Antaragni* (the cultural festival), *Techkriti* (the technical and entrepreneurship festival) and *Udghosh* (the sports festival) is to infuse a sense of richness and purpose in the lives of students. All these social, cultural and sporting activities play a crucial role in the transformation of a student into a complete human being. These festivals have seen vastly improved participation levels, both from within the Institute and also from students from other national and international institutions. The revenues generated for conducting these festivals saw an impressive growth last year, which is a tribute to the managerial and logistical skills of our students.

The Institute sports teams participated in the Inter IIT Sports meet held at IIT Kharagpur this year. The Badminton men's team and the Cricket team were successful in securing Gold medals. This year our campus saw the addition of a new Rock Climbing wall and an air-conditioned gymnasium to the Institute Facilities.

Our students also organized several on campus inter-Hall competitions such as *Galaxy, Takneek, Spectrum* and *Varchasva,* the inter-Hall Cultural, Science & Technology, Media and Sports championships respectively. A fresher Varchasva tournament was also organized to find some new talent within the freshers batch. The guiding principle behind organizing these events is to provide the students a much needed platform to compete and showcase their cultural and sports talents. Furthermore, such occasions provide a reason and a motivation for students to come out of their rooms and participate in group activities.

In addition to the above, the students also organised a significant Energy Saving Competition amongst hostels called *Green Opus*. The results were astounding in that the students just through internal competition were able to markedly reduce the average energy consumption in the halls. Results from all the five Inter Hall Competitions were then used to identify the winner of the *Overall Championship Trophy*.

The Counseling Service is an active wing of our students. Its activities include organizing the orientation programme for UG as well as PG students; providing specific attention to students having academic, financial or personal problems; and monitoring the progress of students who need special attention. It enjoys wide appreciation amongst faculty and students.

The Institute also continued successfully with the Career Counseling programme this year with almost a two-fold rise in the number of students availing this facility.

The campus placement programme saw active participation by several companies with many old recruiters registering their presence once again after the recession in 2007. Apart from an overwhelming response from the traditional Consulting, FMCG and the core engineering sectors, the e-commerce sector registered a sizeable presence with a total of 30 job offers from companies such as Myntra, Flipkart and Snapdeal.

785 students registered for placements this year, of which 714 received job offers from 185 companies. Thus the overall placement record stands at 91% as on 5th of May, 2012. The break-up is as follows: B.Tech 92%, Dual 96%, M.Tech including M.Des 84%, Integrated M.Sc 90%, M.Sc 2 yr 35%, and MBA 96%. Results from some of the companies that participated in the placement process are still awaited.

The Institute has put in place the entire infrastructure necessary to meet the requirements of the enhanced student strength. As of now, there are eleven halls of residence, nine for boys and two for girls. The total capacity in these halls is over five thousand.

CLOSING REMARKS

Dear graduates, on this occasion of the forty-fourth convocation, I extend my heartiest congratulations and best wishes to the Class of 2012 passing out today. This hard-earned success is a major milestone in your career. I also take this opportunity to salute your parents who have ensured your success and glory in all you have chosen to do through their constant quiet support.

As individuals you will choose the profession that excites you, that generates intellectual passion within yourself, engages your mind in the best possible way. I fervently hope that you are successful in your endeavors. Today, you will be leaving the protected environment of the Institute to find your place in the larger order of society. Prepare yourselves to evaluate the needs of others and respond to the call for action. It is people like you who keep our flag flying high.

I admire you for your fine accomplishments during your stay at IIT Kanpur. Given your intellectual attainments and breadth of understanding, you are destined to bring cheer, hope, joy and luck in all the lives you touch. Each of you in your own way has internalized the spirit of IIT Kanpur that imbibes commitment, excellence, fellowship, and, importantly, service. No matter where you are, continue to dream and dream big at that! My sincere, good wishes for the productive work you aspire to do in the future.

Jai Hind.

Books published

1. Gas Turbine Propulsion, D. P. Misra (AE), Annamaya Publisher, New Delhi.
2. Engineering Thermodynamics, D. P. Mishra (AE), Cengage Learning India Pvt. Ltd, India.
3. Advanced Control of Aircraft, Spacecraft and Rockets, Ashish Tewari (AE), John Wiley & Sons, Chichester, U.K.
4. Automatic Control of Atmospheric and Space Flight Vehicles, A. Tewari (AE), Springer (Birkhauser), Boston, USA.
5. Introduction to Integral Calculus - A systematic studies with engineering applications for beginners, Ulrich L. Rohde, G, C. Jain, Ajay K. Poddar and A. K. Ghosh (AE), Wiley, USA.
6. Introduction to Differential Calculus - A systematic studies with engineering applications for beginners, Ulrich L. Rohde, G, C. Jain, Ajay K. Poddar and A. K. Ghosh (AE), Wiley, USA.
7. SI adaptation Solid Waste Engineering and Solution Manual, Worrell and Vesilind and Tarun Gupta (CE), Cengage Learning, CT, USA.
8. Psychological Model of Illness, Dr. Rajbala Singh, former PhD student (HSS), Cambridge Scholars Publishing, U.K., 2011. This book is published based on her PhD work.
9. Economics of Nuclear Power: Modeling and Scenario Analysis for Light Water Reactors in India, Dr. Saurabh Sharma, Prof. Anoop Singh (IME) and Prof. M S Kalra (ME), LAP LAMBERT Academic Publishing, Saarbrucken.
10. Optimality conditions in convex optimization. A finite-dimensional view, Anulekha Dhara and Joydeep Dutta (MATH), CRC Press, Taylor and Francis, Boca Raton, FL.
11. Heat Transfer (Second Edition), P S Ghoshdastidar (ME), Oxford University Press.
12. Multi-Objective Evolutionary Optimisation for Product Design and Manufacturing, Wang, L., Ng, A. and Deb, K. (ME), Springer-Verlag., London.
13. Advanced Structural Ceramics, Bikramjit Basu and Kantesh Balani (MSE), John Wiley & Sons, Inc., USA.
14. Tribology of Ceramics and Composites: Materials Science Perspective, Bikramjit Basu (MSE) and Mitjan Kalin, John Wiley & Sons, USA.
15. The Science and Engineering of Materials, Donald R. Askeland et al (Book Adaptation), Kantesh Balani (MSE), Cengage Learning, USA.

Fellowships

1. Prof. C Venkatesan (AE) has been elected as associate Fellow of American Institute of Aeronautics and Astronautics (AIAA).
2. Prof. R. P. Chhabra (CHE) has been elected to the Fellowship of the Indian Academy of Sciences, Bangalore.
3. Dr. Jayant K. Singh (CHE) has received Alexander von Humboldt Research Fellowship, Alexander von Humboldt Foundation.
4. Prof. Ashutosh Sharma (CHE) received J. C. Bose National Fellowship.
5. Prof. Faiz A. Khan (CHM) has been elected as a Fellow of the National Academy of Sciences, Allahabad for his outstanding contribution to Organic Synthesis.
6. Prof. Faiz A. Khan (CHM) has been elected to the Fellowship of the Indian Academy of Sciences, Bangalore.

7. Dr. S. P. Rath (CHM) has received Alexander von Humboldt Research Fellowship, Alexander von Humboldt Foundation.
8. Prof. S. Sarkar (CHM) received Ramanna Fellowship of the Department of Science and Technology.
9. Dr. S. P. Rath (CHM) received AvH Research Fellowship for Experienced Researcher by AvH Foundation.
10. Prof. S. R. Gadre (CHM) received Prof. B. D. Tilak Visiting Fellowship by ICT, Mumbai.
11. Prof. S. N. Singh (EE) became Fellow of the Institution of Engineering and Technology, UK.
12. Dr. Prashant Bagad (HSS) has been awarded the Endeavour Research Fellowship by Australian Government.
13. Prof. P. Chandra (MATH) has been elected as President, 2012, Indian Society of Theoretical and Applied Mechanics.
14. Prof. Kalyanmoy Deb (ME) has been awarded the National J. C. Bose Fellowship by DST.
15. Prof. Kalyanmoy Deb (ME) has been elected as an IEEE Fellow for his contributions to evolutionary multi-criterion optimization techniques.
16. Dr. Binod Sreenivasan (ME) has been awarded the prestigious Swarnajayanti Fellowship for the year 2010-11 by the Department of Science and Technology.

Awards and honours

1. Prof. C Venkatesan (AE) became Member of National Board on Micro-Air Vehicle Program, DRDO-DST National Program.
2. Prof. S. Ganesh (BSBE) received Rajib Goyal Award for Young Scientist of Goyal Foundation, Kurukshetra University, Kurukshetra.
3. Prof. S. Ganesh (BSBE) received CDRI Award for Excellence in Drug Research for the year 2012 of Central Drug Research Institute, CSIR, Lucknow.
4. Dr. Priyanka Ghosh (CE) received the IEI Young Engineers Award 2011-2012 of the Institution of Engineers.
5. Dr. Tarun Gupta (CE) received the Indian National Science Academy (INSA) young scientist medal in their Atmospheric Sciences and Earth Sciences Division for the year 2011.
6. Dr. Rajesh Sathiyamoorthy (CE) received IGS-Prof. G.A. Leonards Prize for the Best Doctoral Dissertation in Geotechnical Engineering for 2009-2010 of Indian Geotechnical Society.
7. Dr. Yogesh Joshi (CHE) received a prestigious DAE-SRC Outstanding Investigator Award of Department of Atomic Energy.
8. A special invited session in the Catalysis and Reaction Engineering Division was held in honour of Prof. Santosh K Gupta (CHE) during the Annual Meeting of American Institute of Chemical Engineering held in Minneapolis in Oct 2011. This honour is in recognition of the outstanding work by Prof. Gupta in the area of Polymer Reaction Engineering.
9. Dr. Jayant K. Singh (CHE) selected for the membership of the National Academy of Sciences India, Allahabad.
10. Prof. Ashutosh Sharma (CHE) elected as INAE Chair Professor of INAE.

11. Prof. Sandeep Verma (CHM) received a prestigious DAE-SRC Outstanding Investigator Award of Department of Atomic Energy.
12. Dr. Pratik Sen (CHM) has been selected for the Indian National Science Academy Young Scientist Medal for the year 2012 for his contributions to ultra-fast excited state processes in molecules.
13. Prof. J. K. Bera (CHM) received the Chemical Research Society of India (CRSI) Bronze Medal in recognition of his outstanding contributions to Organ Metallic Chemistry of Transition Metals and its application to Catalysis.
14. Prof. D. Goswami (CHM) received Bharat Jyoti Award of India International Friendship Society, New Delhi.
15. Prof. R. N. Mukherjee (CHM) received Priyadaranjan Ray Memorial Award of Indian Chemical Society, Kolkata.
16. Prof. Manindra Agrawal (CSE) has been awarded the H. K. Firodia award for excellence in Science and Technology.
17. Dr. Arnab Bhattacharya (CSE) received Yahoo faculty research and engagement award.
18. Prof. S. C. Srivastava (EE) received Outstanding Engineer Award 2012 of PES/IAS Chapter, UP.
19. Dr. R. S. Anand, Principal Research Engineer (EE) has been awarded the Indira Gandhi Shiromani Award for Outstanding Individual Achievements & Distinguished services to the Nation.
20. Dr. Vimal Kumar (HSS) has been selected as one of the winners of the Founders Award honouring Peri Arnold for the Best paper given at the 2010 American Political Science Association [APSA] conference.
21. Dr. Prashant Bagad (HSS) has been awarded the Erasmus Mundus Academic Scholarship of European Commission.
22. Dr. P. M. Prasad (HSS) has been awarded the Erasmus Mundus Academic Staff Scholarship of European Commission.
23. Prof. Arvind K Sinha (HSS) and Dr. Swagato K Ray (MATH) have been awarded the Distinguished Teacher Award-2011.
24. Prof. A. K. Mittal (IME) has been conferred with the M.C. Puri Memorial award for the year 2010 of the Operational Research Society of India.
25. Prof. A. K. Mittal (IME) was honoured by IIT Kanpur as an Institute Fellow.
26. Prof. RRK Sharma (IME) has been selected as AIMS (All India Management Scholars) International Fellow at FLAME (Foundation of Liberal Arts and Management Education), Pune.
27. Prof. Anoop Singh (IME) has been invited to join the Working Group on Power for the 12th Five Year Plan (Subgroup on Legislative and Policy Issues) of the Planning Commission.
28. Prof. P. Chandra (MATH) received Distinguished Service Award of Vijnana Parishad of India, 2012.
29. Dr. Shalabh (MATH) received Prof. C.R. Rao National Award for Young Statisticians, 2011, Ministry of Planning and Programme Implementation, Government of India.
30. Prof. Kalyanmoy Deb (ME) has been selected for the Distinguished Alumnus Award 2011 of IIT Kharagpur.
31. Dr. J. Ramkumar (ME) has been selected for the IEI Young Engineers Award 2011-2012 in Production Engineering discipline.

32. Prof. Kalyanmoy Deb (ME) has been awarded Infosys Prize 2011 in Engineering and Computer Science.
33. Prof. Kalyanmoy Deb (ME) has been awarded the V. Cajastur Mamdani Prize for Soft Computing of the European Centre for Soft Computing, Spain.
34. Prof. S. G. Dhande (CSE & ME) has been awarded the Degree of Doctor of Science (Honoris Causa) in recognition of his contributions in the fields of Technical Education and Engineering Research and Technology.
35. Prof. A. K. Agarwal (ME) received the INAE Silver Jubilee Young Engineer Award of Indian National Academy of Engineers, India.
36. Prof. A. K. Agarwal (ME) received Dr. C. V. Raman Young Teachers Award: 2011 for Excellence in the field of Engineering Education, IES, Bhopal.
37. Prof. Bikramjit Basu (MSE) received the MRSI Medal for 2012 of the Materials Research Society of India.
38. Dr. Kantesh Balani (MSE) has been selected by Elsevier as a recipient of Materials Science and Engineering C: Young Researcher Award for the year 2011.
39. Dr. Kantesh Balani (MSE) received Young Leader Professional Development Award, TMS, USA.
40. Dr. Vivek Verma (MSE) received Shri Ram Arora Award.
41. Dr. Soumik Mukhopadhay (PHY) has been honoured with the Young Achiever Award in the 56th DAE Solid State Symposium in Dec 2011.
42. Prof. Satyajit Banerjee (PHY) received NASI-Scopus Young Scientist award for Physics, 2012 of National Academy of Sciences, Allahabad.

Editorships

1. Prof. C Venkatesan (AE), Member, Journal of Aerospace Sciences and Technologies published by Aeronautical Society of India.
2. Prof. Balaji Prakash (BSBE), Member, Guha Research Conference (GRC).
3. Prof. S. Ganesh (BSBE), Review Editor, Frontiers in Evolutionary and Population Genetics published by Frontiers Research Foundation, Lausanne, Switzerland.
4. Prof. Mukesh Sharma (CE), Member, Editorial Board, Journal of Human and Ecological Risk Assessment (HERA) published by Taylor and Francis Group.
5. Dr. Tarun Gupta (CE), Member, Editorial Board of Journal of Civil & Environmental Engineering published by OMICS Publishing Group.
6. Prof. Ashu Jain (CE), Member, Editorial Board of ISH Journal of Hydraulic Engineering published by Taylor and Francis.
7. Dr. Debajyoti Paul (CE), Member, Editorial Board of Chemical geology published by Elsevier.
8. Prof. Ashutosh Sharma (CHE), Member, Editorial Board, ASME Journal of Micro- and Nano-Manufacturing published by American Society of Mechanical Engineers.
9. Prof. Ashutosh Sharma (CHE), Member, Editorial Board, Nanomaterials and Energy, published by ICE Publishing, UK.
10. Prof. Ashutosh Sharma (CHE), Member, Editorial Board, Chemical Engineering Science, published by Elsevier.
11. Prof. Sandeep Verma (CHM), Editorial Board of the Journal of Chemical Sciences published by the Indian Academy of Sciences, Bangalore.
12. Prof. R. N. Mukherjee (CHM), Member of the Dalton Transactions Advisory Board published by the Royal Society of Chemistry, Cambridge, England.

13. Dr. Mainak Chaudhury (CSE), Associate Editor (Computer Architecture), ACM Computing Surveys, published by Association for Computing Machinery (ACM).
14. Prof. S. N. Singh (EE), Editorial Advisory Board of the International Journal of Energy Sector Management (IJESM) published by Emrald Publication, UK.
15. Dr. Praveen Kulshreshtha (HSS), Member, Editorial Board, Journal of Microeconomics published by Mind Reader Publications, New Delhi.
16. Prof. M. Gupta (MATH), Member, Editorial Board, of Proceedings of the National academy of Sciences, India, (Section A - Physical Sciences) published by Springer.
17. Prof. P. Chandra (MATH), Member, Editorial Board, of Proc. National Academy of Science, India, Ser-A published by Springer.
18. Prof. P. Chandra (MATH), Member, Editorial Board of Differential Equations and Dynamical Systems published by Springer.
19. Prof. D. Kundu (MATH), Member, Editorial Board of Statistical Theory and Practice published by Taylor and Francis.
20. Prof. V. K. Jain (ME), Member, Editorial Board of Journal of Engineering Manufacture (Proceedings of IMechE - Part B) published by Professional Engineering Publishing Ltd., London (U.K.).
21. Prof. Ghoshdastidar (ME), Associate Editor of Heat Transfer Research published by Begell House, USA.
22. Prof. Avinash Kumar Agarwal (ME), Member, Editorial Board of International Journal of Oil, Gas and Coal Technology, published by Inderscience Publishers, Switzerland.
23. Prof. Bikramjit Basu (MSE), Member, Editorial Board of Materials Technology: Advanced Performance Materials published by the Institute of Materials, UK.
24. Dr. Krishanu Biswas (MSE), Member, Editorial Board of Journal of Materials and Metallurgical Engineering published by STM Journals.
25. Prof. Bikramjit Basu (MSE), Member, Editorial Board of Journal of Biomedical Materials Research: Part B published by Wiley Journal.
26. Prof. Bikramjit Basu (MSE), Associate Editor of Biomaterials and Biodevices published by VBRI Press.
27. Dr. Tapobrata Sarkar (PHY), Editorial board of the ISRN High Energy Physics published by Hindawi.
28. Dr. Dipankar Chakrabarti (PHY), Member, Editorial Board of ISRN High Energy Physics journal.
29. Prof. Satyajit Banerjee (PHY), Member, Editoral Board of Superconducting Science and Technology published by Institute of Physics, UK.

Students' awards

1. Mr. Puneet Singh and G Sriram (AE) won the American Helicopter Society student design competition for best new entry.
2. Mr. Ravi Kant Pandey, Research Scholar, (BSBE) received the Best Paper presentation by young scientists (poster session) in the XXXV All India Cell Biology Conference held at NISER Bhubaneswar.
3. Mr. Rajesh Vasita (BSBE) received the Bajpai Saha Award for best oral presentation at the Fourth Indo-Australian Conference on Biomaterials, Tissue Engineering and Regenerative Medicine, Sardar Patel University, Gujarat, Feb. 2011.

4. Mr. Ravi Kumar Verma, Research Scholar, (BSBE) received International Travel Award at the 56th Annual Biophysical Society Meeting held in Feb. 2012 in San Diego, U. S. A.
5. Ms. Ujjwala (CE) received Best Poster Award in SURGE 2011.
6. Ganti Ravikumar (CE) awarded financial assistance for meritorious students to attend AGU2011 in San-Francisco, USA.
7. Mr. Ankur Verma (CHE) received Shah-Schulman Award for the Best Ph.D. Thesis in the area of Colloid and Interface Sciences, at CHEMCON 2011.
8. Mr. Ankur Verma (CHE) received Malhotra-Weikfield Foundation Nanoscience Fellowship 2011 at 4th Bangalore Nano 2011.
9. Mr. Chandra Shekhar Sharma (CHE) got Innovative Student Projects Award 2011 – INAE, India.
10. Mr. Shashwat Shivam (CHE) and Mr. Rohit Gupta (EE) emerged as North Zone Winner and National 2nd Runner-Ups at Mahindra AQ Quizzing event.
11. Ms. Amritha Rammohan, Mr. Sumit Barthwal (CHE) received best Poster Award for Cantilever arrays for bio-chemical sensing at ICONSAT 2010.
12. Ms. Avani Nandini, Ms. Parul Agarwal, Ms. Kritika Singh (CSE) won the 2012 Google India Anita Borg Award. They were amongst the 9 winners from among 377 applicants.
13. Mr. Anurag Awasthi, Ms. Avani Nandini (CSE) won Popular Choice Award for their project and Gold Medal at Intel India Embedded Challenge (IIEC), 2011.
14. Ms. Avani Nandini (CSE) won best student Poster Award for Embedded Eyes for Blind at Grace Hopper Celebration for Women in Computing, 2011.
15. Ms. Avani Nandini (CSE) stood at third place in undergraduate category in ACM student research competition for What if Application Demands Phonetic Similarity, 2011.
16. Ms. Avani Nandini (CSE) won Grace Hopper Scholarship of Facebook, 2011.
17. Mr. Varunesh Mishra (CSE) won Best Poster in IBM Collaborative Academia Research Exchange (I-CARE) on Fourier Domain Scoring based Bug Report Summarization, 2011.
18. Mr. Purushottam Kar (CSE) got honourable mention at Yahoo Key Scientific Challenges Global Competition.
19. Ms. Parul Agarwal's (CSE) paper was accepted for Grace Hopper Celebration for Women in Computing, 2011.
20. Mr. Shubhadip Mitra, Ashish Agrawal, Rohit Gurjar (CSE) were awarded the TCS Research Scholarship.
21. Mr. Ranjith Nair (EE) received 2nd Best Student paper Award in ACDOS 2012 at IISc Bangalore.
22. Mr. Tathagata Bhowmick (EE) has received the best Poster Award at XVI IWPSD 2011 Workshop.
23. Mr. Raghvendra Kumar Chaudhary (EE) has been awarded the Best Paper Award in session at 5th Antenna Test and Measurement Society (ATMS).
24. Mr. T. Bhowmick (EE) got the Best Poster in Optoelectronics in the International Workshop on Physics of Semiconductor Devices held at IIT Kanpur.
25. Mr. Kewal Dharmashi (ME) was declared as one of the three winners of the Inaugural version of ASME ICED Undergraduate Presentation Competition.
26. Mr. Kewal Dharamashi (ME) received the First Prize in ASME's Asia Pacific Competition apart from the Best Technical Paper Award. The award is for his work

on laser ignition of natural gas air mixtures carried out in our Engine Research Laboratory.

27. A group of students (ME) won the first prize at the USID Gurukul for designing an educational board game for high school children.
28. Ms. Shail Pandey (PHY) received the Buti Young Scientist Award for her paper titled Observation *of electron plasma waves inside large amplitude electromagnetic pulses in a temporally growing plasma* in the 26th National Symposium on Plasma Science and Technology.
29. Mr. Samit Paul (PHY) received the PSSI Poster Award for his poster titled *Physics of capillary guiding of focussed ion beams* in the 26th National Symposium on Plasma Science and Technology.
30. Ms. Seema Devi (PHY) received a cash prize and a certificate of excellence in a poster presentation titled *Elastic scattering normalized synchronous fluorescence spectroscopy for multicomponents extraction from human cervical tissues*, in The XXXVI Optical Society of India Symposium on Frontiers in Optics and Photonics.

Major projects sanctioned

- Aero-Elastic Study Of Turbo-Machinery Blades (DRDO-GTRS);
- Musculoskeletal Stem Cells In Tissue Regeneration (DBT);
- Using A Unique Tool Genetic Tool To Study The Role Of Bmp Ligands In Neurogenesis And Gliogenesis In The Developing Cortex (DBT);
- Indo-Max Planck Centre For Computer Science (IMPECS) (DBT);
- Engaging Farmers, Enriching Knowledge: Agropedia Phase II (NAIP);
- Thematic Unit Of Excellence On Soft Nanofabrication With Applications In Energy, Environment And Bioplatforms (DST);
- Stand-Off Detection Of Explosives Based On Immunochemical Techniques (PSA);
- The Structure And Dynamic Of Groundwater System In Northwestern India Under Past, Present And Future Climates (MOES);
- Hydrometeorological Feedback And Changes In Water Storage And Fluxes In Northern Indian Basins (MOES);
- Cosmic Rays-Cloud-Climate Conundrum: Can Ion-Aerosol Near Cloud Mechanism Explain The Observed Correlations (MOES);
- Top Chemistry Departments In The Country (DST);
- Stability And Performance Of Photovoltaic (STAPP) (DST);
- A 1mw Re-Synchronizable Autonomous Grid: Dc-Ac Inversion & Grid Size Paralleling (DST);
- Miniaturized Polymaric Fluidic Pumps Based On Principle Of Peristalsis (ADA);
- Development Of Non-Contact Ultrasonic NDT Based On LBU And EMAT Technique For Defect Detection In Panels (ARDB);
- Experimental Investigations On Combustion Characteristics And Emission Reductions Of A Laser Fired Hydrogen Engine (MNRE);
- Fuel Spray And Combustion Visualization Using Endoscope In Biodiesel Fuelled Direct Injection Engine For Optimal Fuel Injection Strategy And Emission Reduction (DST);
- Lithographic Approach To Assemble And Manipulate Spindle And Asters: Understanding Cell Division Through Experiment And Modeling (DBT);

- Comprehensive Water Modeling Facility For Steelmaking Process Analysis And Design (MOS);
- First Principle Studies On Ferroic Oxides (DST);
- Research And Development Of Ingazno4 (IGZO) Large Area Electronics And Its Applications To Active Matrix Flat Panel Displays (DST).

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Chiarman,
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Ministry of Human Resource Development
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Shri R. D. Sahay
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Professor Manindra Agrawal
Dean of Resource Planning & Generation
Indian Institute of Technology, Kanpur
Kanpur-208016

SECRETARY:

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Acting Registrar
Indian Institute of Technology Kanpur
Kanpur-208016

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(As on 31.03.2012)

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Kanpur-208016

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Former Senior Advisor & Former Chairman
& Geography Managing Director, Accenture
26, Crescent Park
2B, Rest House, Crescent Road,
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Shri Ashok Thakur
Special Secretary
Government of India
Department of Secondary Education & Higher Education
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Shastri Bhawan
New Delhi – 110 001

Shri Ajay Narayan Jha
Joint Secretary & Financial Adviser
GOI, Department of Higher Education
Ministry of Human Resource Development
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Prof. Neeraj Misra
Department of Mathematics and Statistics
Indian Institute of Technology Kanpur
Kanpur – 208 016

SECRETARY:

Dr. Rakesh Kumar Sachan
Acting Registrar
Indian Institute of Technology, Kanpur
Kanpur – 208016

LIST OF MEMBERS OF THE BUILDING & WORKS COMMITTEE

(As on 31.03.2012)

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Indian Institute of Technology, Kanpur
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Head, Deptt. of Planning & Architecture
Indian Institute of Technology, Roorkee
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Shri Mohan Swaroop
Addl. Director General (Retd.), CPWD
H-Block, 54-A, Sector-22
Noida- 201 301

Shri B M Agarwal
Retd. Engineer-in-Chief, UP Irrigation
102, Ravinder Garden
Sector-E, Aliganj
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Shri R K Govil
Chief Engineer (Northern Zone-II), CPWD
3rd Floor, Kendriya Bhawan
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Indian Institute of Technology, Kanpur
Kanpur – 208016

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SENATE
[From 01.04.2011 to 31.03.2012]

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Indian Institute of Technology Kanpur
Kanpur

Dy. Director

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Prof. S C Srivastava	w.e.f . 01.09.2011

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Prof. Ashok Kumar	w.e.f. 26.03.2012
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Prof. Ashok Khanna	
Prof. Ashutosh Sharma	
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Prof. Nishith Verma	
Prof. V Shankar	w.e.f. 26.03.2012
Prof. Nitin Kaistha	w.e.f. 26.03.2012

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Prof. R Gurunath	w.e.f. 26.03.2012
Prof. Manas Kumar Ghorai	w.e.f. 26.03.2012

Prof. Jitendra K Bera	w.e.f. 26.03.2012
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Prof. Pradip Sircar
Prof. Baquer Mazhari
Prof. A K Chaturvedi
Prof. R K Bansal
Prof. S N Singh
Prof. Shyama P Das
Prof. Yatindra N Singh
Prof. Laxmidhar Behera
Dr. A K Jagannatham w.e.f 01.10.2011
Prof. K S Venkatesh w.e.f. 26.03.2012
Prof. A R Harish w.e.f. 26.03.2012
Prof. S Sundar Kumar Iyer w.e.f. 26.03.2012

HUMANITIES & SOCIAL SCIENCES (HSS)

Prof. (Ms) Lilavati Krishnan
Prof. Binayak Rath Upto 31.01.2011
Prof. A K Sharma
Prof. K K Saxena
Prof. A K Sinha
Prof. B K Pattnaik
Prof. G Neelakantan
Prof. Surajit Sinha
Prof. (Ms) Achla M Raina
Prof. (Ms) Shikha Dixit
Prof. Munmun Jha

INDUSTRIAL & MANAGEMENT ENGINEERING (IME)

Prof. A K Mittal
Prof. N K Sharma
Prof. Kripa Shanker
Prof. Arun P Sinha
Prof. R R K Sharma
Prof. Jayanta Chatterjee
Prof. Rahul Varman

MATERIALS SCIENCE AND ENGINEERING (MSE):

Prof. S P Mehrotra Upto 30.4.2012
Prof. Brahma Deo

Prof. R C Sharma
Prof. Dipak Mazumdar
Prof. Rajiv Shekhar
Prof. Sandeep Sangal
Prof. B K Mishra Upto 04.12.2011
Prof. Deepak Gupta
Prof. (Ms) Monica Katiyar
Prof. Anish Upadhyaya
Prof. Bikramjit Basu w.e.f. 26.03.2012

MATERIALS SCIENCE PROGRAMME (MSP):

Prof. Jitendra Kumar

MATHEMATICS & STATISTICS DEPARTMENT (MTH & STATS):

Prof. R K S Rathore
Prof. (Ms) Manjul Gupta
Prof. M K Kadalbajoo
Prof. Prawal Sinha
Prof. G P Kapoor
Prof. Peeyush Chandra
Prof. V Raghavendra
Prof. I D Dhariyal
Prof. (Ms) Shobha Madan
Prof. Debasis Kundu
Prof. Pravir Kumar Dutt
Prof. Neeraj Misra
Prof. B V Rathish Kumar
Prof. D Bahuguna
Prof. P Shunmugaraj
Prof. Arbind Kumar Lal
Prof. Alok Kumar Maloo
Prof. (Ms) Mohua Banerjee w.e.f. 26.03.2012
Prof. (Mrs) Rama Rawat w.e.f. 26.03.2012
Prof. S Ghorai w.e.f. 26.03.2012
Prof. Joydeep Dutta w.e.f. 26.03.2012
Prof. Amit Mitra w.e.f. 26.03.2012
Dr. Shalabh Upto 30.11.2011

MECHANICAL ENGINEERING (ME):

Prof. M S Kalra
Prof. V K Jain
Prof. N N Kishore
Prof. Himanshu Hatwal
Prof. P M Dixit
Prof. K Muralidhar

Prof. Gautam Biswas
Prof. Prabhat Munshi
Prof. S K Choudhury
Prof. N S Vyas
Prof. Kalyanmoy Deb
Prof. P S Ghoshdastidar
Prof. Subrata Sarkar
Prof. P K Panigrahi
Prof. Bhaskar Dasgupta
Prof. N Venkata Reddy

Prof. Bishakh Bhattacharya	w.e.f. 26.03.2012
Prof. Kamal K Kar	w.e.f. 26.03.2012
Prof. Avinash Kumar Agarwal	w.e.f. 26.03.2012
Prof. Sumit Basu	w.e.f. 26.03.2012
Prof. Ashish Datta	w.e.f. 26.03.2012
Prof. P Venkitanarayanan	w.e.f. 26.03.2012
Dr. J Ramkumar	Upto 30.11.2012

PHYSICS (PHY):

Prof. R K Thareja
Prof. Keshawa Shahi
Prof. Rajendra Prasad
Prof. Debashish Chowdhury
Prof. R C Budhani
Prof. Y N Mohapatra
Prof. Avinash Singh
Prof. Deshdeep Sahdev
Prof. V Ravishankar
Prof. Pankaj Jain
Prof. H C Verma
Prof. M K Harbola
Prof. K P Rajeev
Prof. Mahendra K Verma
Prof. (Ms) Asima Pradhan
Prof. (Ms) R Vijaya

Dr. Zakir Hossain	Upto 30.09.2011
Dr. Anjan Kumar Gupta	Upto 30.11.2011
Prof. S Anantha Ramakrishna	w.e.f. 26.03.2012
Prof. Amit Dutta	w.e.f. 26.03.2012
Prof. Satyajit Banerjee	w.e.f. 26.03.2012

Librarian

Dr. V D Shrivastava

Secretary Senate

Shri Sanjeev S Kashalkar Upto 08.03.2012
Registrar
Indian Institute of Technology Kanpur
Kanpur

Dr. Rakesh Kumar Sachan w.e.f 09.03.2012
Acting Registrar
Indian Institute of Technology Kanpur
Kanpur

THREE NOMINEES OF THE CHAIRMAN, BOARD OF GOVERNORS
(FROM 01.11.2010 TO 31.10.2011)

1. Dr. Tushar Kanti Chakraborty
   Director
   Central Drug Research Institute
   Lucknow – 226 001

2. Dr. AK Verma
   General Manager
   H.A.L Lucknow,
   Lucknow

3. Prof. MP Dubey
   Dean Faculty of Arts
   University of Allahabad
   Allahabad

THREE NOMINEES OF THE CHAIRMAN, BOARD OF GOVERNORS
(FROM 01.11.2011 TO 31.10.2012)

1. Prof. Manoj K Mishra
   Vice Chancellor
   University of Lucknow
   Lucknow

2. Dr. AK Verma
   General Manager
   H.A.L Lucknow,
   Lucknow

3. Mr. Najeeb Jung
   Vice Chancellor
   Jamia Millia Islamia
   Jamia Nagar
   New Delhi

SENATE STANDING COMMITTEES:
[FROM 01.10.2010 TO 30.09.2011]

(1) SENATE EDUCATIONAL POLICY COMMITTEE:

(a) MEMBERS (EX-OFFICIO):

1. Chairman, Senate : **Chairman**
2. Chairman, SPGC
3. Chairman, SUGC

(b) SENATE NOMINEES:

1. Prof. Somnath Biswas (CSE)
2. Prof. Debasish Kundu (MATHS)
3. Prof. P K Bharadwaj (CHM)

(c) STUDENTS' SENATE NOMINEES:

1. Mr. C Rahul (Y6142), crahul@iitk.ac.in
2. Mr. Vivek Agarwal (Y7513) agvivek@iitk.ac.in

(2) SENATE ELECTIONS COMMITTEE:

SENATE NOMINEES:

1. Prof. G P Kapoor (MATHS)
2. Prof. V K Jain (M E)
3. Prof. A K Ghosh (A E)

(3) SENATE LIBRARY COMMITTEE:

(a) LIBRARY:

Librarian : Dr. V D Shrivastva

(b) SENATE NOMINEES:

1. Dr. Peeyush Mehta (IME)
2. Dr. A R Harish (EE)
3. Dr. Aneesh Upadhyay (MME)
4. Dr. P M Prasad (HSS)

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. P M Mohite AE
2. Dr. Ashwani Kumar Thakur BSBE Upto 28.09.2010
   Dr. Mainak Das BSBE w.e.f 28.9.2010

3.	Dr. S Sivakumar	CHE
4.	Dr. J K Bera	CHM
5.	Dr. Saumyen Guha	CE
6.	Dr. Harish Karnick	CSE
7.	Dr. L Behera	EE
8.	Dr. Prashant Bagad	HSS
9.	Dr. Ashok K Mittal	IME
10.	Dr. Y N Singh(EE)	LTP
11.	Dr. I Sharma	ME
12.	Dr. Ashish Garg	MSE
13.	Dr. Rajeev Gupta	MSP
14.	Dr. Parasar Mohanty	MTH & STAT.
15.	Dr. P Munshi	NET
16.	Dr. Amit Dutta	PHY
17.	Dr. Jayanta Chatterjee (IME)	M DES

(d) STUDENTS' SENATE NOMINEES :

1. Mr. Puneet Singh (Y8378), punsingh@iitk.ac.in
2. Mr. Sanchit (Y8442), sanset@iitk.ac.in

(4) SENATE POST-GRADUATE COMMITTEE:

(a) SENATE NOMINEE:

1. Dr. Gouthama MSE **- Outgoing Chairman**

2. Prof. Jayanta Chatterjee (I M E)

(b) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1.	Dr. Debopam Das	AE
2.	Dr. R Sankararamakrishnan	BSBE Upto 28.09.2010
	Dr. Dhirendra S Katti	BSBE w.e.f 28.09.2010
3.	Dr. J K Singh	CHE
4.	Dr. S P Rath	CHM
5.	Dr. Priyanka Ghosh	CE
6.	Dr. Purnendu Bose	EEMP
7.	Dr. Anil Seth	CSE
8.	Dr. Nandini Gupta	EE
9.	Dr. Vineet Sahu	HSS
10.	Dr. Peeyush Mehta	IME
11.	Dr. P Kumar (EE)	LTP
12.	Dr. N V Reddy	ME
13.	Dr. Aneesh Upadhyaya	MSE
14.	Dr. Kamal K Kar	MSP
15.	Dr. Joydeep Dutta	MTHS & STAT.

16. Dr. P Munshi	NET
17. Dr. Zakir Hossain	PHY
18. Dr. Munmun Jha (HSS)	M DES

(c) STUDENTS' SENATE NOMINEES:

1. Mr. A Y Santosh (Y9101001), aysan@iitk.ac.in
2. Mr. Bishwajeet Mandal (Y9114007), bmandal@iitk.ac.in
3. Mr. Mohammad Ashiq (Y9106064), mdashiq@iitk.ac.in
4. Mr. Abdullah Bin Abubaker (Y7108061), Abdullah@iitk.ac.in

(5) SENATE RULES COMMITTEE:

(a) MEMBER (EX-OFFICIO):

Parliamentarian of the Senate

(b) SENATE NOMINEES:

1. Prof. Sarvesh Chandra (C E)
2. Prof. Utpal Das (E E)
3. Prof. Deeraj Sanghi (CSE)

(6) SENATE SCHOLARSHIPS & PRIZES COMMITTEE:

(a) MEMBERS (EX-OFFICIO):

Head Institute Counselling Service
Chairman, APEC
Dean of Students' Affairs

(b) SENATE NOMINEES:

1. Prof. P S Ghoshdastidar (M E)
2. Dr. Siddharth Panda (CHE)
3. Dr Kantesh Balani (MME)
4. Dr. Amitabh Bandyopadhyay (BSBE)

(c) STUDENTS' SENATE NOMINEES:

1. Mr. Meet Pathak (Y8291), meetp@iitk.ac.in
2. Mr. Yash Sidana (Y7519), yashsid@iitk.ac.in
3. Mr. Ashutosh Sharma (Y7097), ashushar@iitk.ac.in

(7) SENATE STUDENTS' AFFAIRS COMMITTEE:

(a) MEMBERS (EX-OFFICIO):

Head Institute Counselling Service

One member of the APEC nominated by Chairman, APEC

One Warden of students; Hall of Residence nominated Chairman, COW

Dean of Students' Affairs : Chairman, Ex-Officio

(b) SENATE NOMINEES:

1. Prof. Rajat Moona (CSE)
2. Prof. Shikha Dixit (HSS)
3. Dr. Bharat Lohani (C E)

(c) STUDENTS' SENATE NOMINEES:

1. Mr. Deepanshu Arora (Y6927157), deepansh@iitk.ac.in
2. Mr. K S Rao (Y5209864), ksrao@iitk.ac.in
3. Mr. Abdullah Bin Abubaker (Y7108061), abdullah@iitk.ac.in
4. Mr. C Rahul (Y6142), crahul@iitk.ac.in

(8) SENATE UNDERGRADUATE COMMITTEE:

(a) SENATE NOMINEE:

1. Dr. Amit Prashant CE- **Outgoing Chairman**

2. Prof. Peeyush Chandra (MATHS)

(b) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. Brijesh Eshpuniyani	AE
2. Dr. Ashok Kumar	BSBE
3. Dr. Pankaj A Apte	CHE
4. Dr. Madhav Ranganathan	CHM
5. Dr. Pranab K Mohapatra	CE
6. Dr. Sumit Ganguly	CSE
7. Dr. J Akhtar	EE
8. Dr. Praveen Kulshreshtha	HSS
9. Dr. Arun P Sinha	IME
10. Dr. Asima Pradhan (PHY)	LTP
11. Dr. B Dasgupta	ME
12. Dr. R C Sharma	MSE

13. Dr. K Shahi (PHY)	MSP
14. Dr. Shalabh	MATHS & STAT.
15. Dr. P Munshi	NET
16. Dr. Sudeep Bhattacharjee	PHY
17. Dr. Braj Bhusan (HSS)-	M DES

(d) STUDENTS' SENATE NOMINEES:

1. Mr. C Rahul (Y6142) crahul@iit.ac.in
2. Mr. Vivek Agarwal (Y7513), agvivek@iitk.ac.in
3. Mr. Suraj Gupta (Y8517), surajg@iitk.ac.in
4. Mr. Pratik Moona (Y9433), pratikm@iitk.ac.in

SENATE STANDING COMMITTEES
[FROM 01.10.2011 TO 30.09.2012]

(1) SENATE EDUCATIONAL POLICY COMMITTEE:

(a) MEMBERS (EX-OFFICIO) :

1. Chairman, Senate : **Chairman**
2. Chairman, SPGC
3. Chairman, SUGC

(b) SENATE NOMINEES:

4. Prof. K Muralidhar, ME
5. Prof. Anish Upadhayaya, MSE
6. Progf. Yogesh Joshi, ChE

(c) STUDENTS' SENATE NOMINEES:

1. Mr. Shantanu Misra (Y7027410) shanm@iitk.ac.in
2. Mr. Rishant Singh (Y8419) rishant@iitk.ac.in

(2) SENATE ELECTIONS COMMITTEE:

SENATE NOMINEES:

1. Prof. Sudhir Mishra, CE
2. Prof. Pankaj Jain, Phy
3. Prof. K Srihari, Chem

(3) SENATE LIBRARY COMMITTEE:

(a) LIBRARY:

Librarian : Dr. V D Shrivastva

(b) SENATE NOMINEES:

1. Prof. R Prasad, Phy
2. Prof. S Ganesh, BSBE
3. Prof. Deepu Philip, IME
4. Prof. Monica Katiyar, MSE

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. D P Mishra	AE
2. Prof. Balaji Prakash	BSBE
3. Dr. Sri Sivakumar	CHE
4. Dr. S P Rath	CHM
5. Dr. Animesh Das	CE
6. Dr. Tarun Gupta	EEM
6. Prof. Amitabha Mukerjee	CSE
7. Prof. L Behera	EE
8. Dr. Koumudi P Patil	HSS
9. Prof. A K Mittal	IME
10. Prof. Y N Singh(EE)	LTP
11. Dr. I Sharma	ME
12. Dr. Vivek Verma	MSE
13. Dr. Rajeev Gupta(PHY)	MSP
14. Dr. Mohua Banerjee	MTH & STAT.
15. Dr.M S Kalra (ME)	NET
16. Dr. T K Ghosh	PHY
17. Dr. Koumudi P Patil(HSS)	M DES

(d) STUDENTS' SENATE NOMINEES:

1. Mr. Puneet Singh (Y8378), punsingh@iitk.ac.in
2. Mr. Mohammad Ashiq (Y9106064) mdashiq@iitk.ac.in

(4) SENATE POST-GRADUATE COMMITTEE:

(a) SENATE NOMINEE:

1. Dr. Zakir Hossain PHY - **Outgoing Chairman**
2. Prof. Phalguni Gupta, CSE

(b) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. P M Mohite	AE
2. Dr. Mainak Das	BSBE
3. Dr. Jayant K Singh	CHE

4. Dr.Manas K Ghorai	CHM
5. Prof. Rajiv Sinha	CE
6. Dr. S N Tripathi	EEMP
7. Dr. Anil Seth	CSE
8. Dr. Dr. P Sensarma	EE
9. Dr. Sarani Saha	HSS
10. Dr. R N Sengupta	IME
11. Dr. P Kumar (EE)	LTP
12. Dr. P Venkitanarayanan	ME
13. Dr. Krishanu Biswas	MSE
14. Prof. K Shahi (PHY)	MSP
15. Dr. Amit Mitra	MTHS & STAT.
16. Dr. P Munshi (ME)	NET
17. Dr. Satyajit Banerjee	PHY
18. Dr. Nachiketa Tiwari (ME)	M DES

(c) STUDENTS' SENATE NOMINEES:

1. Mr. Vinod Parmar (10114017) vinodp@iitk.ac.in
2. Mr. Ruchir Gupta (Y10104121) rgupta@iitk.ac.in
3. Mr. Karthik Balasundaram (10103066) karthikb@iitk.ac.in
4. Mr. Kanwar Deep Singh (11125025) kanwar@iitk.ac.in

(5) SENATE RULES COMMITTEE:

(a) MEMBER (EX-OFFICIO):

Parliamentarian of the Senate

(b) SENATE NOMINEES :

1. Prof. Neeraj Mishra, Maths
2. Prof. Somenath Biswas, CSE
3. Prof. P Bose, CE

(6) SENATE SCHOLARSHIPS & PRIZES COMMITTEE:

(a) MEMBERS (EX-OFFICIO):

Head Institute Counselling Service
Chairman, APEC
Dean of Students' Affairs

(b) SENATE NOMINEES:

1. Prof. D Goswami, Chem
2. Prof. S Guha, CE

3. Prof. Sanjeev Garg, ChE
4. Prof. Sandeep Verma, Chem

(c) STUDENTS' SENATE NOMINEES:

1. Mr. Meet Pathak (Y8291), meetp@iitk.ac.in
2. Mr. Vibhav Agarwal (Y8558), vibhav@iitk.ac.in
3. Mr. Jyoti Gupta(Y9265), gyoti@iitk.ac.in

(7) SENATE STUDENTS' AFFAIRS COMMITTEE:

(a) MEMBERS (EX-OFFICIO):

Head Institute Counselling Service

One member of the APEC nominated by Chairman, APEC

One Warden of students; Hall of Residence nominated Chairman, COW

Dean of Students' Affairs **: Chairman, Ex-Officio**

(b) SENATE NOMINEES:

1. Prof. Rama Rawat, Maths
2. Prof. Jayant Singh, ChE
3. Prof. Mukesh Sharma, CE

(c) STUDENTS' SENATE NOMINEES:

1. Mr. Aditya Gupta (Y8036) gaditya@iitk.ac.in
2. Mr. Sanchit Singhal (Y8442), sanset@iitk.ac.in
3. Mr. Abdullah Bin Abu Baker (Y7108061), abdullah@iitk.ac.in
4. Mr. Vivek Agarwal (Y7513), agvivek@iitk.ac.in

(8) SENATE UNDERGRADUATE COMMITTEE:

(a) SENATE NOMINEE:

1. Dr. Brijesh Eshpuniyani AE **- Outgoing Chairman**

2. Prof. K Subramaniam, BSBE

(b) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. A Kushari	AE
2. Prof. Pradip Sinha	BSBE
3. Dr. Pankaj A Apte	CHE

4. Dr. Nisanth Nair	CHM
5. Prof. Purnendu Bose	CE
6. Prof. Sumit Ganguly	CSE
7. Dr. A Jagannatham	EE
8. Dr. Suchitra Mathur	HSS
9. Prof. A P Sinha	IME
10. Dr. Asima Pradhan (PHY)	LTP
11. Dr.A K Saha	ME
12. Dr. Kantesh Balani	MSE
13. Prof. Jitendra Kumar	MSP
14. Prof. A K Lal	MATHS & STAT.
15. Dr. P Munshi (ME)	NET
16. Dr. Sudeep Bhattacharjee	PHY
17. Dr. Braj Bhusan (HSS)	M DES

(c) STUDENTS' SENATE NOMINEES:

1. Mr. Keshav Goel (Y7196) keshavg@iit.ac.in
2. Mr. Aditya Gupta (Y8036) gaditya@iitk.ac.in
3. Mr. Apoorva Agarwal (Y9125), apoorvag@iitk.ac.in
4. Mr. Mihir Jha (10399), mihirj@iitk.ac.in

The Faculty

There are thirteen departments and five interdisciplinary programs offering degrees at various levels in the Institute.

The faculty strength of the Institute as on March 31, 2012 was 348. Out of these 20 are shared by two departments on a half time basis. There were also 30 Academic staff comprising of Research Engineers/Scientific Officers/Design Engineers and Library staff, who are treated at par with faculty, on March 31, 2012. The Institute also had a number of Visiting Faculty members. 14 faculty members and 01 academic staff retired/voluntary retired/resigned (Technical); 03 visiting faculty/ academic staff have resigned/technical resigned/term over. 14 Faculty Members, 05 Visiting Faculty joined during the year. The Visiting/Distinguished/ Adjunct Faculty contribute significantly and they also get an opportunity to know the Institute.

AEROSPACE ENGINEERING DEPARTMENT

SANCTIONED STRENGTH: 20
EXISTING STRENGTH : 18

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 4458 E Rathakrishnan
2 4694 C Venkatesan
3. 4581 T K Sengupta
4. 4285 Sudhir Kamle
5. 4664 Kamal Poddar
6. 4696 Sanjay Mittal
7. 4660 Ashish Tewari
8. 4709 A K Ghosh
9. 4733 D.P. Mishra
10. 4785 C S Upadhyay

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4958 Abhijit Kushari
2. 4993 Debopam Das
3. *5129 Sivasambu Mahesh

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

1. 5288 P.M. Mohite

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5366 Rajesh Kitey

ASSISTANT PROFESSOR AGP-7000 (Contract) PB-3 (15600-39100)

1. 5396 Abhishek
2. 5403 Ashoke De
3. 5431 Rakesh Kumar

BIOLOGICAL SCIENCE & BIO-ENGINEERING

SANCTIONED STRENGTH: 15
EXISTING STRENGTH : 12

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 4959 Pradip Sinha
2. 5005 R Sankararamakrishnan
3. 5009 K Subramaniam
4. 5020 Subramaniam Ganesh
5. 5023 Balaji Prakash
6. 5119 Ashok Kumar
7. 5103 Dhirendra S Katti

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 5194 Anupam Pal

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

1. 5206 Amitabha Bandyopadhyay
2. 5207 (Ms) Jonaki Sen

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5376 Mainak Das
2. 5378 Ashwani Kumar Thakur

CHEMICAL ENGINEERING DEPARTMENT

SANCTIONED STRENGTH: 32
EXISTING STRENGTH : 19

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 3314 Deepak Kunzru
2. 3754 P K Bhattacharya
3. 4244 R P Chhabra
4. 4045 Ashok Khanna
5. 4562 Ashutosh Sharma
6. 4750 Goutam Deo
7. 4794 Nishith Verma
8. 5011 V. Shankar
9. 5016 Nitin Kaistha

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 5196 Siddharta Panda
2. 5106 Animangsu Ghatak
3. 5114 Yogesh Moreshwar Joshi
4. 5021 Sanjeev Garg
5. 5175 Jayant K Singh

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

1. 5208 Pankaj A Apte
2. 5298 Raj Ganesh S Pala
3. 5303 Sri Sivakumar

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5337 Raghvendra Singh
2. 5362 Abhijit Chatterjee

CHEMISTRY DEPARTMENT

SANCTIONED STRENGTH: 30
EXISTING STRENGTH : 30

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 3827 N Sathyamurthy
2 3791 S Sarkar
3. 4008 Y D Vankar
4. 4394 V Chandrasekhar
5. 4448 R N Mukherjee
6. 4462 P K Bharadwaj
7. 4047 N S Gajbhiye
8. 4460 S Manogaran
9. 4583 Veejendra K Yadav
10. 4596 Vinod K Singh
11. 4676 Amalendu Chandra
12. 4746 Faiz Ahmed Khan
13. 4759 S S Manoharan
14. 4789 Sandeep Verma
15. 4816 J N Moorthy
16. 5389 S R Gadre
17. 4760 K Srihari
18. 5071 Debabrata Goswami
19. 4876 R Gurunath
20. 5038 Jitendra K Bera
21. 5024 Manas Kumar Ghorai
22. 5056 M L N Rao

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 5127 Sankar Prasad Rath

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

1. 5236 Madhav V Ranganathan
2. 5091 Anantharaman Ganapathi
3. 5304 Nishanth N Nair
4. 5305 Pratik Sen

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5427 Dattatraya Hanumant Dethe
2. 5369 Ramesh Ramapanicker
3. 5432 Ashis Kumar Patra

ASSISTANT PROFESSOR AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience

CIVIL ENGINEERING DEPARTMENT

SANCTIONED STRENGTH: 33
EXISTING STRENGTH : 33

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 3462 Ashwini Kumar
2. 4209 Sudhir K Jain
3. 4399 Sarvesh Chandra
4. 4295 Vinod Tare
5. 4586 V K Gupta
6. 4464 S K Chakrabarti
7. 4799 Mukesh Sharma
8. 4662 Onkar Dikshit
9. 4663 Partha Chakroborty
10. 4695 Rajiv Sinha
11. 4690 Sudhir Misra
12. 4798 Rajesh Srivastava
13. 4775 Purnendu Bose
14. 4784 Soumyen Guha
15. 4793 Ashu Jain
16. 4871 Animesh Das
17. 4995 Durgesh C Rai
18. 5057 Sachidanand Tripathi

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4978 Javed N Malik

2. 5026 Bharat Lohani
3. 5079 Pranab Kumar Mohapatra
4. 5037 Nihar Ranjan Patra
5. 5192 Tarun Gupta
6. 5230 Priyanka Ghosh
7. 5307 Debajyoti Paul

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

1. 5152 Amit Prashant

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5346 Samit Ray Chaudhuri
2. 5347 (Ms) Prishati Raychowdhury
3. 5386 (Ms) Anubha Goel

ASSISTANT PROFESSOR AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience

1. 5387 Vinod Vasudevan
2. 5388 Shivam Tripathi
3. 5393 Sudib K Mishra
4. 5405 Rajesh Sathiyamoorthy

COMPUTER SCIENCE & ENGINEERING SANCTIONED STRENGTH: 18
EXISTING STRENGTH : 25

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. *3858 S G Dhande
2. 3972 Somenath Biswas
3. 4297 H C Karnick
4. 4370 T V Prabhakar
5. 4563 S K Aggarwal
6. 4490 Sanjeev Saxena
7. 4628 Rajat Moona
8 4754 Manindra Agrawal
9. 4627 Amitabha Mukerjee
10. 4300 Ratan Kumar Ghosh
11. 4385 Phalguni Gupta
12. 4645 Ajai K Jain
13. 4668 Dheeraj Sanghi
14. 4762 Sumit Ganguly
15. 4934 Anil Seth
16. 5010 Shashank K Mehta

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 5112 Mainak Chaudhuri
2. 5197 Surender Baswana
3. 5222 Peeyush P Kurur

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

1. 5268 Arnab Bhattacharya

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5372 (Ms) Krithika Venkataramani
2. 5383 Amey Karkare

ASSISTANT PROFESSOR AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience

1. 5382 Satyadev Nandakumar
2. 5392 Subhajit Roy
3. 5429 Raghunath Tewari

ELECTRICAL ENGINEERING

SANCTIONED STRENGTH: 53
EXISTING STRENGTH : 36

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 3927 Avinash Joshi
2. 4326 M Sachidananda
3. 4495 S C Srivastava
4. 4486 Prem Kumar Kalra
5. 4691 Shafi Qureshi
6. 3873 (Ms) Sumana Gupta
7. 4372 Govind Sharma
8. *4687 Utpal Das
9. 4566 A K Dutta
10. 4652 Animesh Biswas
11. 4478 Pradip Sircar
12. 4670 Baquer Mazhari
13. 4827 A K Chaturvedi
14. 4489 R K Bansal
15. 5003 S N Singh
16. 4776 Shyama P Das
17. 4771 Yatindra N Singh
18. 4833 K S Venkatesh
19. 4988 Laxmidhar Behera
20. 5013 A R Harish
21. 5113 S Sundar Kumar Iyer

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4938 K Vasudevan
2. 5012 Parthasarathi Sensarma
3. 5015 (Ms) Nandini Gupta
4. 5111 Adrish Banerjee
5. 5162 Ramprasad Potluri
6. 5293 Santanu K Mishra
7. 5295 Rajesh M Hegde

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

1. 5309 Kumar Vaibhav Srivastava
2. 5321 Naren Naik
3. 5326 Md Jaleel Akhtar
4. 5327 Nishchal Kumar Verma

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5343 Aditya K Jagannatham
2. 5344 Bahniman Ghosh
3. 5357 Pradeep Kumar K
4. 5363 Saikat Chakrabarti

HUMANITIES & SOCIAL SCIENCES

SANCTIONED STRENGTH: 31
EXISTING STRENGTH : 31

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 3838 (Ms) Lilavati Krishnan
2. 3983 A K Sharma
3. 4373 K K Saxena
4. 4016 A K Sinha
5. 4791 B K Pattnaik
6. 4729 G Neelakantan
7. 4488 Surajit Sinha
8. 4700 (Ms) Achla M Raina
9. 4702 (Ms) Shikha Dixit
10. 4773 Munmun Jha

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4957 (Ms) Suchitra Mathur
2. 5076 T Ravichandran
3. 5310 Praveen Kulshrestha
4. 4927 (Ms) Mini Chandran
5. 5075 P M Prasad

6. 5181 Braj Bhusan
7. *4976 Satyaki Roy
8. 5231 Kumar Ravi Priya

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

1. 5270 Sarani Saha

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5237 A V Ravi Shankar Sarma
2. 5287 Anindita Chakrabarti
6. 5332 Vineet Sahu
4. 5333 Vimal Kumar
5. 5335 P B Bagad
6. 5353 Nirmalya Guha
7. 5354 (Ms) Chaithra Puttaswamy

ASSISTANT PROFESSOR AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience

1. 5367 (Ms) Sohini Sahu
2. 5409 Anirban Mukherjee
3. 5410 (Ms.) Tanika Chakraborty

ASSISTANT PROFESSOR AGP-6000 (Contract) PB-3 (15600-39100)

1. *5183 (Ms) Koumudi Prakash Patil
2. 5331 (Mrs) Shatarupa Thakurta Roy

INDUSTRIAL & MANAGEMENT ENGINEERING

SANCTIONED STRENGTH: 18
EXISTING STRENGTH : 16

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 3432 A K Mittal
2. 3977 N K Sharma
3. 3792 Kripa Shanker
4. 4042 Arun P Sinha
5. 4525 R R K Sharma
6. 4961 Jayanta Chatterjee
7. 4701 Rahul Varman

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4865 (Ms) Veena Bansal
2. 4968 Anoop Singh

3. 5073 Raghu Nandan Sengupta
4. 5147 B V Phani
5. 5142 Peeyush Mehta

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

1. 5302 Subhas Chandra Misra

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5348 Deepu Philip

ASSISTANT PROFESSOR AGP-7000 Contract PB-3 (15600-39100) Ph.D + 1 year experience

1. 5428 Shashi Shekhar Mishra
2. 5430 Sri Vanamalla V

MATERIALS & METALLURGICAL ENGINEERING

SANCTIONED STRENGTH: 32
EXISTING STRENGTH : 21

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 1932 S P Mehrotra
2. 3845 R C Sharma
3. 3763 R K Dube
4. 4382 Dipak Mazumdar
5. 4565 Rajiv Shekhar
6. 4597 Sandeep Sangal
7 4790 Deepak Gupta
8. 4796 (Ms) Monica Katiyar
9. 4919 Anish Upadhyaya

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4977 Bikramjit Basu
2. 5034 Ashish Garg
3. 5072 Gouthama
4. 5269 Kallol Mondal
5. 5273 Krishanu Biswas
6. 5289 Anandh Subramaniam

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

1. 5297 Kantesh Balani

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5336 Vivek Verma
2. 5385 Tanmoy Maiti
3. 5404 Shashank Shekhar
4. 5381 Sarang Ingole
5. 5400 Shobhit Omar

ASSISTANT PROFESSOR AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience

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MATHEMATICS & STATISTICS DEPARTMENT

SANCTIONED STRENGTH: 36
EXISTING STRENGTH : 35

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 3407 R K S Rathore
2. 3772 (Ms) Manjul Gupta
3. 3739 M K Kadalbajoo
4. 3773 Prawal Sinha
5. 3776 G P Kapoor
6. 4058 Peeyush Chandra
7. 4074 V Raghavendra
8. 3824 I D Dhariyal
9. 4290 (Ms) Shobha Madan
10. 4584 Debasis Kundu
11. 4449 Pravir Kumar Dutt
12. 4726 Neeraj Misra
13. 4707 B V Rathish Kumar
14. 4782 D Bahuguna
15. 4656 P Shunmugaraj
16. 4734 Arbind Kumar Lal
17. 4803 Alok Kumar Maloo
18. 4781 (Ms) Mohua Banerjee
19. 4832 (Mrs) Rama Rawat
20. 4870 S Ghorai
21. 5029 Joydeep Dutta
22. 5153 Amit Mitra

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4822 G Santhanam
2. 4537 (Ms) Aparna Dar
3. 4930 Swagato Kumar Ray
4. 5189 Parasar Mohanty
5. 5036 Shalabh

6. 5121 (Ms) Nandini Nilakantan
7. 5229 Sharmistha Mitra
8. 5235 Sudipta Dutta

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

1. 5291 Malay Banerjee
2. 5314 Sameer Laxman Chavan

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5361 T Muthukumar
2. 5370 Akash Anand
3. 5395 (Ms) Rekha Santhanam

ASSISTANT PROFESSOR AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience

MECHANICAL ENGINEERING

SANCTIONED STRENGTH: 42
EXISTING STRENGTH : 38

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. *3858 S G Dhande
2. 3862 M S Kalra
3. 4093 V K Jain
4. 4224 N N Kishore
5. 4286 Himanshu Hatwal
6. 4210 P M Dixit
7. 4398 K Muralidhar
8. 4560 Gautam Biswas
9. 4061 Prabhat Munshi
10. 4452 S K Choudhury
11. 4459 N S Vyas
12. 4650 Kalyanmoy Deb
13. 4288 P S Ghoshdastidar
14. 4788 Subrata Sarkar
15. 4801 P K Panigrahi
16. 4779 Bhaskar Dasgupta
17. 4823 N Venkata Reddy
18. 4890 Bishakh Bhattacharya
19. *4928 Kamal K Kar
20. 4931 Avinash Kumar Agarwal
21. 5014 Sumit Basu
22. 5022 Ashish Datta
23. 5054 P Venkitanarayanan

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4956 Anupam Saxena
2. 5120 Sameer Khandekar
3. 5074 J Ramkumar
4. 5122 Arun Kumar Saha
5. *5129 Sivasambu Mahesh
6. 5394 Nachiketa Tewari
7. 5399 Shakti Singh Gupta
8. 5199 Ishan Sharma
9. 5234 Shantanu Bhattacharya
10. 5299 Pankaj Wahi
11. 5364 Binod Sreenivasan

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

1. 5267 Basant Lal Sharma
2. 5294 Malay Kumar Das
3. 5300 Anurag Gupta

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5358 Sovan Das

PHYSICS DEPARTMENT

SANCTIONED STRENGTH: 38
EXISTING STRENGTH: 33

PROFESSOR AGP-10500 PB-4 (37400-67000)

1 3980 R K Thareja
2. *4064 Keshawa Shahi
3. 4254 Rajendra Prasad
4. 4642 Debashish Chowdhury
5. 4688 R C Budhani
6. *4559 Y N Mohapatra
7. 4651 Avinash Singh
8. 4527 Deshdeep Sahdev
9. 4504 V Ravishankar
10. 4708 Pankaj Jain
11. 4723 H C Verma
12. 4881 M K Harbola
13. 4653 K P Rajeev
14. 4692 Mahendra K Verma
15. *4679 (Ms) Asima Pradhan
16. 5407 (Ms.) R. Vijaya
17. 5040 S Anantha Ramakrishna
18. 5041 Amit Dutta
19. 5117 Satyajit Banerjee

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4755 V Subrahmanyam
2. 4797 Gautam Sengupta
3. 4893 Harshwardhan Wanare
4. 5028 (Ms) Sutapa Mukherji
5. 5046 Anjan Kumar Gupta
6. 5102 Zakir Hossain
7. 5115 Tapobrata Sarkar
8. 5123 Sudeep Bhattacharjee
9. *5167 Rajeev Gupta
10. 5417 Soumik Mukhopadhyay

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

1. 5284 Tarun Kanti Ghosh
2. 5290 Kaushik Bhattacharya
3. 5306 Dipankar Chakrabarti

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5355 Krishnacharya

ASSISTANT PROFESSOR AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience

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MATERIALS SCIENCE PROGRAMME

SANCTIONED STRENGTH: 06
EXISTING STRENGTH : 05

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 3762 Jitendra Kumar
2. *4064 Keshawa Shahi
3. *4559 Y N Mohapatra
4. *4928 Kamal K Kar

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. *5167 Rajeev Gupta

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

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LASER TECHNOLOGY PROGRAMME

SANCTIONED STRENGTH:
EXISTING STRENGTH: + 02 HT

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. *4687 Utpal Das
2. *4679 (Ms) Asima Pradhan

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

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DESIGN PROGRAMME

SANCTIONED STRENGTH:
EXISTING STRENGTH: +2 HT

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. *4976 Satyaki Roy

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

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ASSISTANT PROFESSOR AGP-6000 (Contract) PB-3 (15600-39100)

1. *5183 (Ms) Koumudi Prakash Patil

While Nuclear Engineering & Technology and Environmental Engineering Management interdisciplinary programmes offer separate postgraduate degrees for administrative purpose these are under the administrative control of Mechanical Engineering and Civil Engineering Departments respectively.

*** Half Time**

LIST OF ACADEMIC STAFF AS ON APRIL 01, 2012

Sl No.	Name & Designation (Ms/Shri/Dr)	Department/ Programme
1.	4983 Alok Gupta, Research Engineer Gr-I	AE
2.	4616 Sushmit Sen, Senior Research Engineer	Robotics
3.	4824 Anjali V Kulkarni, Senior Research Engineer	Mechatronics
4.	5118 Ajay Misra, Senior Research Engineer	AE
5.	4078 Chaturi Singh, Senior Research Engineer	NWTF
6.	5278 Neeru Chhabra, Senior Research Engineer	EE
7.	4318 Amitabha Roy, Principal Research Engineer	EE
8.	4807 Brajesh Chandra, Principal Research Engineer	A E (NWTF)

9.	4056	V Raghuram, Principal Research Engineer	M E
10.	4777	Rajeev Gupta, Principal Research Engineer	A E (NWTF)
11.	4955	Raghuvir Singh Anand, Principal Research Engineer	E E
12.	4921	Aurobinda Chatterjee, Principal Research Engineer	M E
13.	4015	A L Bhavsar, Scientific Officer Gr.I	CHEM
14.	4815	K K Bajpai, Senior Scientific Officer	C E
15.	3780	Sanjay Gupta, Chief Scientific Officer	ACMS
16.	5285	Saikat Hira, Computer Engineer Gr II	C C
17.	4578	Md Aftab Alam, Senior Computer Engineer	C C
18.	4821	Brajesh Pande, Senior Computer Engineer	C C
19.	4820	Gopesh Tewari, Senior Computer Engineer	C C
20.	5019	Soma Sengupta, Senior Computer Engineer	C C
21.	4721	Md K Ahmad, Senior Computer Engineer	C C
22.	4920	Anju Tewari, Senior Computer Engineer	C C
23.	3868	K S Singh, Principal Computer Engineer	C C
24.	4817	Navpreet Singh, Principal Computer Engineer	C C
25.	4541	B M Shukla, Principal Computer Engineer	C C
26.	5030	Vipul Mathur, Senior Aircraft Maintenance Engineer	A E
27.	5312	V D Shrivastava, Librarian	Kelkar Lib
28.	3969	Umed Singh, Assistant Librarian	Kelkar Lib
29.	3974	(Ms) Neelam Prasad, Assistant Librarian	Kelkar Lib
30.	5148	S K Vijaianand, Assistant Librarian	Kelkar Lib

Academic Programmes

EDUCATIONAL GOALS

Engineering education should produce trained manpower for advancing the technological growth of the nation. The scope of engineering education should evolve based on its usefulness and relevance to the current and future needs of the country.

The academic goals of the Indian Institute of Technology Kanpur from the viewpoint of its teaching programmes are as following:

To prepare students for the highest level of excellence in science, and technology and produce competent, creative and imaginative scientists and engineers.

To promote a spirit of free and objective inquiry in different fields amongst the students and motivate them for higher studies and research.

To foster inter-disciplinary approach by bringing together faculty and students from different departments into activities of mutual interest.

TEACHING PROGRAMMES

The Institute offers instruction in various disciplines of science and engineering, both at under-graduate (UG) and post-graduate (PG) levels. These programmes are approved and monitored by Senate of the Institute. Management of these programmes are carried out by the Senate Under-Graduate Committee (SUGC) and the Senate Post-Graduate Committee (SPGC), respectively.

Undergraduate Programmes

The four-year under-graduate programmes consist of two parts. The first part is the Core programme, largely common to all such programmes, and is carefully planned to give the students a strong base of basic education in mathematics, physics, chemistry, engineering sciences, technical arts, humanities and social sciences. The second part of under-graduate programmes consists of professional courses and a project in the chosen branch of specialization. At the Bachelor's level, we have B.Tech. programmes in Aerospace Engineering, Biological Sciences & Bio-Engineering, Chemical Engineering, Civil Engineering, Computer Science and Engineering, Electrical Engineering, Material Science and Engineering, and Mechanical Engineering. We also have four-year B.S. programmes in Physics, Chemistry, Mathematics & Scientific Computing, and Economics.

B.Tech. - M.Tech. and B.S. - M.Sc. Dual-degree Programmes

Institute offers to its under-graduate students an option to do additional courses and research, and complete the requirements of both under-graduate and corresponding post-graduate programmes on a fast pace, normally within a duration of five years.

Two-Year M.Sc. Programme

There are two-year M. Sc. programs in Physics, Chemistry, Mathematics, and Statistics, where the students with B.Sc. background are chosen through an all-India entrance examination known as JAM. These programmes have produced large number of scientists, many of whom are currently engaged in Indian research laboratories and universities.

Postgraduate Programme

Post-graduate programmes prepare students to enter their professions with a perspective and breadth of knowledge related to the principal divisions of their respective fields of specialization through courses and specialized research experience. A postgraduate student is typically enrolled for three or four courses each semester until the student advances to a point where the principal requirements of the programme left to be fulfilled are research and thesis. The M. Tech. and Ph.D. students receive research/ teaching assistantships.

M. Tech. Programme

The Institute offers M.Tech. Programmes in all the engineering disciplines mentioned above. In addition, there are M.Tech. Programmes in inter-disciplinary areas such as, Nuclear Engineering, Laser Technology, Environmental Engineering, Materials Science, and Industrial and Management Engineering. Admission to M.Tech. programmes is based on performance in the all-India examination known as GATE, in some cases followed by an internal test/interview. These are typically two year programmes.

MBA and MDES Programme

We also offer two more Master's level programs, namely, Masters of Business Administration (MBA) and Master of Design (MDes). Both are two-year programmes. Admission to MBA programme is through an all-India examination called CAT, followed by an internal test/interview process. Admission to MDes is through an all India examination called CEED, followed by an internal test/interview process.

Doctor of Philosophy (Ph.D.)

The academic programmes leading to the Degree of Doctor of Philosophy (Ph.D.) exists in all departments (both Engineering and Science) and all inter-disciplinary programmes. The focus of PhD programs is high-quality research training. As part of the program, students carry out original research on a selected problem leading to a thesis. Usually, the research work also gets published in peer-reviewed journals and conferences. In most programs, the admission to PhD program is for those who have completed a Master's level program in the relevant discipline. In exceptional cases, students graduating with a BTech degree can also be admitted to a PhD program, based on an internal test/interview. Typically, students take 4 to 6 years to complete their programs.

M.Sc.-Ph.D. (Dual Degree)

The Department of Physics offers a M.Sc.-Ph. D. dual degree program, the admission is through JAM.

Curriculum Development and Monitoring Committee (CDMC)

The Curriculum Development and Monitoring Committee (CDMC) has been formed in order to monitor the curriculum continually. The Committee will solicit a report at the beginning of every semester from all Core Course Subcommittees regarding their respective core courses. These reports include all relevant information pertaining to the teaching of the courses, tutorials, laboratories and other aspects. This Committee has been working with effect from January, 2012 and its tenure is of two years.

The following is the present composition of the CDMC:

Prof. Goutam Deo	(ChE)	Chairman
Prof. C.S. Upadhyay	(AE)	Co Chairman
Prof. K Srihari	(CHM)	Member
Prof. B. Mazhari	(EE)	,,
Prof. A.K. Lal	(MTH)	,,
Prof. Manoj K Harbola	(PHY)	,,
Prof. Sumit Ganguly	(CSE)	,,
Prof. Suchitra Mathur	(HSS)	,,
Prof. Monica Katiyar	(MSE)	,,
Prof. Saumyen Guha	(CE)	,,

ADMISSION

Undergraduate

Admissions for all the B.Tech. and B.S. programmes at IIT Kanpur for the academic session 2011-2012 were made by the Joint Admission Committee for all IITs and IT-BHU.

The Joint Entrance Examination (JEE) -2011 was held on April 10, 2011. The following offers of admission were made from IIT Kanpur:

Department/Disciplines	Total Number of Candidates-Direct Admission								
Programmes	JEE-2011					Preparatory Course-2010			Tota l
	Gen	SC	ST	OB C	PH	SC	ST	PH	
B.Tech.									
Aerospace Engg.	24	7	4	12	1	-	-	-	48
BSBE	19	7	3	11	-	-	3	-	43
Chemical Engg.	37	10	6	21	1	-	-	-	75
Civil Engg.	51	15	8	28	1	-	-	-	103
Computer Sc. & Engg.	45	14	6	25	2	-	-	-	92
Electrical Engg.	63	20	9	35	4	-	-	-	132
Mechanical Engg.	47	14	7	28	2	-	-	1	99
Materials & Met. Engg.	45	14	7	24	-	-	6	2	98
B.S. Programme (4 year)	-	-	-	-	-	-	-	-	-
Chemistry	21	4	-	-	-	-	2	-	27
Mathematics & Scientific Computing	24	6	2	13	1	-	2	1	49
Economics	26	6	1	3	-	-	3	-	39
Physics	15	4	-	7	-	-	1	-	27
Total	**417**	**121**	**53**	**207**	**12**	**0**	**17**	**5**	**832**

Two-Year M.Sc. Programme

Admissions to the two-year M.Sc. and M.Sc.-Ph.D. (Dual Degree) programmes were made on the basis of JAM performance. Admission statistics for the M.Sc. and M.Sc.-Ph.D. (Dual Degree) Physics programmes during 2011-2012 are as under:

S. No.	Department/Group	Numbers of Admission Offered	Actual Number of Students Joined
M.Sc. (2-year)			
1	Chemistry	40	40
2	Mathematics	39	38
3	Physics	29	27
4	Statistics	31	23
Total		**139**	**128**
M.Sc. – Ph. D. (Dual Degree)			
1	Physics	14	14
Total		**14**	**14**

Post-Graduate

The number of students admitted to the post-graduate programmes in the first and second semesters of 2011-12 academic year is given below:

ENGINEERING

Department / Group	First Semester			Second Semester		
	M.Tech.	Ph.D.	Total	M.Tech.	Ph.D.	Total
Aerospace Engg.	29	5	34	01	01	**02**
B.S.B.E.	12	10	22	-	06	**06**
Chemical Engg.	25	22	47	-	06	**06**
Civil Engg.	46	9	55	-	08	**08**
Computer Sc. & Engg.	40	5	45	-	02	**02**
Design (M.Des.)	13	-	13	-	-	**-**
Electrical Engg.	113	22	135	-	14	**14**
Mechanical Engg.	62	10	72	-	13	**13**
Materials Science & Engg.	18	5	23	-	03	**03**
I.M.E.	16	4	20	-	03	**03**
Laser Technology	15	-	15	-	-	**-**
Material Science	09	05	14	-	-	**-**
N.E.T.	09	01	10	-	01	**01**
E.E.M.	19	-	19	-	-	**-**
M.B.A. (IME)	50	-	50	-	-	**-**
Total	**476**	**98**	**574**	**01**	**57**	**58**

SCIENCES

Department / Group	First Semester	Second Semester
	Ph.D.	Ph.D.
Chemistry	21	19
Mathematics	06	01
Physics	06	06
M.Sc.-Ph.D. in Physics	09	-
H.S.S.	02	03
Total	**44**	**29**
Grand Total	**618**	**87**

The total department/programme wise strength of the post-graduate students during the year is given below:

ENGINEERING

Department / Group	First Semester			Second Semester		
	M.Tech.	Ph.D.	Total	M.Tech.	Ph.D.	Total
Aerospace Engg.	56	33	89	53	33	**86**
B.S.B.E.	25	67	92	24	71	**95**
Chemical Engg.	53	80	133	53	80	**133**
Civil Engg.	106	58	164	79	65	**144**
Computer Sc. & Engg.	76	28	104	73	27	**100**
Design (M.Des.)	27	-	27	25	-	**25**
Electrical Engg.	206	97	303	194	112	**306**
Mechanical Engg.	149	83	232	125	91	**216**
Materials Science & Engg.	27	60	87	23	59	**82**
I.M.E.	29	20	49	28	19	**47**
Laser Technology	25	-	25	23	-	**23**
Material Science	16	20	36	13	20	**33**
N.E.T.	14	7	21	13	8	**21**
E.E.M.	39	-	39	32	-	**32**
M.B.A. (IME)	76	-	76	75	-	**75**
VLFM (IME)	34	-	34	-	-	**-**
Total	**958**	**553**	**1511**	**833**	**585**	**1418**

SCIENCES

Department / Group	First Semester	Second Semester
	Ph.D.	Ph.D.
Chemistry	199	207
Mathematics & Statistics	45	46
Physics	69	70
M.Sc.-Ph.D. in Physics	32	31
H.S.S.	37	30
Total	**382**	**384**
Grand Total	**1893**	**1802**

Strength of Undergraduate and Postgraduate Students during 2011 – 12 – I:

Department /Group	UG (BTech MSc.-5 Yr.)	B.Tech M.Tec (Dual Degre	M.S 2-Yr	M.Sc. Ph.D. Dual Degre	M.Tech./ MBA/ DES/ VLFM	Ph.D.	M.Sc-Ph.D Dual Degree (PhD part)	Total (UG+PG
Aerospace	143	47	-	-	56	33	-	**279**
B.S.B.E.	138	-	-	-	25	67	-	**230**
Chemical	229	61	-	-	53	80	-	**423**

Chemistry	81	-	81	-	-	199	-	**361**
Civil	307	87	-	-	106	58	-	**558**
C.S.E.	234	138	-	-	76	28	-	**476**
Economics	141	-	-	-	-	-	-	**141**
Design	-	-	-	-	27	-	-	**27**
E.E.	387	123	-	-	206	97	-	**813**
H.S.S.	-	-	-	-	-	37	-	**37**
Math	198	-	72	-	-	45	-	**315**
Stat	-	-	54	-	-	-	-	**54**
M.E.	288	96	-	-	149	83	-	**616**
M.S.E.	329	-	-	-	27	60	-	**416**
Physics	105	-	57	27	-	69	32	**290**
I.M.E.	-	-	-	-	29	20	-	**49**
Laser Tech.	-	-	-	-	25	-	-	**25**
M.S.P.	-	-	-	-	16	20	-	**36**
N.E.T.	-	-	-	-	14	07	-	**21**
E.E.M.	-	-	-	-	39	-	-	**39**
DIIT(EE)	-	-	-	-	-	-	-	**-**
MBA (I.M.E.)	-	-	-	-	76	-	-	**76**
VLFM (IME)	-	-	-	-	34	-	-	**34**
Total	**2580**	**552**	**264**	**27**	**958**	**903**	**32**	**5316**

GRADUATION

During the year 2011-2012, 1135 students completed the requirements for the award of B.Tech., M.Sc., DIIT, MBA, M.Tech., and Ph.D. degrees as detailed below:

B.Tech	340
M.Sc. (2 yr. & 5 yr.)	170 (95+75)
B.Tech.M.Tech. (Dual)	123
MBA	26
VLFM	34
M.Tech.	320
M.Des.	21
Ph.D.	101
Total:	**1135**

COURSES OFFERED

The following table gives the number of courses offered during 2011-2012 at the under-graduate as well as post-graduate level:

UNDERGRADUATE LEVEL

Core Curriculum / Department Courses	First Sem.	Second Sem.	Summer	Total
Core Courses run by various departments	27	31	6	**64**
Aerospace Engineering	16	19	2	**37**
B. S. B. E.	10	10	-	**20**
Chemical Engineering	19	20	2	**41**
Civil Engineering	28	31	2	**61**
Computer Science & Engineering	25	27	3	**55**
Economics	10	12	-	**22**
Design	1	1	1	**3**
Electrical Engineering	30	28	2	**60**
Mechanical Engineering	25	31	1	**57**
Materials Science and Engineering	15	19	1	**35**
Chemistry	19	20	-	**39**
Mathematics	32	28	2	**39**
Physics	28	34	1	**62**
Humanities & Social Sciences	16	13	1	**30**
Industrial & Management Engineering	6	10	-	**16**
Nuclear Engineering & Technology	3	2	-	**5**
Materials Science Program	1	-	-	**1**
Laser Technology Program	-	-	-	**-**
CPA	2	2	1	**5**

P0ST GRADUATE LEVEL

Core Curriculum / Department Courses	First Sem.	Second Sem.	Total
Aerospace Engineering	15	16	**31**
Chemical Engineering	17	15	**32**
Civil Engineering	21	21	**42**
Computer Science & Engineering	15	16	**31**
Design (M.Des.)	6	6	**12**
Electrical Engineering	29	25	**54**
Environmental Engg. & Management	4	8	**12**
Mechanical Engineering	26	27	**53**
Materials & Metallurgical Engineering	12	15	**27**
Chemistry	15	9	**24**
Mathematics / Statistics	14	11	**25**
Physics	15	13	**28**
Humanities & Social Sciences	19	17	**36**

Industrial & Management Engineering	7	7	**14**
Materials Science Program	6	5	**11**
Nuclear Engineering & Technology	5	6	**11**
Laser Technology Program	3	3	**6**
Biological Science & Bio Engg.	12	15	**27**
M.B.A.(IME)	17	17	**34**
V.L.M. (IME)	6	-	**6**

UNDERGRADUATE

The following statement shows promotion and detention of B. Tech., M.Sc. (Integrated) and B.Tech.-M.Tech. (Dual Degree), students in the academic year 2011-12 (upto July, 2012)

Sl. No.	**Contents**	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**	**Total**
1	Students strength at the beginning of the session	823	808	655	561	229	**3076**
2	Students strength at the beginning of the 2nd semester	821	805	653	554	223	**3056**
3	Students joined in 2nd semester on migration	-	-	-	-	-	**-**
4	Number of students withdrawn or on leave on medical ground in 1st and 2nd semesters	-	4	4	4	2	**14**
5	Number of students graduated	-	-	-	280	181	**461**
6	Number of students dismissed due to poor performance in 1st and 2nd semester	3	13	14	6	5	**41**

UNDERGRADUATE

The following statement shows promotion and detention of M.Sc. (2-year) and M.Sc.(Dual Degree) students in the academic year 2011-2012 (upto July, 2012)

S. No.	**Contents**	**1st Year**	**2nd Year**	**Total**
1	Students strength at the beginning of the session	142	149	291
2	Students strength at the beginning of the 2nd Sem.	138	140	278
3	Number of students dismissed in 1st semester	-	-	-

	Number of students dismissed in 2nd semester	12	4	16
4	Number of students graduated in 1st semester		9	9
	Number of students graduated in 2nd semester		86	86
5	Number of students dismissed in due to continued absence from the programme	-	-	-

Following is the department-wise break-up of students who were awarded the degree at XLIV Convocation held on June 2, 2012**. Dr. E Sreedharan, Principal Adviser, DMRC, India** was the Chief Guest at the Convocation:

S No	DEPT	B.Tech	B.Tech-M.Tech (Dual Degree)	M.Sc. (5YR)	M.Sc. (2YR)	**TOTAL**	VLFM	MBA	M.Des	M.Tech	Ph.D.	**TOTAL**	**GRAND (UG+PG)**
1	AE	15	12	-	-	27				28	06	**34**	**61**
2	BSBE	29	-	-	-	29				10	06	**16**	**45**
3	CHE	35	16	-	-	51				18	09	**27**	**78**
4	CHM	-	-	9	39	48				-	18	**18**	**66**
5	CE	52	14	-	-	66				45	08	**53**	**119**
6	CSE	41	23	-	-	64				30	02	**32**	**96**
7	DES	-	-	-	-	-			21	-	-	**21**	**21**
8	ECO	-	-	19	-	19				-	-	**-**	**19**
9	EE	58	35	-	-	93				67	03	**70**	**163**
10	EEM	-	-	-	-	-				15	-	**15**	**15**
11	HSS.	-	-	-	-	-				-	09	**09**	**09**
12	IME	-	-	-	-	-	34	26		16	06	**82**	**82**

13	LTP	-	-	-	-	-				11	-	**11**	**11**
14	MSE	66	-	-	-	66				14	06	**20**	**86**
15	MSP	-	-	-	-	-				07	01	**08**	**08**
16	MTH	-	-		16	16				-	10	**10**	**26**
17	MTH & SC COMP.	-	-	33	-	**33**				-	-	**-**	**33**
18	ME	44	23	-	-	**67**				54	07	**61**	**128**
19	NET	-	-	-	-	**-**				05	-	**05**	**05**
20	PHY	-	-	14	21	**35**				-	10	**10**	**45**
21	STAT				19	**19**				-	-	**-**	**19**
	TOTAL	340	123	75	95	**633**	34	26	21	320	101	**502**	**1135**

Research and Development

The Institute has been striving to develop itself into an institution of excellence in education and research in consonance with the contemporary and future needs of India. The Institute's R&D activity aims at innovation and technological development through research collaborations with universities, governments through sponsored projects. The research work is published through journal papers in reputed national and international journals. Besides this, the research done, and the technology developed have commercial value.

During 2011-12, 107 sponsored projects worth Rs. 5871 lakh and 74 consultancy projects of value Rs. 727 lakh were undertaken by the faculty and research engineers/scientists of the Institute, respectively.

Our faculty members have published around 627 research papers in reputed national and international journals. The Institute has signed several Memoranda of Understanding with Indian as well as international academic/research institutions and industries to strengthen its collaborative research efforts.

Technologies developed at the Institute have been recognized and launched at the national level.

SIMRAN, a GPS based Real Time Train Information System jointly developed by IITK and RDSO was inaugurated by the Hon'ble Minister of Railways in October 2011.

Jugnu Micro Satellite was successfully launched with the PSLV C18 rocket on October 12, 2011 from Sriharikota.

Digital Mandi for Indian Kisan was inaugurated by Mr. Kapil Sibal, the Hon'ble Minister of Communications and Information Technology and Minister of Human Resource Development in August 2011.

The details of some of the major projects sanctioned during the year 2011-12 are as follows:

Major sponsored projects sanctioned by various agencies during the year are DST Rs. 3160 lakh, DBT Rs. 410 lakh, MOES Rs. 342 lakh, DRDO Rs. 189 lakh, MNRE Rs. 115 lakh, and MOEF Rs. 101 lakh.

- **Aero-Elastic Study of Turbo-Machinery Blades**

DRDO has sponsored a project on Aero-Elastic Study of Turbo-Machinery Blades under GATET Scheme. The project will involve validation and optimization of a theoretical model of turbo-machinery aero elasticity already developed at IIT Kanpur, experimental study of forced response of a cascade, and development of a laboratory cascade model to simulate cascade flutter.

- **Structure And Dynamic Of Groundwater System In Northwestern India Under Past, Present And Future Climates**

MOES India and NERC UK has sponsored a project on the structure and dynamics of groundwater systems in northwestern India under past, present and future climates. India is the largest agricultural user of groundwater in the world. In fact, northwestern India is now a hotspot of groundwater depletion, with 'the largest rate of groundwater loss in any comparable-sized region on Earth'. This project is based on the premise that we must first understand the geology and geometry of the aquifer system before we can hope to estimate the way it will respond to a complex set of future stresses.

- **Generation Of Solar Hydrogen**

The project entitled Generation of Solar Hydrogen is a multi-institutional initiative, coordinated by IIT Kanpur and supported by the Technology Systems Development Program of DST, New Delhi. Participating Institutes include IIT Madras, DEI Agra, IIT Jodhpur, CECRI Karaikudi and BARC Mumbai. The project aims at developing workable designs of a solar hydrogen generation system using multiple technologies. The project aims at conducting research to develop and identify the best possible photo-electro-catalysts suitable for large scale applications. Apart from the photocatalytic route, an electrolyzer integrated to a PV module and a thermochemical approach will be developed for hydrogen generation.

- **InGaZnO4 (IGZO) Large Area Electronics and its Application to Active Matrix Flat Panel Displays**

DST has funded a project on Research and Development of Ingazno4 (IGZO) large area Electronics and its applications to Active Matrix Flat Panel Displays. In contrast to the microelectronics industry, large area electronics is still an emerging technology in which India has the capability to join the race. This project will be a step in that direction.

- **Thematic Unit Of Excellence On Soft Nanofabrication With Applications In Energy, Environment And Bioplatforms**

DST has also funded a project Thematic Unit of Excellence on Soft Nanofabrication with applications in Energy, Environment and Bioplatforms as a 2nd phase of the Unit on Nanosciences. The Unit has many state-of-the-art resources for nanofabrication and characterization (e.g., SEM, e-beam, photolithography, nanoimprinting, profilometers, micro-Raman, NSOM, SPMs, LB/BAM, XRD, SAXS, ellipsometer, PECVD, sputtering, imaging, etc.). The basic thrust of the Unit involving participation of around ten faculty groups spread over different departments is in developing soft materials, structures and devices within 100 nm size and exploit their applications in three areas: energy, environment and bio-applications/health.

- **Stability and Performance of Photovoltaic (STAPP)**

In addition, DST has sponsored a project to set up five different PV technologies of mono-crystalline, multi-crystalline, amorphous thin film silicon, CIGS thin film and multi-junction high efficiency concentrators with trackers to monitor and collect data objectively, analyze their performance and to find levelized cost of Electricity (LCOE) of each of these technologies.

Patents filed by the faculty during the financial year 2011-2012:

- Power Supply System
- A System for generating crystal of desired size and number density of a biomolecule, and process thereof.
- Functional Flow Generator
- Method of fabricating Organic Thin Film and Organic thin film thereof/Method of improving microstructure and morphology of organic thin film by annealing in electric field to achieve high efficient optoelectronic devices
- Power extraction from Photovolatic Power Sources
- A self propelled stair climbing wheel chair
- A New Self Configurable Modular Robot
- Magnesium inserted porphyrin compound, its blends and devices thereof
- Automation of rapid thermal anneal for specific Refractive Index or Absorption Coefficient of intermixing multi quantum wells
- Breast cancer detection system
- An arrangement for jet engine to reduce noise

Patents filed through Intellectual Ventures:

- Hydroxyapatite Poly (etheretherketone) nanocomposities and method of manufacturing same
- Flexible temperature sensor and sensor array
- Carbon nanofiber/carbon nanocoil coated substrate and nano composites
- Organic photonic materials (zinc based) as precursors for inorganic photonic materials in bulk, film and nanowire form
- Aluminum based n-type semiconductors as organic photonic presursors for inorganic photonic materials in bulk, film and nanowire form
- Novel Pixel addressing to extend lifetimes and improve performance of disply devices
- Smart analyte responsive microspheres and nanospheres for controlled delivery of biomolecules
- Cell sheet engineering using sugar responsive hydrogels
- Phase transformable cryogel scaffold for tissue engineering
- ASJQ: Skylines with aggregate operations over multiple relations
- Miniature Lenses, Systems and Methods of Making the same
- Composite Reusable Adhesives
- Micropattern Generation with pulsed laser diffraction
- Measurement of submicron focused charged particles beams using a current flux grating spider probe

Design patent:

- Multi Drug Delivery Medical Pump
- Stair Climbing Wheel Chair

Major Facilities Added during the financial year 2011-12:

- **Nanoscale Imaging Facility**
  The Institute is in process of setting up a facility for materials and biological science at a cost of about Rs. 15 crores. The facility will house a HRTEM and a cryo-TEM along with the complete infrastructure/accessories for materials and biological sample preparation. The HRTEM will be FEI make Titan G2 60-300 model, the world's most powerful commercially available STEM/TEM. The microscope will have the most advanced, most recent technology detectors, attachments and imaging system with state of the art capability for imaging at sub-Angstrom scale, and diffraction and X-ray spectroscopy at nanometer scale. The facility will be commissioned and available for researcher by the end of 2012.

- In addition, to give a boost to infrastructure for research, the Institute provided a grant of Rs. 2.5 crore to each department. This has led to wide spread augmentation of equipments and facilities across the Institute.

- Some laboratories established in the Institute are virtual instrumentation laboratory (AE); a Flame/Fire dynamics laboratory (AE) and a general purpose laboratory for Production Shop Simulation and Smart Systems and Operations Laboratory (IME).

- **Facilities under CARE Scheme of IITK:**

  The Institute is adding several major infrastructural facilities for carrying out multidisciplinary R&D activities. Under CARE, A Distributed Fiber-Optic Strain and Temperature Sensing System, Contact Angle Goniometer, FTIR based Emission Measurement System for Air Pollutant measurement, Plasma Cleaning System: A TEM sample preparation accessory, Autoclave for curing of Polymer Matrix Composites. It also granted funds for upgradation of the old console for 400 MHz high resolution NMR Spectrometer have been funded.

Memorandum of Understanding

During the year 2011-12, IIT Kanpur strengthened its relations with many national and international institutes and organizations through research collaborations and signed several Memoranda of Understanding. During the year, the following institutes/universities/organizations have joined hands with IIT Kanpur for the purpose of research work in the diverse fields of science and technology. Some of such organizations are:

1. Central Pollution Control Board, Delhi for the study of Inventorisation of industrial clusters in the country and assessment of the unmet need for common effluent treatment plants.

2. Technical University of Denmark, Denmark funded by Danish Council of Strategic Ressearch to develop a methodology for combining multi-scale and multi-disciplinary analysis tools with optimation techniques for product development.
3. The International Union of Railways, France to study and evaluate VSAT based Train Control Communication System for railways in the Asia Region.
4. UK Universities in Indo-UK Project for development of efficient and low cost excitonic solar cells, Human resource development, Development of know-how, bi-lateral collaborations and exchanges.
5. University of Rhode Island, USA, Brown Unversity, USA for academic exchange and cooperation (with DST Nanosciences, IITK in the first phase).
6. The Université libre de Bruxelles for exchange of faculty, scientists, students, joint research activities, exchange of publications.
7. Bhabha Atomic Research Centre, Mumbai to carry out experimental evaluation of strain rate effects on nuclear grade concrete mixes.
8. Indian Institute of Science Education and Research Bhopal for Addendum to the MoU to provide all source code and database structure of the software developed by IIT Kanpur to IISER Bhopal.
9. Indian Council for Agricultural Research (ICAR), New Delhi for the project titled "Engaging farmers, enriching knowledge: Agropedia Phase II".
10. Research Design and Standards Organisation, Luchnow for Gangmen Warning System integrated with SIMRAN.
11. University of Nottingham, UK, IIM Bangalore for the UK-India Science Bridge Program.
12. Bhabha Atomic Research Centre, Mumbai for project titled Development of a low cost PIV system.
13. Bhabha Atomic Research Centre, Mumbai for project titled Experimental Investigation of Turbulent Buoyant Plume and Ceiling Jet Behaviour using Time Resolved PIV (TRPIV), Shadowgraph and Quantitative Schlieren.
14. British Council Division, India for programme titled Integrated sensing, Monitoring and Healing for complex autonomous systems.
15. British Council Division, India for programme titled Sustainable Management of the Ganga River basin through Scientific Innovation.
16. Department of Telecommunications, New Delhi to provide consultancy services for implementation of IPv6 in government department.
17. Institute for Plasma Research, Gandhinagar for project titled Safety code modification, validation, and safety analysis of Indian test blanket module for iter.
18. Defence Engineering College, Ethiopia to assist DEC in developing and implementing a two year Masters Programme for working professionals sponsored by industrial organizations under Federal Democratic Republic of Ethiopia.

During the year 2011-12, Memoranda of Understanding have also been signed with many companies such as:

1. Tata Consultancy Services, Mumbai for TCS Research Scholarship Program.
2. TauRx Therapeutics Limited, Singapore for Project entitled "Evaluation of chemical compounds in the treatment of cellular models of Lafora disease".
3. Chevron U.S.A. Inc for Amended and Restated Research agreement to demonstrate and commercialize HIGEE 2nd Generation Technology.

4. Boeing Company, USA for Purchase Contract.
5. General Motors Technical Center India Private Limited, Bangalore for amendment of dispute resolution clause.
6. GE India Technology Center Pvt. Ltd., Bangalore for services in the field of design and simulation of DC/DC conversion.
7. M/S Supreme Paper Mills Ltd., Kolkata to analysis and validation of data generated by Supreme Paper Mills, in their membrane based pilot plant for production of sodium lignosulphonate from spent sulphite liquor out of rive straw.
8. Siva Ventures Limited, Chennai to provide inputs on the draft milestone verification protocol for developing CCS technology.
9. ICF Consulting India Private Limited, New Delhi Teaming agreement for contribution of renewable power towards eliminating shortages and meeting economic growth aspirations.
10. WAPCOS Limited, New Delhi to provide technical support in SCADA system in the PMC work for R-APDRP Part B schemes of SCADA towns of U.P
11. Manipal Press Ltd, Manipal for extension of MoU till 31st October 2013.
12. Myko Tech Private Limited, Goa to characterize the fluroscent pigments and fluroscent proteins and developing technological applications.
13. Bio-Organics & Allpied Materials Pvt. Limited, Bangalore to amend MoU in terms of intellectual property.
14. United Technologies Corporation acting through its Pratt and Whitney Division, USA Research and Development: Master Services Agreement for Liquid jet breakup in swirling air flow.
15. Boeing Inc. USA India: Master Project Agreement
16. Biotech Consortium India Ltd., New Delhi for promoting technologies at home and abroad.
17. ITI Limited, Bangalore for providing services to ITI to revamp its business model and achieve its objectives.

A list of major sponsored and consultancy projects sanctioned during the financial year 2011-2012 is provided below.

Sponsored Projects:

A. National Projects:

1. INAE CHAIR PROFESSORSHIP, Funded by INAE, Total Cost Rs. 230000
2. INAE CHAIR PROFESSORSHIP, Funded by INAE, Total Cost Rs. 460000
3. SYNTHESIS OF NOVEL CARBON/POLMERIC MATERIALS FOR BATTERY SEPARATORS, Funded by DST, Total Cost Rs. 4124900
4. ISRO-IITK-STC, Funded by STC, Total Cost Rs. 1000000
5. ENGAGING FARMERS, ENRICHING KNOWLEDGE: AGROPEDIA PHASE II, Funded by NAIP, Total Cost Rs. 12248700
6. GRBMP-PIC, Funded by MOEF, Total Cost Rs. 10140000
7. STABILITY AND PERFORMANCE OF PHOTOVOLTAIC (STAPP), Funded by DST, Total Cost Rs. 20550000
8. MULTIMEDIA EXHIBITION ON GANGA, Funded by MOC , Total Cost Rs. 150000

9. STUDY OF HIGH ENTROPY ALLOYS FOR ENHANCED DUCTILITY: PREPARATION AND CONSOLIDATION, Funded by STC, Total Cost Rs. 3042000
10. DEVELOPMENT OF ADVANCED TEXTILE AND POLYMERIC MATERIALS FOR NBC INDIVIDUAL PROTECTIVE EQUIPMENT, Funded by DMSRDE, Total Cost Rs. 4860000
11. OFDM FOR VIDEO CONTENT BASED BROADBAND MIMO WIRELESS SENSOR, Funded by DST, Total Cost Rs. 2625480
12. MULTIPLE TIP HYPRODERMINE SYRINGE NEEDLE FOR EASY INSERTION INTO SOFT TISSUES, Funded by ICMR, Total Cost Rs. 2943092
13. A 1MW RE-SYNCHRONIZABLE AUTONOMOUS GRID: DC-AC INVERSION & GRID SIZE PARALLELING, Funded by DST, Total Cost Rs. 9565000
14. STUDIES ON SHEAR THICKENING FLUIDS, Funded by DMSRDE, Total Cost Rs. 2270400
15. STUDY OF PARAMETRIC SENSITIVITY OF WATER PERMEATION IN FUEL CELL PROTON EXCHANGE MEMBRANES, Funded by ISRO, Total Cost Rs. 2008000
16. EXTRACTION OF METAL IONS USING LIGAND ASSISTED SUPERCRITICAL CO2 AND IONIC LIQUIDS, Funded by BRNS, Total Cost Rs. 2471300
17. PREDICTION FOR VISUAL SURVEILLANCE USING STATIC CAMERA, Funded by DRDO, Total Cost Rs. 4000000
18. ENTREPRENEURIAL AND MANAGERIAL DEVELOPMENT OF SMES THROUGH INCUBATORS, Funded by MSME, Total Cost Rs. 2651200
19. DEVELOPMENT OF HIGH STRENGTH IN-SITU NANOCOMPOSITES FOR AEROSPACE AND DEFENCE APPLICATIONS, Funded by INSA, Total Cost Rs. 150000
20. STARTING FLOW CHARACTERISTICS OF S200 SOLID MOTOR IN GROUND TEST CONDITIONS: NEAR AND FAR FIELD ACOUSTICS AND NEAR FIELD VELOCITY MEASUREMENTS, Funded by STC, Total Cost Rs. 2352000
21. ELECTRONIC,OPTICAL,STRUCTURAL AND DYNAMICAL PROPERTIES OF ZNS-PMMA NANOCOMPOSITE, Funded by SAMSUNG, Total Cost Rs. 2550000
22. TO DEVELOP ORGANIC AND POLYMER SOLAR CELLS AND LIGHT EMITTING DIODES ON CORUSS STEEL SUBSTRATE, Funded by TATASTEEL, Total Cost Rs. 2000000
23. DOPED OXIDES AS ANODES FOR HYDROGEN GENERATION VIA WATER ELECTROLYSIS, Funded by STC, Total Cost Rs. 1240800
24. DEVELOPMENT OF CARBON NANOSTRUCTURE REINFORCED BIPOLAR PLATES MADE OF PHENOLIC RESIN AND CARBON FIBER FOR THE PEM FUEL CELLS: PERFORMANCE EVELUATION, Funded by STC, Total Cost Rs. 2200000
25. MINIATURIZED POLYMARIC FLUIDIC PUMPS BASED ON PRINCIPLE OF PERISTALSIS, Funded by ADA, Total Cost Rs. 5226000
26. SINGLE POINT INCREMENTAL FORMING OF TI SHEET/FOIL, Funded by DRDO, Total Cost Rs. 1460000
27. PULSED COLUMN SIMULATION FOR PUREX, Funded by DAE, Total Cost Rs. 1589600
28. MUSCULOSKELETAL STEM CELLS IN TISSUE REGENERATION, Funded by DBT, Total Cost Rs. 7788000

29. FLASH AWARE OPTIMIZATIONS FOR COLUMNAR DATABASES, Funded by NETAPP, Total Cost Rs. 1080000
30. OPTIMAL GAME THEORETIC POLICIES FOR SPECTRUM AUCTIONS AND TRADING, Funded by IITCOE, Total Cost Rs. 200000
31. DEVELOPING BIOMEDICAL TECHNOLOGIES TO COUNTER THE DELETERIOUS EFFECTS OF MICROGRAVITY ON THE ROD AND CONE PHOTO-RECEPTOR NETWORK OF THE RETINA, Funded by STC, Total Cost Rs. 1560000
32. THE KOSI RIVER ALLUVIAL DYNAMICS AND ASSOCIATED RISKS, Funded by IFCPAR, Total Cost Rs. 2717000
33. UNDERSTANDING TRANSPORT OF ENERGY AND MASS IN JAMMED SOFT MATERIALS USING LASER INTERFEROMETRY, Funded by DST, Total Cost Rs. 4500000
34. SEGREGATION IN VIBRATED GRANULAR MATERIALS, Funded by DST, Total Cost Rs. 3381600
35. DESIGN AND FABRICATION OF MICRO ECM SETUP FOR MICRO CHENNELS, Funded by ARDB, Total Cost Rs. 1930750
36. INDO-MAX PLANCK CENTRE FOR COMPUTER SCIENCE (IMPECS), Funded by DST, Total Cost Rs. 6412000
37. DEVELOPMENT OF MICRO/NANO CARBON FIBERS AS SUPPORT FOR ENZYME IMMOBILIZATION AND SEPARATION OF AMINO ACIDS FROM AQUEOUS SYSTEMS, Funded by DBT, Total Cost Rs. 2407000
38. DESIGN AND DEVELOIPMENT OF MAV WITH HOVERING CAPABILITY, Funded by DRDO, Total Cost Rs. 4715000
39. WEB BASED COMPUTING RESOURCE FOR AB INITIO CALCULATIONS OF LARGE MOLECULES: A CAPACITY BUILDING PROGRAM FOR TEACHERS & RESEARCHERS, Funded by IGNOU, Total Cost Rs. 1090200
40. AERO-ELASTIC STUDY OF TURBO-MACHINERY BLADES, Funded by GTRE, Total Cost Rs. 19253000
41. IMMOBILIZED ENZYME MEMBRANE REACTOR FOR CONVERSION OF LACTOSE TO GALACTO OLIGOSACCHARIDES (GOS), Funded by DBT , Total Cost Rs. 4221800.
42. RESEARCH AND DEVELOPMENT OF INGAZNO4 (IGZO) LARGE AREA ELECTRONICS AND ITS APPLICATIONS TO ACTIVE MATRIX FLAT PANEL DISPLAYS, Funded by DST, Total Cost Rs. 68695000
43. ENHANCED IONIC CONDUCTIVITY OF SOFC VIA NANO-CEO2, Funded by DST, Total Cost Rs. 2947890
44. SYNTHESIS CHARACTERIZATION AND EVALUATION OF CERIUM OXIDE NANOPARTICLES TO COUNTER FREE REDICAL DAMAGE IN HIGH ALTITUDE, Funded by DIPAS , Total Cost Rs. 4500000
45. GEOCHEMICAL EVOLUTION OF THE EARTH, Funded by DST, Total Cost Rs. 1449000
46. COMPREHENSIVE WATER MODELING FACILITY FOR STEELMAKING PROCESS ANALYSIS AND DESIGN, Funded by MOS, Total Cost Rs. 6189600
47. LOW TEMPERATURE CATALYTIC OZONE DECOMPOSITION, Funded by BRNS, Total Cost Rs. 2337875
48. EXPERIMENTAL INVESTIGATION OF LOW RE NO TWO-ELEMENT AIRFOILS TE-19 & FH 300, Funded by ADE, Total Cost Rs. 3870000

49. DEVELOPMENT OF A MORPHING WING, Funded by DRDO, Total Cost Rs. 3749000
50. MODIFIED RIG AND COMPENSATOR CONTROL SYSTEM FOR DYNAMIC RIG, Funded by ARDB, Total Cost Rs. 1834000
51. DEVELOPMENT OF 3D MULTIPACTING ANALYSIS CODE FOR RF COUPLERS, Funded by BRNS, Total Cost Rs. 1201700
52. 1 MW RE-SYNCHRONIZABLE AUTONOMOUS GRID: DC-DC CONVERSION FOR SOLAR PV INCLUDING MPPT AND BATTERY CHARGE CONTROLLER, Funded by DST, Total Cost Rs. 4508000
53. TEPP OUTREACH ACTIVITY CENTER, Funded by DSIR, Total Cost Rs. 800000
54. FABRICATION OF TUNABLE WETTING SURFACES BASED ON RESPONSIVE POLYMERS, Funded by DAE, Total Cost Rs. 1700000
55. MULTICORE CURRICULUM, Funded by INTEL, Total Cost Rs. 154904
56. DEVELOPMENT OF SILK BASED ADVANCED BIOMATERIALS FOR TISSUE ENGINEERING APPLICATIONS USING CRYOGELATION TECHNOLOGY, Funded by DBT, Total Cost Rs. 3644000
57. CHARACTERIZATION OF RETIONIC ACID SIGNALING IN THE DEVELOPING CHICK OPTIC TECTUM, Funded by DST, Total Cost Rs. 4086000
58. USING A UNIQUE TOOL GENETIC TOOL TO STUDY THE ROLE OF BMP LIGANDS IN NEUROGENESIS AND GLIOGENESIS IN THE DEVELOPING CORTEX, Funded by DBT, Total Cost Rs. 5146016
59. LITHOGRAPHIC APPROACH TO ASSEMBLE AND MANIPULATE SPINDLE AND ASTERS: UNDERSTANDING CELL DIVISION THROUGH EXPERIMENT AND MODELING, Funded by DBT, Total Cost Rs. 8951000
60. INVESTIGATING THE ROLE OF BMP SIGNALING IN THE HEART AND VASCULATURE OF ADULT MICE USING A NOVEL GENETIC TOOL, Funded by DST, Total Cost Rs. 3820800
61. LONG-TERM RESPONSE OF THE HIMALAYAN RIVER SYSTEMS TO CLIMATE CHANGE, Funded by CRPG, Total Cost Rs. 1170000
62. EXPERIMENTAL INVESTIGATIONS OF FUEL SPRAYS OF BIODIESEL, STRAIGHT VEGETABLE OILS AND THEIR BLENDS WITH MINERAL DIESEL FOR OPTIMIZING FUEL INJECTION EQUIPMENT TO LOWER ENGINE EXHAUST EMISSIONS, Funded by DST, Total Cost Rs. 2800440
63. THEMATIC UNIT OF EXCELLENCE ON SOFT NANOFABRICATION WITH APPLICATIONS IN ENERGY, ENVIRONMENT AND BIOPLATFORMS AT THE INDIAN INSTITUTE OF TECHNOLOGY, KANPUR, Funded by DST, Total Cost Rs. 76210000
64. AERODYNAMIC CHARACTERIZATION AND PERFORMANCE ESTIMATIONS THROUGH FLIGHT TEST, Funded by DRDO, Total Cost Rs. 1035000
65. DESIGN, CONSTRUCTION AND AERODYNAMIC TESTING OF BIO-MIMICKING FLAPPING WING MICRO AIR VECHICLES AND MODELS, Funded by DRDO, Total Cost Rs. 4929500
66. STANDARD MODEL WITH LOCAL SCALE INVARIANCE, Funded by DST, Total Cost Rs. 1593600
67. THE STRUCTURE AND DYNAMIC OF GROUNDWATER SYSTEM IN NORTHWESTERN INDIA UNDER PAST, PRESENT AND FUTURE CLIMATES, Funded by MOES, Total Cost Rs. 21627000

68. STAND-OFF DETECTION OF EXPLOSIVES BASED ON IMMUNOCHEMICAL TECHNIQUES, Funded by PSA, Total Cost Rs. 5546680
69. ATTITUDE FROM VECTOR OBSERVATIONS, Funded by RCI, Total Cost Rs. 1440000
70. EXPERIMENTAL EVALUATION OF STRAIN RATE EFFECTS ON NUCLEAR GRADE CONCRETE MIXES, Funded by BARC, Total Cost Rs. 3110000
71. FEASIBILITY STUDIES ON ENHANCING DETECTOR EFFICIENCY WITH STRUCTURED PLASMONIC FILMS, Funded by ISRO, Total Cost Rs. 1200000
72. A DROSOPHILA MODEL FOR UNREVEALING THE LINK BETWEEN CELLULAR STRESS RESPONSE, CARCINOGENESIS AND ANTI-CENCER DRUG SCREENING, Funded by DBT, Total Cost Rs. 3924400
73. NOVEL PHOTONIC CRYSTAL MICROCAVITIES FOR LASER APPLICATIONS, Funded by BRNS, Total Cost Rs. 2783750
74. FLOW CONTROL FOR SEPARATION AND TRANSITION DELAY BY PLASMA ACTUATION OVER AIRFOIL, Funded by ARDB, Total Cost Rs. 1856500
75. JC BOSE FELLOWSHIP, Funded by DST, Total Cost Rs. 6800000
76. UNDERWATER DYNAMIC MODELING OF A UNDERWATER SUPERCAVITATING VEHICLE IN MOTION, Funded by NRB, Total Cost Rs. 2460000
77. THE MECHANICAL REGULATIONS OF PARTICULAR CARTILAGE DEVELOPMENT: THE MECHANISMS UNDERYING MECHANICAL REGULATION OF GENE EXPRESSION, Funded by DST, Total Cost Rs. 360000
78. FUEL SPRAY AND COMBUSTION VISUALIZATION USING ENDOSCOPE IN BIODIESEL FUELLED DIRECT INJECTION ENGINE FOR OPTIMAL FUEL INJECTION STRATEGY AND EMISSION REDUCTION, Funded by DST, Total Cost Rs. 5304600
79. SOUTH ASIAN PRECIPITATION: A SEAMLESS ASSESSMENT SAPRISE, Funded by IITD, Total Cost Rs. 4560000
80. COSMIC RAYS-CLOUD-CLIMATE CONUNDRUM: CAN ION-AEROSOL NEAR CLOUD MECHANSIM EXPLAIN THE OBSERVED CORRELATIONS, Funded by MOES, Total Cost Rs. 5980100
81. CRYPTOGRAPHIC ALGORITHMS, Funded by GM, Total Cost Rs. 1000000
82. DEVELOPMENT OF PROSODICALLY GUIDED PHONETIC ENGINE FOR SEARCHING SPEECH DATABASES IN INDIAN LANGUAGES, Funded by DIT, Total Cost Rs. 4025000
83. PHOTOELECTROCHEMICAL WATER SPLITTING USING PHOTOELECTRODES HAVING NON-ACTIVE NANOSTRUCTURES AND SELECTIVE TERMINATIONS, Funded by DST, Total Cost Rs. 3000000
84. STRUCTURAL AND BIOCHEMICAL STUDIES TO UNDERSTAND THE BIOLOGICAL ROLE OF A HIGHLY CONSERVED GTPASE/ATPASE YCHF, Funded by CSIR , Total Cost Rs. 2692000
85. HYDROMETEOROLOGICAL FEEDBACK AND CHANGES IN WATER STORAGE AND FLUXES IN NORTHERN INDIAN BASINS, Funded by MOES, Total Cost Rs. 6587454
86. CARBENE GENERATION ON SYNTHETICALLY MODIFIED PURINE BASES: NUCLEOBASE MODIFICATION AND NUCLEIC ACID LABELING, Funded by CSIR, Total Cost Rs. 1700000

87. DEVELOPING ACCURATE MULTI SCALE MODELS FOR STUDYING RADIATION DAMAGE IN FERRITIC ALLOYS, Funded by DAE, Total Cost Rs. 2074550
88. COMPUTATIONAL ANALYSIS OF ALGAN/GAN EPITAXIA SYSTEMS, Funded by ER&IPR, Total Cost Rs. 4236000
89. TOP CHEMISTRY DEPARTMENTS IN THE COUNTRY, Funded by DST, Total Cost Rs. 25000000
90. EXPERIMENTAL INVESTIGATIONS ON COMBUSTION CHARACTERISTICS AND EMISSION REDUCTIONS OF A LASER FIRED HYDROGEN ENGINE, Funded by MNRE, Total Cost Rs.11544000
91. EXPERIMENTAL INVESTIGATION OF TURBULENT BUOYANT PLUME & CEILING JET BEHAVIOUR USING TIME RESOLVED PIV (TRPIV), SHADOWGRAPH AND QUANTITATIVE SCHLIEREN, Funded by DAE, Total Cost Rs. 4825000
92. INVERSE SIMULATION FOR PREDICTION OF HELICOPTER BLADE LOADS IN AN UNSTEADY MANOEUVRE, Funded by ARDB, Total Cost Rs. 1350000
93. ROBUST DISTRIBUTED VIDEO SURVEILLANCE UNDER VARIABLE ENVIRONMENTAL CONDITIONS, Funded by DST, Total Cost Rs. 2933280
94. FIRST PRINCIPLE STUDIES ON FERROIC OXIDES, Funded by DST, Total Cost Rs. 5447940
95. DEVELOPMENT OF NON-CONTACT ULTRASONIC NDT BASED ON LBU AND EMAT TECHNIQUE FOR DEFECT DETECTION IN PANELS, Funded by ARDB, Total Cost Rs. 6284400
96. NUMERICAL SIMULATION AND EXPERIMENTAL STUDIES OF MOLD FILLING PROCESS IN MANUFACTURING OF FIBROUS COMPOSITES, Funded by ARDB, Total Cost Rs. 4215100
97. ANALYTICAL AND NUMERICAL STUDY OF MIXED CONVECTION PROCESS IN CORRUGATED FLUID SATURATED POROUS CONFIGURATIONS, Funded by DST, Total Cost Rs. 1982400
98. DEVELOPMENT OF MICRO-INVERTER BASED MODULAR SOLAR ENERGY GENERATOR FOR LINE POWER, Funded by DST, Total Cost Rs. 3300000
99. LITHOGRAPHY ASSISTED PATTERNING AND IN VITRO POLYMERIZATION OF MICROTUBULE ASTERS, Funded by DST, Total Cost Rs. 1567000
100. ANALYSIS OF SIZE-SEGREGATED COMPOSITION AND DISTRIBUTION OF ORGANIC COMPOUNDS ON AMBIENT AIR PARTICLES: SEASON VARIATIONS IN URBAN ENVIRONMENT IN NORTHERN INDIA, Funded by DST, Total Cost Rs. 2590000
101. PATH TRACKING CONTROL OF FOUR WHEEL DRIVE FOUR WHEEL STEER ELECTRIC VEHICLE, Funded by DST, Total Cost Rs. 1960800
102. HEAP ANALYSIS FOR GARBAGE COLLECTION, PARALLELIZATION AND OTHER APPLICATIONS, Funded by DST, Total Cost Rs. 1014000
103. DYE SENSITIZED HYBRID SOLAR CELLS WITH UP-CONVERSION NANOSTRUCTURES FOR ENHANCED EFFICIENCY, Funded by DST, Total Cost Rs. 2610000
104. SYNTHESIS, FUNCTIONALIZATION, CHARACTERIZATION AND APPLICATION OF NOVEL CARBON NANOMATERIALS FOR THE REMOVAL OF ARSENIC FROM CONTAMINATED GROUND WATER, Funded by DST, Total Cost Rs. 2430000

105. INVESTIGATION ON SEISMIC RESPONSE OF TWO CLOSELY PLACED SHALLOW GROUND ANCHORS, Funded by DST, Total Cost Rs. 1950000
106. GENERATION, STORAGE AND DISTRIBUTION OF SOLAR HYDROGEN, Bottom of Form Funded by DST, Total Cost Rs. 30508200

B. International:

107. INVESTIGATION INTO THE THERMO-OXIDATIVE AND MECHANICAL RESPONSE OF COMMERCIAL POLYIMIDE RESINS AND POLYIMIDE NANO-COMPOSITES FOR AEROSPACE APPLICATION, Funded by Boeing, Total Cost Rs. 5959800

Consultancy Projects:

A. National:

1. PRODUCTION OF POLYMER NANOFIBRES THROUGH ELECTROSPINNING, Funded by TCS, Total Cost Rs. 1517000
2. TECHNICAL EVALUATION OF RELOCATION OF TANNERIES IN JAJMAU AREA, KANPUR, Funded by UPG, Total Cost Rs. 344203
3. PERFORMANCE STUDY OF OUR EFFLUENT TREATMENT PLANT AND EVALUATION OF COMPLIANCE STATUS AT OUR SITE, Funded by LUPINM, Total Cost Rs. 992700
4. TRAIN RUNNING SIMULATION SOFTWARE, Funded by BHEL, Total Cost Rs. 4412000
5. GLIDER BASED PAYLOAD (TORPEDO) DELIVERY SYSTEM, Funded by DRDO, Total Cost Rs. 965125
6. CHECKING SEWER DESIGN: MANDHANA KANPUR NAGAR, Funded by UPSIDC, Total Cost Rs. 77210
7. SUBSOIL INVESTIGATIONS AT SMRITI APPTS. SITE, KURSI ROAD, LUCKNOW, Funded by MARGLT, Total Cost Rs. 603893
8. STABILITY ANALYSIS OF RAISING OF ASH DYKE - PHASE I, Funded by MPPOWE, Total Cost Rs. 471223
9. VETTING OF PROCESS DESIGNS OF SEWAGE TREATMENT PLANTS, ALLAHABAD, Funded by HNBEPL, Total Cost Rs. 750000
10. CONSULTANCY REGARDING LINING WORK OF MEJA JIRGO CANAL, Funded by BANSAG, Total Cost Rs. 103406
11. INTERFACING OF ECU OF EFI WITH TEST COMMANDER, Funded by RDSO, Total Cost Rs. 2950000
12. VETTING DESIGN AND DRAWING OF 3 SEWAGE TREATMENT PLANTS, Funded by HNBEPL, Total Cost Rs. 300000
13. THEORETICAL STUDY ON UNDER WATER DYNAMICS AND HYDRO-BALLISTICS FOR ANTI-SUBMARINE ROCKET, Funded by ARDE, Total Cost Rs. 997000
14. VETTING OF PROCESS DESIGNS OF 210 MLD SEWAGE TREATMENT PLANTS, BINGAWAN KANPUR, Funded by GSJ, Total Cost Rs. 1300000
15. DEVELOPMENT OF HIGH SURFACE AREA CARBON NANO MATERIALS FOR CAPACITIVE DEIONIZATION, Funded by THERMAX, Total Cost Rs. 1200000

16. THERMODYNAMIC MODELING AND BLAST FURNACE, Funded by L&TG, Total Cost Rs. 751419
17. GPR INVESTIGATIONS AT RAJAGOPURAM TEMPLE SRIRANGAM, TIRUCHIRAPALLI, Funded by RAJAGO, Total Cost Rs. 330900
18. DESIGN AND IMPLEMENTATION OF IPV6 TRAFFIC GENERATOR, IPV6 TRAFFIC ANALYZER AND IPV6-IPV4 TRANSLATOR, Funded by BITCOE, Total Cost Rs. 909975
19. REGULATION AND CONTROL OF URPM, Funded by GEGR, Total Cost Rs. 758300
20. CONSULTANCY REGARDING BANDA BYPASS ROAD, Funded by PWD, Total Cost Rs. 96513
21. DEVELOPMENT OF TANNERY INDUSTRY DOCUMENT, Funded by UPED , Total Cost Rs. 248175
22. RESTORATION OF SERVERS, NETWORKS & WEBSITES OF NBRI, Funded by NBRI, Total Cost Rs. 192000
23. CHECKING SEWER DESIGN: TRONICA CITY GAZIABAD, Funded by UPSIDC, Total Cost Rs. 99270
24. GPS INS BASED CONTROL SYSTEM INTEGRATED AND GLIDER TORPEDO KIT, Funded by NSTL, Total Cost Rs. 992700
25. ANALYTICAL MODEL FOR CONTACTLESS POWER TRANSFER, Funded by GE, Total Cost Rs. 909975
26. PREDICTIVE MODELS FOR SHEET THINNING AND SPRING BACK INCREMENTAL SHEET FORMING, Funded by BOEING, Total Cost Rs. 876277
27. RETAINERSHIP - UPPTCL STUDY CELL 2011-12, Funded by UPPTCL, Total Cost Rs. 1000000
28. CONSULTANCY PROJECT FOR FIXING OF STREET LIGHT POLES ON THE BRIDGE AT NH-2 (FROM BHAUTI TO RUMA), Funded by KDA, Total Cost Rs. 275750
29. STRUCTURAL ASSESSMENT OF YAMUNA BRIDGE AT HAMIRPUR INCLUDING CORE CUTTING, TESTING & REPORTING, Funded by PNC, Total Cost Rs. 882400
30. TOPOGRAPHIC MAPPING MATA VAISHNO DEVI SITE, Funded by SMVDSB, Total Cost Rs. 1599813
31. 3D LASER IMAGING OF STRATEGIC TARGETS, Funded by DRDO, Total Cost Rs. 990000
32. CONSULTANCY FOR THE CORE CUTTING & TESTING, Funded by UPBC, Total Cost Rs. 440120
33. INTEROPERABILITY OF FINGERPRINT SYSTEMS, Funded by NABARD, Total Cost Rs. 3300000
34. INVENTORIZATION OF INDUSTRIAL CLUSTERS, Funded by CPCB, Total Cost Rs. 827250
35. IMPACT OF ELECTRICITY REFORMS ON THE POWER SECTOR IN INDIA, Funded by WB, Total Cost Rs. 635421
36. KOZADI CHIMNEY MODEL DESIGN AND ANALYSIS, Funded by LANCO, Total Cost Rs. 397052
37. REDUCTION IN TRANSITION SLAB VOLUME FROM 17T BLOOM CASTER IN VIZAG STEEL, Funded by RINL, Total Cost Rs. 1356690

38. IMPROVING YIELD AND PERFORMANCE OF THE BLOOM CASTER TUNDISH, Funded by MUSCO, Total Cost Rs. 1586500
39. UNDERSTANDING THE NANOSCALE PROPERTIES RELATED TO DIFFUSION, SURFACE STRESS AND MODULUS OF LITHIUM ION CELL MATERIALS USING ATOMISTIC SIMULATIONS, Funded by GM, Total Cost Rs. 3161474
40. CONSULTANCY ON GEOTECH DESIGN OF BUILDING IN MUMBAI, Funded by HALKAR, Total Cost Rs. 683860
41. ADVANCED MATERIALS, Funded by PGCI, Total Cost Rs. 25000
42. CHARACTERIZATION OF FOG GENERATORS, Funded by FHPL, Total Cost Rs. 115815
43. WIND TUNNEL STUDY OF IREO GROUP HOUSING PROJECT AT NWTF IIT KANPUR, Funded by IREO, Total Cost Rs. 529440
44. TRAINING ON SEISMIC DESIGN OF STEEL STRUCTURES, Funded by UHDE, Total Cost Rs. 132360
45. AMBIENT AIR AND STACK MONITORING TECHNIQUES, Funded by CPCB, Total Cost Rs. 279980
46. DEVELOPMENT OF EXTRA LIGHT AND STRONG ANTI-WEATHERING NETS, Funded by INGEN, Total Cost Rs. 727980
47. DEVELOPMENT OF FLYASH UTILIZATION, Funded by UPED, Total Cost Rs. 248175
48. INVESTIGATION OF STAINLESS STEEL PLATES, Funded by PTC , Total Cost Rs. 68938
49. CONSULTANCY FOR FOUNDATION OF ELECTRIC POLE FOUNDATION, Funded by ABB, Total Cost Rs. 16545
50. FAILURE OF SPOT WELDED JOINTS, Funded by MARUTI, Total Cost Rs. 45000
51. LIMITED WIND TUNNEL TESTING FOR GENERATION OF LONGITUDINAL, STABILITY AND CONTROL CHARACTERISTICS, Funded by NSTL, Total Cost Rs. 965125
52. CONTRIBUTION OF RENEWABLE POWER TOWARDS ELIMINATING SHORTAGES AND MEETING ECONOMIC GROWTH ASPIRATIONS, Funded by ICF, Total Cost Rs. 1058880
53. PERFORMANCE EVALUATION OF CATALYST COATED MICRO-CHANNELED PLATES IN TEST REACTOR, Funded by CFEES, Total Cost Rs. 1191240
54. DESIGN CONSULTANCY OF STEEL GATES OF RAMGANGA BARRAGE, Funded by GHANAR, Total Cost Rs. 289538
55. ANALYSIS AND VALIDATION OF RESULTS OBTAINED OUT OF MEMBRANE PILOT PLANT FOR THE PRODUCTION OF LIGNO-SULPHONATES FROM SPENT SULPHITE LIQUOR (SSL), Funded by SPML, Total Cost Rs. 300000
56. GROUND PENETRATING RADAR SURVEY AT KAMPILYA (ERSTWHILE SOUTHERN PANCHAAL CAPITAL), Funded by DRAUPA, Total Cost Rs. 40000
57. EXPERT REPORT FOR ANALYSIS OF LOADS ON PCC POLES ERECTED IN SOIL WITHOUT GROUTING IN UNNAO (U.P) ABB LTD., Funded by ABB, Total Cost Rs. 441200
58. PROOF OF CONCEPT FOR RFID-QSF, Funded by DOP, Total Cost Rs. 882400
59. DESIGN AND FABRICATION OF A FLYING WING VERTICAL TAILLESS ADAPTED AURA UCAV MODEL, Funded by ADA, Total Cost Rs. 758500
60. GANGMEN WARNING SYSTEM (GWS), Funded by RDSO, Total Cost Rs. 2976600

61. CONDITION ASSESSMENT OF IOCL OFFICE BUILDING AT NOIDA (UP), Funded by IOC, Total Cost Rs. 496350
62. IMPROVING RHEOLOGICAL BEHAVIOUR OF AGRO-PRODUCTS, Funded by UPL , Total Cost Rs. 772100
63. PASSIVE AND ACTIVE CONTROL OF HOOTING, Funded by PWC, Total Cost Rs. 11562500
64. ENVIRONMENTAL POLLUTION SOURCES AND THEIR APPORTIONMENT TO AMBIENT ENVIRONMENT OF SOLAN DISTRICT: A GIS BASED STUDY, Funded by HPSPCB, Total Cost Rs. 3033250
65. PREPARATION OF CODE AND GUIDELINES FOR USING CODE OF ANN, Funded by CES, Total Cost Rs. 181414
66. OPTIMAL DESIGN OF A HEAT SINK FOR AN LED LUMINAIRE, Funded by PHILIP, Total Cost Rs. 137875
67. VETTING OF DESIGN OF BRIDGE AT SHUKLAGANG, Funded by ENGINE, Total Cost Rs. 68938

B. International:

68. STUDY ON A SOUTH ASIA REGIONAL POWER EXCHANGE, Funded by ADB, Total Cost Rs. 67540
69. INDOOR AIR QUALITY MONITORING, Funded by P&G, Total Cost Rs. 772243
70. REWIND: KNOWLEDGE BASED ENGGINERING, Funded by DCSR, Total Cost Rs. 1024595
71. PARAMETER IDENTIFICATION IN AUTOMOTIVE VEHICLES, Funded by EATON, Total Cost Rs. 2205000
72. VSAT BASED TRAIN CONTROL COMMUNICATION, Funded by UIC, Total Cost Rs. 1000000
73. THE USE OF LAFORA DISEASE CELL BASED ASSAY AS POTENTIAL THERAPEUTIC USES OF DIAMINOPHENOTHIAZINE COMPOUND, Funded by TAURX, Total Cost Rs. 8438
74. MARKET BASKET ANALYSIS, Funded by RETAIL, Total Cost Rs. 5000

Alumni Association Activities

Major Activities of the Alumni Association, IIT Kanpur

1. Reunions

Organizing Reunions is a salient activity of Alumni Association. Reunions provide a vibrant forum that promotes interaction and networking among alumni. Alumni from around the world participate in these reunions. FOUR reunions were held during 2011-12.

i. Silver Jubilee Reunions (SJR): The SJR of Class-of-87 was held from December 24 to December 27, 2011. About 95 alumni of the batch gathered in the institute, most of them with their families, former faculty, invited guest and over all about 250 guests attended the reunion.

ii. Thirty fifth Year Reunion: The Class-of-77 had their 35th Year Reunion from February 2 to 5 2012. Around 60 batch-mates gathered for their reunion

iii. Fortieth Year Reunion: The Class-of-72 celebrated their 40th Reunion from December 27 to 30, 2011. About 64 alumni attended the reunion with their family members.

iv. Golden Jubilee Reunion: The second batch which entered IIT Kanpur in the year 1961, celebrated their 50 years of association with the Institute as Golden Jubilee Reunion from November 26 to 28, 2011. 43 alumni attended the reunion with their family members, which included three families of the deceased alumni of this batch.

The reunion attendees included alumni from various professional backgrounds. Alumni Association office facilitated their local travel, accommodation, invitation to former faculty and other guests, their meeting with the faculty and staff of their time, visit their respective Departments and Labs and new facilities in the Institute, sharing their experiences and fond memories with the present faculty, staff and students. All participants after renewing their bonds with the Institute went back determined to stay connected with the Institute and amongst themselves.

2. Nostalgia

Nostalgia, an event jointly organized by Alumni Association and the Student's Gymkhana, is held every year for bidding farewell to the students completing their degree.

The Class-of-2011 celebrated their annual farewell function Nostalgia on May 26, 2011 on the eve of Convocation in the glamorous Open Air Theatre of the New SAC. Prof. A.K. Ghosh, who was appointed as Dean of Students Affairs on the same evening, congratulated the students and their parents on completing their studies and wished them success in life. Director, Prof. S G Dhande, Prof. Manindra Agarwal, Dean of

Resource Planning and Generation addressed and wished the students for their bright careers. A lively cultural programme and DJ night followed the hi-tea.

3. Distinguished Alumni Awards (DAA)

The DAA is the highest award conferred by the Indian Institute of Technology Kanpur upon its alumni and is given in recognition of the achievements of exceptional merit under the following five categories: (i) Entrepreneurship (ii) Management (iii) Professional Excellence (iv) Academic Achievements, and (v) any other activity that benefits humanity at large. The recipients of DAA for the year 2011-12 were:

Mr. Sunil Singhal (BT/CHE/71), President, Chemical Systems Technologies (I) Pvt Ltd and Founder, Ecoware, for his outstanding contributions to developing specialized chemicals and cutting edge technology for the sugar industry worldwide as well as using innovative skills in utilizing the waste generated for "green" use.

Mr. Vasdev Chanchlani (MT/IME/76), Serial Entrepreneur and Philanthropist, Co-founder, Sigma Group, Canada and Co-founder, Sigma Software Solutions Pvt. Ltd. for providing strategic direction in business development and outstanding entrepreneurial skills, and philanthropic activities.

Prof. Rakesh Agarwal (BT/CHE/75), Winthrop E. Stone Distinguished Professor, School of Chemical Engineering, Purdue University for his outstanding contributions to research and development in Chemical Engineering.

Prof. Jayathi Y Murthy (BT/ME/79), Chair, Department of Mechanical Engineering at The University of Texas at Austin and Ernest Cockrell, Jr., Memorial Chair in Engineering, Dept of Mechanical Engineering for her outstanding contribution towards developing powerful analysis tools and techniques for the industry and having played a transformative role in redefining the design process of fluid and thermal systems.

4. Satyendra K Dubey Memorial Award

The Board of Governors of Indian Institute of Technology Kanpur, taking a note of the tragic death of Shri Satyendra K Dubey, an alumnus of IITK who died fighting against corruption, had instituted the Satyendra K Dubey Memorial Award for honoring outstanding alumni of the IIT system, who have shown professional integrity and have been upholding human values. Mr Rahul Sharma (BT/EE/87/IITK) IPS Gujarat Cadre was chosen for the Satyendra K Dubey Memorial Award this year.

5. Alumni Association Chapter Activities

- **The Outer Delhi Chapter:** The outer Delhi chapter holds a chapter meet almost every month. The other events organized during 2011-12 were:
    i. Get-to-gather on Saturday, October 1, 2011 at Babu Banarasi Das Institute of Technology (BBDIT), Ghaziabad.
    ii. Outer Delhi Alumni Meet was held on April 10, 2011

iii. "Annual Picnic" on December 18, 2011 at Raghunath Batika, GT Road , Ghaziabad
iv. Socio-Cultural Extravaganza on January 8, 2012
v. Jaisalmer Trip March 9, 2012
vi. Many talks and seminars, were also organized under the chapter banner.

- **Mumbai Chapter**: To celebrate the first step beyond the campus, the Mumbai Chapter held a welcome function at Mumbai on August 19, 2011 for all the new alumni who graduated in the year 2011 and have started their careers from Mumbai. The aim was to welcome the new entrants into the group of Alumni Association, IIT Kanpur and to hear the latest gossip from the campus, to share out insights in relation to any queries / concerns / ambitions and have a joyful evening.

- **Lucknow Chapter** organized a chapter get-together on September 24, 2011 and on February 25, 2012 at Lucknow. There was an emphasis on family interaction and showcasing of family talent. A few interesting party games and a local jazz band was also arranged.

- **Hyderabad Chapter** organized "Monsoon Melodies" event on Saturday, July 30, 2011 at ISB Campus, Hyderabad. Many IIT Kanpur alumni attended this lively event along with their families. Prof. UB Desai, Director, IIT Hyderabad, Mr. B V Mohan Reddy, DAA and Chairman of Infotech-Entreprises, Mr. Rakesh Pandey, President, Alumni Association IIT Kanpur attended the event. There were Talent show, Music, and Dance programmes followed by Dinner.

- **West Coast Chapter, USA** celebrated the IIT Kanpur West Coast Annual Award Dinner Event 2011 on May 21, 2011 at TiE Center, Santa Clara. Dr. Ashok Singhal (1983), Dr. Rama Shukla (1974), Mr. Vinit Saxena, (1978), Mr. Jai Rawat, (1991), Dr. T. M. Ravi (1982) were the awardees of the West Coast Alumni Leadership award. The gathering was to celebrate the personal and professional achievements of fellow alumni, to Network, find mentors, make new friends, Gestate entrepreneurial ideas, and many had more events.

6. Student Alumni Interaction Day (SAID)

This initiative gives an opportunity for alumni to visit the campus, to reconnect with the Institute, share their experiences, meet with students and guide them for their careers. Altogether 3 SAID programmes have been held during this year. Several alumni varied fields expertise were invited for these interaction sessions.

7. Chapter Coordinators Meeting

Alumni Association Chapter Coordinators' meeting was held on Saturday, August 6, 2011 at IIT Kanpur. It was convened and moderated by Mr. Rakesh Pandey, President, Alumni Association. The chapter coordinators from seven chapters based in India participated in the meeting and discussed various issues related to the constitution, chapter formation, database, elections, etc.

8. Social Initiatives

Alumni Association office had sent out mails to all alumni requesting for financial help for the family of Late Mr. Sanjay Kumar Thakur, '97 batch and for Prof Nachiketa Tripathi, who had to undergo liver transplant surgery. Alumni Association sponsored a Half Marathon race on April 10, 2011, organized by Adventure Sports Club and Students' Gymkhana of IIT Kanpur. Ravindra Sindhu (3rd Year student) and Dr. Madhav Ranganathan coordinated in organizing this. Alumni association also sponsored Akhilesh Sapra well known for a veena recital to perform in the campus. Bus arrangements were made for Deaf and Dum school children to visit the campus during Annual Flower Show in the month of February. Vivekananada Samiti was given a donation of Rs. 5000 for organizing various competitions during the centenary year celebrations of Swami Vivekananda in the Institute. Alumni Association has extended support to Parivartan, an NGO of Kanpur by getting composting bins installed at few places in the campus and arranging two busses for walk-a-thon on February 5, 2012 at Green Park, Kanpur. Alumni Association took the lead to represent the campus.

9. Life Membership Cards

Alumni Association office has obtained a new plastic card color printer to print Life Membership Cards and deliver them effectively for all the members of Alumni Association. The information printed on the card includes name, roll number, degree and branch with a background of the institute. These cards were given during the Reunions, PAN IIT Conclave in Greater Noida, chapter gatherings Lucknow and Kanpur and during convocation to recent graduates who became new members of Alumni Association. A drive has been launched, to help the alumni apply for their cards through Alumni Website. This initiative has been well received by all alumni.

10. Life Membership Drive of the Alumni Association for the Class of 2011

Alumni Association, IIT Kanpur has expanded by adding more than 800 new members into its database. The AA office had kept in touch with the graduating batch through emails and posters, informing them about the procedure and benefits of becoming its Life Members. Memorabilia such as Bags, Coffee mugs, Departmental Group photographs of students and faculty members along with Photoframe were gifted to all new members who joined the Association.

11. Alumni Newsletters

Alumni Newsletter, a Newsletter published in house by the Alumni Association office has released 10 issues of the Newsletter in the year 2011-12

12. Souvenir shop

Looking at the overwhelming response received for the souvenir shop, Alumni association has outsourced the Souvenir Shop, to provide wider range of world-class products to the alumni as well as the Institute. The shop runs at the Outreach 69 n 80 Building.

13. Database Statistics

To remain connected with its alumni, the Alumni Association maintains a database of around 26,000 alumni who have graduated from IIT Kanpur, out of which around 70% of these are connected to the Association either through email or post.

14. BOD elections

Elections for the Board of Directors, Alumni Association for the year 2012-2014 was held during January to March, 2012. Prof. Y.N Singh of Electrical Engineering department was the Election Officer. These elections were held electronically as well as though the postal/physical ballot.

The following members have been elected.

President:	Ashok Kumar Gupta (BT/ME/72)
Vice President -1:	Sashi Kumar Singhania (BT/ME/67)
Vice President -2:	Salil Dave (BT/EE/86)
Secretary:	Sudhir Misra (BT/CE/81)
Treasurer:	Mukesh Sharma (MT/CE/81)
Member-1:	Ajay Kumar Shukla (BT/MME/95)
Member 2:	Saurabh Sharma (MT/NET/10)
Member-3:	Dharam Vir (MSC2/PHY/71)
Member-4:	Nikhil Padhye (BT-MT(Dua)l/EE/2010)

Central Facilities

P. K. Kelkar Library

The P. K. Kelkar Library provides essential support by offering current information services which are integrated with and central to the IITK's teaching, learning and research activities. The library facilitates excellence in teaching, creates an appropriate learning and research environment, anticipates and responds to student learning and research needs and provides the information infrastructure essential in today's changed environment. P. K. Kelkar Library is housed with all modern amenities, and is situated in a magnificent three-storied building covering an area of 5730 square meters. The library remains open, for 358 days of the year, from 8 a.m. to 12 midnight on all working days; 9 a.m. to 12 midnight on Saturdays; 9 a.m. to 5.30 p.m. on Sundays and Gazetted holidays and for 24 hours during the three examinations each semester.

ACQUISITION UNIT

Books: During the period under report the P. K. Kelkar Library received 3377 volumes of books out of which 131 volumes were received as Gratis. 12 annual reports and 28 Technical Reports were also received .The total expenditure on books was to the tune Rs. 1,60,53,879/-.

PERIODICALS UNIT

Subscription to periodicals and binding: The periodical budget for 2011-12 was Rs. 10,52,49,305/. The library subscribed 2009 current periodicals for the period under report. Of these 148 were print versions, whereas 935 were print plus online, 910 were online, 14 were databases and 02 were CDs. The library added 3135 bound volumes of periodicals and 875 damage books were bound during the year.

The library continued its focus on the acquisition of electronic products. The archival volumes of journals 147 were procured and previously procured volumes were maintained.

NEW RESOURCES ADDED:

NEW RESOURCES PROCURED IN THE F.Y 2011-12

SL.NO.	PUBLISHER / TITLE	NO. OF RESOURCES
1	American Society of Mechanical Engineers / ASME Archive	25
2	American Society of Civil Engrs./ ASCE Proceedings (Backfiles: 2000 to Current)	35
3	Annual Reviews / Annual Reviews (Back volumes: 1832 - 2007)	14

4	Cambridge Univ. Press/ Back vols.: 1) Bulletin.of the Aust. Mathematical Soc. 2) Ergodic Theory & Dynamical Systems 3) Anziam Journal	3
5	Elsevier / 1)Advances in Organometallic Chem. (V.1 to current year)	1
6	Elsevier / (New Titles for 2012) 1) Adv. In Heat Transfer 2) Adv. In Applied Mechanics	2
7	I.S. Eurocode, (Complete set - 2010)	58
8	Intellectuals Soc. For Socio-Techno Welfare/ ISST Jl. of Advances in Librarianship	1
9	Institute of Physics / (New Titles for 2012) 1) Nuclear Fusion 2) Plasma Phy. & Controlled Fusion	2
10	Multi Science / International Jl. of Spray & Combustion Dynamics (New Title for 2012)	1
11	Nature Pub. Group/ Nature Reviews Neuroscience (New Title for 2012)	1
12	Nature Pub. Group/ Scientific American (Backfiles: 1845-2012)	1
13	NOW Pub./ (Backfiles) : 1) Found.& Trends in Commu. & Inf. Th.(v.1-7) 2) F & T in Signal Processing (V. 1-3) 3) F & T in Networking (V. 1-4) 4)F & T in Human Compu. Integration (v.1-4)	4
14	Patent InfoS / India Patents Database (1971 to Current)	1
15	Royal Society of Chemistry / RSC Complete Archives (1841-2007)	75
16	Sage / HSS Package Archive (1999 to Current)	453
17	T&F/ Language Learning and Development (New Title for 2012)	1
18	T&F/ Vehicle System Dynamics (Backfiles: 1972-2010) (Vols. 1-18, 23-44, 47-48)	1
19	Thieme Medical & Scientific Pubs./ Synthesis (Backfiles: 1969-2011)	1
20	Wiley / Backfiles : 1) Austr.& Newzealand Jl. of Statistics 2) Biometrical Jl. 3) Numerical Methods for Partial Diff. Equation 4) Statistica Neerlandica	4
21	Wiley / Backfiles : 1) Jl. Of Graph Th. (1977-95) 2) Networks: an Intl. Jl. (1991-95) 3) Software: Practice & Experience (1991-95)	3

22	Wiley / Developmental Science (New Title for 2012)	1
23	Wiley / International Jl. for Numerical Methods in Fluids (Backfiles : 1981 to 1996)	1
24	Wiley / (Backfiles : 1918-2001 (Different Coverage years for different Titles)	16

E-resources through INDEST-AICTE:

As a core member to the INDEST-AICTE Consortium, IITK academic community continued to access more than 10000 full-text journals.

TECHNICAL SERVICES UNIT

Current Awareness Service (Weekly List of Additions): The books added to the library collection were disseminated to academic community through 52 weekly lists of new additions on every Monday. These were also released on library OPAC. The unit processed 4513 books in 2011-12. The current issues of the journals are also displayed on alternate days thrice in a week.

CIRCULATION UNIT

During the year 2011-2012, 14880 publications were circulated for home study. A large number of books and journals from reference, textbooks (23488) and general collection areas were also consulted by users within the library.

COMPUTER AIDED REFERENCE SERVICE UNIT

Document Delivery Services and Consultation Facility to External Users: The Inter-Library Loan (ILL) services are extended free to sister IITs, IISc, TIFR, BARC, INDEST-AICTE members and other technical institutions & universities. During 2011-12, ILL requests for 392 articles/chapters/books were received and document delivery made to outside institutions whereas IITK users' requests for 24 articles/chapters/books were sent to other libraries. Consulting facility of the library was extended to 1134 external users including 1065 Programme participants of various courses/ programmes organized by the Institute.

LIBRARY AUTOMATION

Library has already installed and implemented LibSys LSPremia, a web centric integrated library management software package. During the period several problem solving sessions were organized in consultation with the Libsys Ltd and customization on various modules suggested by us were incorporated. Now all housekeeping operations are running through LibSys. Some of the advanced customizations are in the pipeline with the LibSys.

DIGITAL LIBRARY INITIATIVES

The following digital library initiatives continued:

Online Submission of Theses: 988 Theses & Dissertations (ETD) were added in the repository of Electronic Theses and Dissertations (ETD).

BOG Minute/Agenda: About 11221 pages of BOG Minutes/Agenda were scanned along with complete OCRing and quality checking of Agenda and Minutes as per request from Institute Archival Project/ Registrar Office.

SEMINARS/CONFERENCES/ MEETINGS CHAIRED/ ATTENDED/VISITS ABROAD:

1. Appointed Member of the National Steering Committee of National Library and Information Services for Infrastructure for Scholarly Content (N-LIST) MHRD, GOI, New Delhi, in April 2011, Dr. V. D. Shrivastava, Librarian.

2. Attended the International Meeting of Library Advisory Board of Association of Computing Machinery (ACM) on 3rd April, 2011 at North Yorkshire , UK, Dr V. D. Shrivastava, Librarian

3. Attended as an International Delegate the 34th UKSG Conference and Exhibition at Harrogate International Centre, Harrogate, North Yorkshire, UK during 4-6 April 2011, Dr V. D. Shrivastava, Librarian

4. Attended the Resource Finalization Committee Meeting of N-LIST New Delhi on 8th August 2011 at IIT Delhi, Dr. V D Shrivastava, Librarian.

5. Attended the Seminar on "Accelerate Research Excellence: Evaluate, Benchmark and Strategise" on 23 September 2011 at New Delhi, Dr. V D Shrivastava, Librarian.

6. Attended the meeting of Elsevier e-Books forum at Four Points by Sheraton, Bangkok, Thailand during 3-6 October 2011, Dr V. D. Shrivastava, Librarian.

7. Attended the Indo-Global Education Summit 2011 during November 3-6, 2011 at India Habitat Centre, New Delhi, Dr V. D. Shrivastava, Librarian.

8. Attended the IEEE Annual Advisory Council Conference as International Advisory Council Member at W Times Square in New York City, USA during 18-23 October 2011, Dr V. D. Shrivastava, Librarian.

9. Attended the 16th National Steering Committee Meeing of INDEST-AICTE Consortium on 7th December 2011 at IIT Delhi, Dr V. D. Shrivastava, Librarian.

10. Attended the ASA Conference 2012 on "Best Way to Predict the Future is to Invent It" in Duchess Mews, London, UK during 26-29 February, 2012, Dr V. D. Shrivastava, Librarian.

11. Delivered the Inaugural Lecture on 15th December 2011 as the Chief Guest to inaugurate the International Workshop on "Strengthening the Academic

Library to enhance Agriculture Education" under AIP(US-AID) and Cornell University, USA Program held during 15-16 December 2011 held at Banaras Hindu University, Varanasi, Dr V. D. Shrivastava, Librarian.

12. Attended the Library Committee Meeting of National Academy of Sciences, India, Allahabad on 16th December 2011 at NASI, Allahabad, Dr V. D. Shrivastava, Librarian.

13. Was nominated Expert Member of the Library Committee of the National Academy of Sciences, India, Allahabad for 2012 on 2nd March 2012, Dr. V D Shrivastava, Librarian.

Member of Editorial Board of Journals:

1. Appointed Member of the editorial Board of "Research Digest: A Multidisciplinary Journal" published by Guru Ghasidas Vishwavidyalaya, Bilaspur, Dr V. D. Shrivastava, Librarian.

2. Appointed Member of the editorial Board of "ISST Journal of Advances in Librarianship (IJLIB)" published by Intellectual Society for Socio - Techno Welfare, Dr V. D. Shrivastava, Librarian

3. Appointed Member of the editorial Board of "ISST Journal of Library and Information Science (IJLIS)" published by Intellectual Society for Socio- Techno Welfare, Dr V. D. Shrivastava, Librarian

Computer Center

Computer Centre at IIT Kanpur is a central facility that caters to the computing needs of the faculty, staff and students for their research, development and teaching. It also manages Internet and campus local network and wireless infrastructure. It provides several services like e-mail and web access. It currently supports more than 10000 users. Computer Centre has been upgrading its computing, mail, network, Internet, PC lab and overall infrastructural facilities in a major way over past few years. In 2011-12, significant upgradation took place in the areas of servers, PC labs, software, mail, network and Internet. Besides, substantial progress also took place in the area of Data Centre infrastructure.

For the High Performance Computing (HPC) facility, four new ftp servers have been put in place which is being used heavily by HPC users for the transfer of data from the HPC storage to various nodal machines on campus. Besides, five high-end workstations are also now being used, in addition to the main HPC cluster, for running some of the HPC application software. The number of users of the HPC facility has increased significantly over the past one year. On the PC lab front, new PCs have been procured for two PC labs of the Centre so replace the old ones. The new PCs have come with state-of-the-art processors and many other modern features including good graphics and this upgradation has greatly facilitated the conduct of computer lab

classes for undergraduate and postgraduate students and also in the conduct of various computer-related courses, examinations and other academic activities in CC.

On the software side, several general purpose and HPC application software have been either renewed or procured afresh. The list of some of the key software includes: Matlab, Parallel Numerical Algorithms Group (NAG), Mathematica, SPSS, Origin, BeCN, COMSOl, Accelrys, MedeAVASP, AMBER, Tecplot, Turbomole, Gaussian, Ansys, Fluent etc.

A new mail server has been added for the benefit of e-mail users of the Centre. Currently, the Centre handles more than 10000 e-mail users of the institute. It also provided e-mail and web facilities to a large number of conferences, symposia and workshops that took place in the campus in 2011-12. A significant expansion of the campus local area network (LAN) and wireless network also took place over the past one year to cover the new buildings and residential areas. Computer Centre procured a large number of network switches in 2011-12 for this expansion of network. The backbone of the network is upgraded to 10 Gbps. The total number of network ports now stands at more than 15000. On the Internet side, Computer Centre procured two 1 Gbps links without any rate limit and a third link is also now available from National Knowledge Network (NKN).

In addition to the above updradations in compute servers, software, PC lab, mail, web and network facilities, Computer Centre also organized a number of symposium and short workshops in the area of HPC and networking in 2011-12. The Centre is also undergoing a massive upgradation in its infrastructural facilities. A modern data centre with state-of-the-art precision air conditioning and fire safety features is being built and the work is expected to be completed in 2012-13. Once the operation of this new Data Centre is started, Computer Centre will be in a position to house substantially bigger HPC and other servers.

Centre for Development of Technical Education

Since its inception in 1971, Ministry of Human Resource Development, All India Council for Technical Education has always strived for the development of technical education in the country. The main objective of the Centre for Development of Technical Education (CDTE) is dissemination of knowledge resources of IITK. In a way CDTE is a coordinating facility for the various activities connected with development of curricula, preparation of resource material, administering the continuing education programme and providing in-service training to the teachers of engineering colleges. This is carried out through activities under Curriculum Development Cell (CDC), Quality Improvement Programme (QIP) and Continuing Education Cell (CEC).

Summary of various activities during the year 2011-2012

1. **QIP Students**
   (a) M.Tech Candidates admitted 03
   (b) Ph.D. Candidates admitted 05

2. **Book-Writing Projects**
   (a) Book-writing projects continued – 40
   (b) Book-writing projects approved – 06
   (c) Book-writing projects completed -04

3. Short term courses conducted under QIP – 09

4. Short term self-financed courses conducted -35

5. Workshops/ Conferences/ Seminars conducted – 30

Staff Training Unit

As per the prevailing practice, workshop/ training/ induction programme etc. are being organized the Administration Section. Administration Section after approval of the Competent Authority had conducted the following workshop/ training programme during the year 2011-2012.

Workshop On Pensionary Matters

The Administration Section had organized a workshop on Pensionary Matters on 21.01.2012 in conjunction with the Department of Pension & Pensioners' Welfare, Government of India. Shri Amitabh Dwivedi and Shri D K Solenky, Under Secretary, DoPT were the guest faculties for the workshop. 59 staff members including officials of the Institute and 07 officials from various IITs and IISER Bhopal were attended the above said workshop. The workshop was very successful and everybody attended appreciates the initiative taken by the Administration Section to organize the workshop.

Apart from the above, Institute officials and employees were nominated to attend workshops/ training programmes conducted by the ISTM, New Delhi and other training organizations, as per their area of work and responsibility.

SC/ST and OBC Cell

The cell consists of **Prof. B. Mazhari** (Deptt. of Electrical Engineering), Liaison Officer (**w.e.f. August 16, 2011)** and **Shri Anil P Gonade,** In-Charge, Recruitment Section, in addition to their normal duties. Prof. B. Mazhari is available in **Room No. 221** (Directorate), Faculty Building at the Institute on **Phone No. 2597950** and Shri Gonade is available in **Room No. 224,** 2nd Floor, Faculty Building at the Institute on **Phone No. 2597391.**

Implementation of reservation orders:

The effective date of implementation of reservation for **SC**s and **ST**s in the direct recruitment is **5th September 1974** in this Institute and the implementation of reservation for **OBC**s is w.e.f. the year **1995.**

Maintenance of rosters/ Percentage of reservation:

The Board of Governors had approved, in its meeting held on July 27, 1995, maintenance of 120 points vacancy-based roster [for Group A other than exempted posts (Points reserved in favour of OBCs-31, SCs-20, STs-9)] & B posts; and 100 points roster for Group C & D posts (Points reserved in favour of OBCs-27, SCs-21, STs-1) for direct recruitment at the Institute.

On the basis of Judgment passed by the Constitution bench of Supreme Court, the Government of India, Deptt. Of Per. & Trg., issued O.M. 36012/2/96-Estt.(Res.) dated July 02,1997 vide which the above vacancy-based rosters have been revised into post-based rosters for the different category of employees in direct recruitment. The Board after due consideration accorded its approval, in its 1997/5th meeting held on December 05, 1997 for maintenance of post-based rosters.

Further, the Board of Governors of the Institute (in its meeting held in May 2004, vide item no. 2004.2.13) has considered and **approved** the proposal for grouping of staff for the purpose of reservation and separate grouping of technical and non-technical posts. The proposal was as follows – the posts under Group-A, B, C & D would be grouped separately for technical and non-technical posts. However, there would be a single group under Group-D. Under this dispensation, there would be seven groups in all and as for as possible efforts would be made to provide adequate representation of SCs, STs and OBCs to each post under the group. The proposal was approved in the context that grouping of posts would provide greater leverage for purpose of securing adequate representation for SCs, STs and OBCs in the Institute

As per Modified Assured Career Progression Scheme (in operation at present).

Concessions/ Relaxations:

(a) For Regular employees of IITs who are educationally qualified and otherwise eligible, can be considered for direct recruitment across the whole IIT system up to a maximum of 50 years of age. The due relaxation in upper age is made available for SC/ST, OBC, PH and Ex-servicemen candidates as per Central Govt. Rules.

(b) SC/ST and PH candidates are fully exempted from payment of application and registration fees:

(c) To and fro TA is being paid to the candidates of all categories out of Kanpur to attend the interview [for Group-A- AC-II rail fare (Rajdhani Exp. also) / Chair car in Shatabdi Exp., for Group-B- AC-III rail fare (Rajdhani Exp. also) / Chair car in Shatabdi Exp. and for Group-C- 2nd class sleeper rail fare];

(d) Experience requirement is relax able at the discretion of competent authority.

Employment notification etc.:

Advertisement/ Notification is released in the Employment News with details of concessions/ relaxations to SC/ST & OBC candidates and the number of posts reserved available for them. The copies of Employment Notices/ Notifications are sent to recognize SC/ST Welfare Associations for publicity among their members.

During the period of report, the **detail of Advts.** (internal/ external) issued through Recruitment Section is as under:

Advt. No.	**Name of Post(s)**	**Pay Scale**	**No. of Vacancies**				**Total**	**Published in**
			SC	**ST**	**OBC**	**UR**		
2/2011 [Internal]	Principal	PB-2: Rs.9300-34800 with GP: Rs. 4800	-	-	-	01	**01**	Institute's Notice Board
3/2011	Principal	PB-2: Rs.9300-34800 with GP: Rs. 4800	-	-	-	01	**01**	UP Edition of Hindustan & Hindustan Times
1/2012	Assistant Physical Education Officer	PB-3:Rs.15600-39100 with GP: Rs.5400	-	-	-	01	**01**	All Editions of Dainik Jagran (Nai Rahein), Times of India(Ascent), Universi
	Medical Officer	PB-3:Rs.15600-39100 with GP: Rs.5400	-	-	01	-	**01**	
	Security Officer	PB-3:Rs.15600-39100 with GP: Rs.5400	-	-	01	-	**01**	
	Assistant Executive Engineers	PB-3:Rs.15600-39100 with GP: Rs.5400	-	-	01	01	**02**	
	Assistant Security Officers	PB-2:Rs. 9300-34800 with GP: Rs.4200	-	-	02	02	**04**	
	Physical Training Instructor	PB-2:Rs. 9300-34800 with GP: Rs.4200	-	-	01	-	**01**	
	Junior Superintendents	PB-2:Rs. 9300-34800 with GP: Rs.4200	01	01	01+01*	-	**03+01***	

	Pre-Primary Teachers (Sports-1 & Music-1)	PB-1:Rs. 5200-20200 with GP: Rs.2400	-	-	-	02	**02**	ty News and Employ ment News
	Assistant Coach	PB-1:Rs. 5200-20200 with GP: Rs.2000	02	-	02	01	**05**	
	Junior Assistants	PB-1:Rs. 5200-20200 with GP: Rs.2000	03	-	03	07+ 01*	**13+01***	
	Driver Grade II	PB-1:Rs. 5200-20200 with GP: Rs.2000	-	-	-	01	**01**	
2/2012 [Internal]	Deputy Registrar	PB-3:Rs.15600-39100 with GP: Rs.7600	-	-	-	01	**01**	Institute's Notice Board
	Assistant Registrar	PB-3:Rs.15600-39100 with GP: Rs.5400	01	-	-	03	**04**	
3/2012	Deputy Registrar	PB-3: Rs.15600-39100 with GP: Rs.7600	01	-	-	-	**01**	All Editions of Dainik Jagran (Nai Rahein), Times of India(Ascent), University News and Employment News
	Junior Technical Superintendents	PB-2: Rs. 9300-34800 with GP: Rs.4200	-	02	-	01*	**02+01***	
	Junior Technician	PB-1: Rs. 5200-20200 with GP: Rs.2000	-	-	-	01*	**01***	
Total			**08**	**03**	**12+01***	**21+03***	**44+04***	

* PH Candidates

The recruitment for all academic posts of Institute is made through the press/ professional journals/ circulars to educational institutes etc.

Inclusion of SC/ST Member:

One SCT and/or OBC member of comparable status is included in the Selection Committee as a full member. For the period of report, the detail of Selection Committee meetings held through Recruitment Section is given below:

For Selection	Total **12** Selection Committee meetings: **07** S/C meeting, wherein SCT and OBC representatives included **02** S/C meeting, wherein OBC representative included **02** S/C meeting, wherein SC representative included **01** S/C meeting, wherein ST representative included

Call letters for Interviews/ Appointment letters:

1. To ensure that the interview/ appointment letters are received by the candidates (including reserved category candidates) well in time – the interview/ appointment letters are being sent through UPC & registered/speed post or courier to ensure delivery.

2. Normally for interviews a minimum of three weeks' time and for appointments a minimum of one month's period of interval is being provided.

Reservation of Quarters:

1. The Institute has been allotting 1st in every ten qrs. to SC/ST employees, out of Type-1A, Type-1B Type-1 and Type-II Qrs. & 1st in every twenty qrs. in Type-III, and Type-IV Qrs. (only from the pool reserved for allotment to Officers other than faculty).

The available data related to house allotment is given below for the period under reference:

Type of house	Houses allotted to			
	SC/ST		GEN	Total
	As per Reservation	As per Seniority		
Type-IA	-	-	-	**-**
Type-1B	**-**	-	-	**-**
Type-I	**-**	04	14	**18**
Type-II	01	04	08	**13**
Type-III	-	01	20	**21**
Type-IV	-	01	18	**19**
Type – V	**No reservation**		02	**02**

2. There is no reservation in the quarters of Type –V (as these quarters are more or less allotted to faculty members and other eligible officers without any discrimination of caste and creed etc.)

Complaints/ Grievances:

No letter received for redressal of grievance of a SC/ST/OBC employee under the period of report.

Any **Caste falsification** brought to notice is also followed up by the Cell. No new case came in notice.

Apart from the above, the data, as available for showing the **representation of SCs/STs & OBCs in other areas,** is given below:

A. Academic Staff:

Area(s)	**SC**	**ST**	**OBC**	**GEN**	**TOTAL**
Appointments	-	-	-	14	14
Retirement	-	-	-	05	05
Deaths	-	-	-	-	-
Resignation				05	05
Resignation (Technical)	-	-	-	-	-
Termination	-	-	-	-	-
V/Retirement	-	-	-	-	-
Compulsory Retirement	-	-	-	-	-
Dismissal	-	-	-	-	-
Term Over	-	-	-	-	-
Total	**-**	**-**	**-**	**24**	**24**

B: Non-Academic:

Area(s)	**SC**	**ST**	**OBC**	**GEN**	**TOTAL**
Appointments	05	02	07	12	26
Retirement	11	-	03	23	37
Deaths	-	-	-	01	01
Resignation	02	01	02	04	09
V/Retirement	-	-	-	-	-
C/Retirement	01	-	-	-	01
SVRS	-	-	-	-	-
Deputationists repatriated	-	-	-	-	-
Termination	-	-	-	-	-
Dismissal	-	-	-	01	01
End of contract	-	-	-	-	-
On Long Leave	-	-	01	01	02
Grand Total	**19**	**03**	**13**	**42**	**77**

Financial up-gradation under MACPS during 2011-2012

Financial Assessment	SC	ST	OBC	GEN	TOTAL
	43	**01**	**19**	**102**	**165**

In addition to above, the data, as available for showing the **representation of SCs/STs & OBCs related to existing strength** of the employees at the Institute, is given below:

A. Existing Strength of Academic Staff (Teaching/Non-teaching) as on 01.04.2012:

Recruited through DOFA Office

Academic	SC	ST	OBC	GEN	Total
Teaching	02	-	-	346	348
Non-Teaching	02	-	-	28	30
Total	**04**	**-**	**-**	**374**	**378**

B. Existing Strength of Non-Academic Staff as on 01.04.2012

Recruited through Recruitment Section

Group	SC		ST		OBC		GEN	Total
A	**05**	**21.73**	**0**	**0.00**	**01**	**4.34**	**17**	**23**
B	**60**	**21.50**	**08**	**2.86**	**15**	**5.37**	**196**	**279**
C	**32**	**19.63**	**04**	**2.45**	**26**	**15.95**	**101**	**163**
D	**30**	**26.08**	**0**	**0.00**	**08**	**6.95**	**77**	**115**
TOTAL	**127+5***	**21.89**	**12**	**2.06**	**50**	**8.62**	**391**	**580+5***

*** Cleaners, not counted towards reservation**.

<u>The detailed summary of existing strength of non-academic staff as on 01.04.2012 and representation of SC/ST/OBC</u>

Group/ Stream/ Mode	SC		ST		OBC		GEN	TOTAL
ANR	**0**	**0.00**	**0**	**0.00**	**01**	**16.66**	**05**	**06**
ANU	**03**	**27.27**	**0**	**0.00**	**0**	**0.00**	**08**	**11**
ATR	**02**	**40.00**	**0**	**0.00**	**0**	**0.00**	**03**	**05**
ATU	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**01**	**01**
A	**05**	**21.73**	**0**	**0.00**	**01**	**4.34**	**17**	**23**

BNR	**03**	**15.00**	**03**	**15.00**	**03**	**15.00**	**11**	**20**
BNU	**21**	**22.58**	**01**	**1.07**	**0**	**0.00**	**71**	**93**
BTR	**11**	**18.64**	**03**	**5.08**	**12**	**20.33**	**33**	**59**
BTU	**25**	**23.36**	**01**	**0.93**	**0**	**0.00**	**81**	**107**
B	**60**	**21.50**	**08**	**2.86**	**15**	**5.37**	**196**	**279**

CNR	**07**	**14.89**	**0**	**0.00**	**14**	**29.78**	**26**	**47**
CNU	**07**	**26.92**	**01**	**3.84**	**0**	**0.00**	**18**	**26**
CTR	**11**	**20.37**	**01**	**1.85**	**12**	**22.22**	**30**	**54**
CTU	**07**	**19.44**	**02**	**5.55**	**0**	**0.00**	**27**	**36**
C	**32**	**19.63**	**04**	**2.45**	**26**	**15.95**	**101**	**163**

DR	**03**	**18.75**	**0**	**0.00**	**08**	**50.00**	**05**	**16**
DU	**27**	**27.27**	**0**	**0.00**	**0**	**0.00**	**72**	**99**
D	**30**	**26.08**	**0**	**0.00**	**08**	**6.95**	**77**	**115**

CLEANERS	**5***		**0**		**0**		**0**	**5***

TOTAL	**127+5***	**21.89**	**12**	**2.06**	**50**	**8.62**	**391**	**580+5***

Abbreviations: SC-Scheduled Caste, **ST**-Scheduled Tribes, **OBC**-Other Backward Class, **GEN**-General, **A, B, C & D**-Groups, **N**-Non-technical, **T**-Technical, **R**-Recruited, **U**-Upgraded, * Not counted towards reservation

C. **Existing Strength of Account-II Employees as on 01.04.2012:**

Recruited Through DORD Office

Group	SC	ST	OBC	GEN	Total
B	01	-	01	19	21
C	-	-	-	-	-
D	03	01	04	03	11
Total	**04**	**01**	**05**	**22**	**32**

D. **Existing Strength of Mess Employees as on 01.04.2012:**

Recruited through COW Office

Group	SC	ST	OBC	GEN	Total
B	-	-	01	01	02
C	-	-	01	02	03
D	12	-	19	43	74
Total	**12**	**-**	**21**	**46**	**79**

The data as available for showing the representation of SCs/ STs/ OBCs/ PH related to the new students admitted in the year 2011-12 in various programmes/ disciplines at the Institute is given below:

Programmes	Registration Data in the 2011-12 - Ist Semester				
B.Tech	**SC**	**ST**	**OBC**	**PH**	**Total**
AE	07	04	12	01	**24**
BSBE	06	05	11	0	**22**
ChE	10	07	20	01	**38**
CE	15	08	27	01	**51**
CSE	14	06	25	01	**46**
EE	20	09	36	02	**67**
ME	14	07	27	03	**51**
MSE	14	13	24	02	**53**
TOTAL	**100**	**59**	**182**	11	**352**

Programmes	Registration Data in the 2011-12 - Ist Semester				
M.Sc. (5 yrs)/ BS (4 Yrs)	**SC**	**ST**	**OBC**	**PH**	**Total**
Chemistry	04	02	-	**0**	**06**
Economics	06	04	03	**0**	**13**
Mathematics & Scientific Comp	06	04	14	**02**	**26**
Physics	04	01	06	**0**	**11**
Total	**20**	**11**	**23**	**02**	**56**

Programmes	Registration Data in the 2011-12 - Ist Semester				
M.Sc.-PhD (Dual Degree)	**SC**	**ST**	**OBC**	**PH**	**Total**
Physics	02	01	04	0	07
Total	**02**	**01**	**04**	**0**	**07**

Programmes	Registration Data in the 2011-12 - Ist Semester				
M.Sc. (2 yrs)	**SC**	**ST**	**OBC**	**PH**	**Total**
Chemistry	07	01	11	0	19
Mathematics	06	01	13	0	20
Statistics	0	0	05	0	05
Physics	05	01	07	0	13
Total	**18**	**03**	**36**	**0**	**57**

Registration Data of M. Tech. / MBA/ / VLFM/ M.Des. Students of 2011-12- **Ist Semester**

Dept.	SC	ST	OBC	PH	Total
AE	10	03	15	-	**28**
CHE	04	06	18	-	**28**
CE	10	-	22	01	**33**
EE	13	01	54	-	**68**
ME	20	01	49	-	**70**
MSE	07	01	11	-	**19**
CSE	02	-	08	-	**10**
MSP	01	-	04	01	**06**
IME	05	-	07	-	**12**
MBA	11	05	19	-	**35**
VLFM	-	-	-	-	**-**
NET	-	01	01	-	**02**
LT	-	-	05	-	**05**
EEM	04	02	09	-	**15**
BSBE	01	-	04	-	**05**
DES	07	-	06	-	**13**
TOTAL	**95**	**20**	**232**	**02**	**349**

Registration Data of Ph D students of 2011-12- **Ist Semester**

Dept.	SC	ST	OBC	PH	Total
AE	05	-	04	-	09
CHE	16	01	10	-	27
CE	03	-	06	-	09
EE	04	-	13	-	17
ME	05	02	09	-	16
MSE	06	01	01	01	09
CHM	12	03	24	-	39
MATH	05	-	06	-	11
PHY	09	02	14	-	25
PHY M.Sc.-Ph.D.(Dual)	02	-	02	01	05
HSS	02	01	03	-	06
CSE	02	-	-	-	02
MSP	01	-	02	-	03
STA	-	-	-	-	-
IME	01	-	01	-	02
NET	-	-	01	-	01
BSBE	05	-	05	-	10
TOTAL	**78**	**10**	**101**	**02**	**191**

***Registration Data of PG Students in 2011-12-* I^st^ Semester**

PhD

Dept.	SC	ST	OBC	PH	Total
AE	01	0	01	0	02
CHE	05	0	06	0	11
CE	01	0	0	0	01
EE	0	0	04	0	04
ME	01	0	01	0	02
MSE	01	0	0	0	01
CHM	0	01	03	0	04
MATH	0	0	0	0	0
PHY	0	0	03	0	03
PHY M.Sc.-Ph.D.(Dual)	02	0	02	0	04
HSS	01	0	0	0	01
CSE	01	0	0	0	01
MS	0	0	0	0	0
STA	0	0	0	0	0
IME	0	0	01	0	01
NET	0	0	0	0	0
BSBE	01	0	03	0	04
TOTAL	**14**	**01**	**24**	**0**	**39**

Rajbhasha Prakoshtha

IIT Kanpur is an Institute of national importance where students from all over the country and abroad are admitted for higher education in Science, Engineering, Technology and Humanities disciplines. Therefore, the English language has been adopted as the medium of instruction/syllabus, research and academic activities.

Rajbhasha Prakoshtha was established in the Institute in September 1986. It has got its own office which is equipped with the three bilingual computers for smooth and efficient working. It is managed by a liaison Officer (Hindi), Assistant Registrar and two Junior Technical Superintendent (Translation) with one Project employee. The Rajbhasha Prakoshtha is effortive in creating awareness of Hindi among the Institute employees. "Sansthan Rajbhasha Karyanvayan Samiti" constituted by the Director, monitors and provides guidelines to the Rajbhasha Prakoshtha in its planning and performance. The Rajbhasha Prakoshtha performs various activities like organization of Hindi Diwas, Hindi fortnight, Hindi workshops and holds meetings for promoting the atmosphere of Rajbhasha in the Institute round the year.

The Rajbhasha Prakostha has adopted the following policies:

1. Entire correspondence with Group D employees are done in Hindi.
2. All Hindi letters are replied to in Hindi.

3. All routine forms and the heading of Registers have been printed bilingually in most of the Department of the Institute.
4. The name plates, office stamps, sign boards, letters heads and the envelopes etc. have been made bilingual.
5. Regular classes of Prabodh, Praveen & Pragya for the Non Hindi speaking employees have already been started. Eight Non Hindi speaking employees have been trained in Prabodh, Praveen and Pragya.

The act and the Statutes of the Institute have been made bilingual.

The Annual Report of the Institute for 2010-2011 and the Audit Report for the F.Y. 2010-2011 received from the Account Section/AG,UP were translated into Hindi and fair copies typed for submission to the ministry.

Quarterly news letter SAZAG and half yearly Hindi Magazine "Antas" published in Hindi. The press release and invitation cards for the Convocation – 2012 were issued bilingually. All periodical reports were sent to the Ministry and the Nagar Rajbhasha Karyanvayan Samiti timely.
In compliance with the directives of Official Language Department, New Delhi, Hindi fortnight was observed by conducting various competitions in the month of September 2011 and on 21 September 2011 Hindi Diwas samaroh was held in the Lecture Hall complex, in which winners of the various competitions were honored with books awards.

Following Competitions were held from 01.09.2011 to 20.09. 2011

a) Letter Writing Competition)
b) Hindi Vocabulary Competition
c) Noting & Drafting Competition
d) Hindi Typing Competition
e) Hindi Dictation (Non Hindi Speaking)
f) General Knowledge Competition
g) Hindi New reading (For IIT K Students)
h) Hindi Extempore (For IIT K Students)
i) Poetry recitation Competition

Winner of above competitions were as under:

1. Letter writing Competition

1. Shri Ram Kripal - First
2. Shri Mahesh Kumar - Second
3. Shri Rajesh Kumr Gurang – Third

2. Hindi Vocabulary Competition

1. Sandeep Kumar- First
2. Shri Anil Kumar Sharma – Second
3. Shri J P Kanojia – Third

3. Noting & Drafting Competition

1. Shri Ashis Kumar Singh – First
2. Shri Sandeep Kumar - Second
3. Shri Anil Kumar Sharma – Third

4. Hindi Typing Competition

1. Shri Kamlesh Kumar – First
2. Ms.Arti Gupta – Second
3. Shri Alok Srivastava – Third

5. Hindi Dictation (Non Hindi Speaking)

1. Shri Deepak Ubalae - First
2. Shri Binu S - Second
3. Shri Namdeo Murkhe – Third

6. General Knowledge Competition

1. Shri Anil Kumar Dubey – First
2. Shri Alok Srivastava – First
3. Shri Kamlesh Singh – Second
4. Shri Ram Krishna Tiwari – Third

7. Hindi News Reading Competition (For IIT K Students)

1. Shri Hemant – First
2. Ms. Harsha – Second
3. Shri Bhuwan – Third

8. Hindi Extempore Competition (For IIT K Students)

1. Shri Bhuwan – First
2. Shri Hamant – Second
3. Shri Anurag – Third
4. Shri Piyus – Third

9. Poetry recitation Competition

1. Shri Pramod Kumar – First
2. Shri Rajesh Kumar Srivastava – Second
3. Shri C S Goswami – Third

10. Poetry recitation Competition (For IIT K Students)

1. Shri Ravi kant Pandey – First
2. Ms. Archana Shukla – Second
3. Dr. Sandeep Kumar Shukla – Third

During the year 2010-11 about 337 letters from Directorate, 281 letters from Registrar's office, 423 letters/circulars from Administration Section and 664 letters from others Department/Section/Unit were issued in Hindi.

Rajbhasha Prakoshtha is dedicated to the upliftment of Hindi in the Institute. Prakoshtha is always ready to co-ordinate with each and every department/ Section of the Institute in implementing the orders and directives received time to time from Department of Official Language, Ministry for Home Affairs & Ministry for Human Resources & Development, Govt. of India.

On the occasion of Hindi Diwas samaroh 2011, seventeen employees of the Institute were honored who are working in official language in their Department/Section.

Media Technology Centre

The Media Technology Centre ensures that the faculty, students and the community at large utilize the facility provided by the centre and takes an active interest in the growth of information, communication and technology. The Media Technology Center aims to provide a meaningful platform for the students of the Indian Institute of Technology Kanpur to nurture a sense of creativity in them and merge it with their gradual process of acquiring and exchanging knowledge with technology based education at the Institute.

Students of the Media Communication in the Design Program have an academic relevance to the resources of the center. Students continue to exhibit their ample creative talents by producing social ad campaigns, documentary films, radio jingles and various web and mobile applications exploiting the varied domains of media arts. The resources are also being used by the undergraduate students opting for HSS elective courses in films and videos.

One of the major on going projects of the center involves faculty across the Institute in production of quality video based courseware to generate resources and aids for supporting the engineering, sciences and technology based education that can reach out to the larger Education system through various communication media. The Ministry of Human Resource and Development is supporting the initiative under the auspicious of National Program on Technology Enhanced Learning (NPTEL). In the long term, Media Technology Center aims to create a digital portal as an archive of supportive materials to serve educational purposes and research references in the field of Engineering, Science and Technology, Humanities and Management studies as well as in the relevant areas of National Heritage and Culture. The relevant information / knowledge can be disseminated using this facility and utilized for classroom teaching, student references and research aid.

We have adopted a High Definition multiple-camera mode of production for shooting of our programs. It is typically a three camera set up employed on the set that simultaneously record a scene. Generally, the two outer cameras shoot close shots on the set at any given time, while the central camera shoots a wider master shot to capture the overall action. In this way, multiple shots are obtained in a single take without having to start and stop the action. The live audio and video feed from the cameras of the production floor are send to the production control unit (Switcher/Mixer) that ensures mixing and switching of the multiple footage at the

original, highest-quality through the and recorded on HD Recorders. The digitized video and audio data is then imported to hard disks from the digital tapes through these recorders. Once on disk they are edited on computer using wide range of software i.e. Adobe, FC Pro, Pinnacle etc. The non-linear editing offers a flexibility of film editing, with random access on the source material and easy project organization. The non-linear editing platforms provide numerous options and effect for assembling video clips, audio tracks, graphics and other source material into a presentable package. Once this process is over the edit footage is (i) recorded back to tape or disk and delivered (ii) converted into streaming media and shared on the NPTEL website (nptel.iitm.ac.in).

90.4 FM Community Radio Station

It has been a sincere effort of IIT K Community Radio, since its inception in September 2010, to unite the community within the campus, with the communities outside. This is an initiative by IIT Kanpur to focus on social and educational issues for the development of rural and semi urban areas. As a non-profit, non-commercial setup, the focus of IIT community radio is to engage the campus community along with the students, to educate the rural areas by generating interest through programmes on agriculture, health and hygiene, education and counselling and providing information on courses run in the neighbouring areas, women related issues, moral values through story narration and giving a platform to local people for personality development. As far as possible the Media Centre engages the campus community, students and faculty in programme production and reaches out to them through mails, regular radio announcements and through field visits. The discussions are held over ideas/themes, and once the concept is finalized, the team and volunteers work together. Also, people from neighbouring villages have come forward and effectively used this medium of communication. Regular feedback is also received on our e-mail, and some through field surveys. Our aim is to involve every section of society and produce good and meaningful programmes. Keeping this aim in mind the Community Radio and the Radio club at IIT Kanpur organized a 15 day workshop for the students and also the members of the campus. Radio Experts were invited from All India Radio and 98.7 Radio Mirchi etc. There were nearly 60 participants. They were taught about scripting, voice modulation, anchoring and many other topics.

USID Gurukul 2011

USID Foundation along with Media Technology Center, Design Program & Department of Humanities & Social Science had organized a Design workshop called USID Gurukul from 10th December to 15th December 2011. USID Gurukul is an inspiration taken from "Gurukul", a school concept from the ancient times in India. 60 Students (Shishyas) from four countries were brought together in this two weeks workshop. Resource persons from industry and academia were invited as Gurus.

The idea was to provide a platform for students from the varied fields of design, technology, management and social sciences to go through a two weeks experience of collaborative and immersive learning and explore, experience, learn and create design solution for existing social problems under the mentorship of accomplished

practitioners, researchers, academicians and professionals which would then facilitate social-economic development and better quality of life. Relevance of understanding the importance of social context in design was emphasized through the course of different project taken up during the workshop.

IITK Website

A team at Media Technology Centre is currently involved in developing the IIT Kanpur Website. The team is building a dynamic website aimed towards creating a single visual branding through appropriate graphic user interface and considering the user experience design aspects.

Video Projects

Committed manpower and resources of the Media Technology Center is round the year involved in providing its support in various academic and non-academic events. The recordings of major institute events are done through the mEdia Technology Center. The Center is also involved in creating short films and videos on various topics relating to the Campus Life. Recently the Center produced a film titled 'Giving Back' on Solid and Liquid management systems deployed by the institute. The centre is presently working on a short film project concerning the activities of counselling service on campus and a short film on the technology research initiatives of some faculty members that has substantial social impact.

Finance

The Ministry of Human Resources & Development (MHRD) has released Rs. 13478.00 lakh as Non-Plan Grant and Rs. 12700.00 lakh as Normal Plan Grant in the financial year 2011-2012.

NON-PLAN

The total receipt under Non-Plan during the financial year 2011-2012 from Ministry of Human Resources & Development, Government of India is Rs. 13478.00 lakh. The Internal Receipts of Institute is Rs. 4056.21 lakh.

The Total Non Plan expenditure during the financial year 2011-2012 comes out to Rs. 17594.21 lakh. The deficit of Rs. 60.00 lakh has been met out from Interest Earning of Endowment Fund Account.

NORMAL PLAN

A total receipts under Normal Plan during the financial year 2011-2012 is of Rs. 12700.00 lakh under Plan from the MHRD, Government of India.

With an opening balance of Rs. 1648.96 lakh, the total expenditure under Normal Plan was Rs. 14348.96 lakh. This expenditure includes Rs. 5299.82 lakh on Building & Works and Central AC Facility, Rs. 6680.87 lakh on Non-Consumable purchases including Equipment, Furniture & Fixtures etc., Rs. 93.84.00 lakh on Library Books and Periodicals & Journals and Rs. 2274.43 lakh on Recurring Expenditure includes expenditure on scholarships.

PLAN (OSC)

With an opening balance of Rs. 550.81 lakh, the total expenditure under Plan (OSC) is restricted to Rs. 550.81 lakh. This expenditure includes Rs. 164.24 lakh on Non-Consumable purchases including Equipment, Furniture & Fixtures etc, and Rs. 187.62 lakh on Library Books and Digitalization of Library. Rs. 198.95 lakh was spent on Recurring Expenditure includes expenditure on Periodical and Journals and Consumables.

INCOME AND EXPENDITURE FOR THE YEAR 2011-12 UNDER MAJOR HEADS

Sl. No.	Particulars	Income (Rs. In lakh)	Expenditure (Rs. In lakh)
1	Non- Plan	17594.21	17594.21
2	Normal Plan (Opening Balance – Rs. 1648.96 lakh)	12700.00	14348.96
3	Plan (OSC) (Opening Balance – Rs. 550.81 lakh)	-	550.81
4	JEE	4857.78	4574.73 (Non Plan)
5	GATE	190.86	352.58 (Non Plan)

			2.54 (Plan)
6	GATE (JMET)	12.53	65.76 (Non Plan)
7	Research & Development	1463.03	583.78 (Non Plan) 31.68 (Plan)
8	Deans Capital Fund	79.18	16.09 (Non Plan) 31.47 (Plan)
9	Hall Management	1028.77	1033.84 (Non Plan)
10	Fund Hall Management	102.90	107.41 (Non Plan)
11	Pension Hall Management	175.52	173.59 (Non Plan)
12	Student Gymkhana	67.24	46.71 (Non Plan)
13	Visitors Hostel	118.11	107.79 (Non Plan)
14	Endowment Fund	1738.41	623.72 (Non Plan)
15	GATE (JAM)	22.15	24.87 (Non Plan)

Endowment Report

The year 2011-12 has continued the upwards growth in financial resource of the institute. The total Grant-in-aid received during the financial year from MHRD, Govt. of India, under non-plan was Rs. 186.60 crore and under Plan Rs. 187.00 crore.

The year was good for fund raising as well. The Institute received Rs. 5.83 crore from 888 donations made by 690 donors (334 donors from India and 356 donors from abroad). A total of 421 donors (164 donors from India and 257 donors from abroad) contributed Rs. 60.5 lakh under the Annual Gift Programme. Donations received under AGP have been utilized for providing travel support to the students for attending international conferences, cash award for publication of their research papers in reputed journals, travel support to international visiting faculty, FM Radio Station and other activities including community services supporting and encouraging excellence in the Institute.

Class of 1986 has contributed their batch fund for establishing Tinkering Lab that will provide basic mechanical and electrical tooling facilities. Once the lab gets going, there is a possibility of substantial additional funding from DST to make it a national innovation lab.

Mr. Jageet S. Bindra, donor of Mrs. & Mr. Gian Singh Bindra Faculty Research Fellowship has converted his fellowship to Mrs. & Mr. Gian Singh Bindra Memorial Chair in the Department of Chemical Engineering; Mr. Kamalesh Dwivedi (BT/EE/79) and Mrs. Rita Dwivedi have instituted Pandit Girish Ranjan & Sushama Rani Pathak Chair; Housing and Urban Development Corporation Ltd (HUDCO) has instituted HUDCO Chair.

Mr. Bogineni Chenchu Rama Naidu (MT/MSP/82) has created Bogineni Chenchu Rama Naidu Merit Award; Mr. Khairati Lal Chaudhary has created Lalit Kishore Chaudhary Memorial Award; Mr. Cherian Mathew (BT/CSE/08) has created Dr. Elizabeth & Dr. Varkey Cherian Scholarship and award and Mr. Sanjeev Narayan Khadilkar (PHD/CSE/95) has created Gurubandhu Challenge Prize.

Several donors have instituted new scholarships during the financial year 2011-12. To mention only a few: AIM FOR SEVA [Mr. Arun Kapoor (BT/ME/67)] has instituted 'Padma Kapoor Memorial Scholarship'; Ministry of Steel has instituted 5 scholarships named "Ministry of Steel Scholarship"; Mr. Ashish Shukla (MSc5/MTH/97) has instituted 'Giridhar Gopal Shukla Memorial Scholarship'; Mr. Saibal Dutt (BT/EE/77) has instituted 'Smt. Neela Dutt Scholarship'; Dr. Ashok Jain (MTech/CE/1971, PHD/CE/78) has instituted Sri Babu Ram Jain Memorial Scholarship.

Mrs. Asha Jadeja has donated US$ 2.01 lacs towards the Rajeev Motwani Building for CSE department. Mrs. Jadeja has committed to donate 50% cost of the Rajeev Motwani building which is presently under construction.

The 1972 batch has donated towards establishing the yoga and aerobics hall in the new student's sports complex, which has been renamed as the *1972 Batch Yoga and Aerobics hall*.

Dr. Shashi M. Kuppa (BT/CE/85) has instituted a Distinguished lecture series in the Department of electrical engineering in the name of his father, Prof. M. Ramamoorthy.

SURGE 2011 program was conducted during summer 2011 which saw student participation of 95 members from 122 Institutes, and faculty participation of 72 members from IIT Kanpur as mentors. The selection of student participants was very competitive as 2600 applications were received from various institutions in the country, which gives a clear indication of its increasing popularity.

The Institute encourages research by providing travel support to students and rewarding students for publishing research papers in high quality journals. Institute provided travel support to 114 students for attending international conferences, and cash awards to 129 students for publication of their research papers in reputed ISI Web Journals during the financial year 2011-12.

The institute has created a "Scholar in Residence" program under which eminent scholars are invited to come to IIT Kanpur and interact with students and faculty. The first visitor under this was Mr. Michael Danino, an eminent historian. All these activities are being supported by alumni donations.

The institute has created Department Excellence Funds for every department to support excellence in academics and research.

The institute is working on an ambitious plan for raising substantial resources to increase the research and development activities on campus and hopes to launch the drive in the year 2012-13.

The following expenditure was made during 2011-12 from Endowment Fund A/c to support different activities in the Institute.

(Rs. In lakh)

S. No.	Project Title	Total Amount
1	Development & Operational activities in this Institute	122.51
2	Awards	2.70
3	Scholarships	12.87
4	Faculty Chairs	36.60
5	Young Faculty Research Fellowship	6.00
6	N Narayana Murthy Foundation	135.82
7	Poonam & Prabhu Goel Foundation	24.98
8	Joy & Gill Endowment Foundation	3.35
9	Ranjit Singh Foundation	3.85
10	Distinguished Lecture Series	3.10

11	Batch Funds	30.16
12	Departmental Funds	18.69
13	Student Activities Fund A/c	28.33
14	Community Services	3.33
15	NICEE Endowment Fund	12.26

Facilities to Students

1. RESIDENTIAL ACCOMMODATION FOR STUDENTS

Hall of Residence

IIT Kanpur is a residential Institute and thus requires that all students registered for a degree programme in the Institute reside in the Campus itself. Therefore, all students except (i) married students who are allotted alternative accommodation in single bed room apartments (SBRA) and (ii) Students, who are wards of campus residents, as a special case, are permitted to stay with their parents on the campus.

The Institute has nine Halls of Residence for boys, namely Hall-1 to Hall-5 & Hall-7-Hall-10, Hall – 11 is under construction and two for girls (GH) with total capacities of 3800 and 484 for boys and girls respectively. In addition, there is accommodation for 72 students in single bedroom apartments (SBRA).

The Halls have single and double-seated rooms. Presently, most of the senior undergraduate and all post graduate students are given single-seated rooms, while most of first and second year and some third year B. Tech. and M. Sc., (Integrated) students and Ist year M. Sc. (2-Yrs.) are living in double seated rooms. Each Hall has a mess of which every hall resident is a member. The Halls of Residence also have a well subscribed reading room, TV room, TT rooms, PC room, badminton and volley ball courts, canteen, library (with the books on general topics) and several hobby clubs. The affairs of these amenities in each Hall are managed by (i) the respective committee of students for the amenities and (ii) a central Hall Executive Committee (HEC) under the overall guidance and supervision of three wardens (two for Hall-VI). The overall management of the Halls of residence is through the central Hall Management Council (HMC). The Council of Wardens (COW) looks after the affairs of mess workers.

In addition to students, staffs working in various research projects of the Institute are also provided accommodation in the halls depending upon the availability of the rooms. The boarding and lodging arrangements for the participants of conferences and short-term courses are also made in the Halls of Residence.

Single Bed Room Apartments (SBRA's)

Depending on the availability, the accommodation in single bedroom apartments (SBRA) is provided to married students. In exceptional cases bachelors, on specific medical grounds, may also be provided SBRA accommodation. A Married Students Welfare Committee (MSWC) manages the affairs of SBRA;s under the supervision of the Warden-in-Charge.

2. FINANCIAL ASSISTANCE TO STUDENTS

All possible efforts are made by the Institute to render financial assistance (i) in the form of scholarships and (ii) short-term loans to needy and deserving students during their stay at the Institute. Short-term loans are given to some students, depending on

the requirement of the case, out of the Students' Benefit Fund (SBF) so that their minor financial emergencies are overcome. The details of the financial assistance offered to the students at the Institute are given below:

Loan	Short Term	Long Term
Short Term/Long Term	46	5

Student's Benefit Fund (SBF) also provides scholarships of the value of Rs. 1200/- per month to the needy students. Total 59 students were provided scholarships from the SBF during the year 2011-12.

3. SCHOLARSHIPS FOR UNDERGRADUATE STUDENTS

Merit-cum-Means scholarships of the value of Rs. 1000/- per month with tuition fee waiver are awarded per semester to students up to 25% of the total strength enrolled in each of the batches of the B. Tech., M. Sc. (Integrated), B. Tech-M. Tech. Dual degree and M. Sc. (2-year) programmes provided that the incomes of their parents do not exceed Rs. 4,50,000.00 per annum. SC/ST students not in receipt of scholarships from any other source including the State Governments or Directorate of Harijan and Social Welfare are eligible for the Free Basic Mess (scholarships).

In addition, several students of the B. Tech. /M. Sc. (Integrated) and M. Sc. (2-year) programmes are in receipt of the financial assistance through scholarships, stipends and grants from Central and State Governments, Directorate of Education and other organizations. Table-I shows various scholarships awarded to undergraduate students during 2011-12.

TABLE-I (A): Scholarships for B. Tech. / B. Tech.-M. Tech. (Dual degree)/ M. Sc. (Integrated) M. Sc. (02Year) & M.Sc. - Ph.D. (Dual Degree) for the year 2011-12

Undergraduate Scholarships	Year				
	I	II	III	IV	V
MCM @ Rs. 1000/- p.m. with Freeship	188	174	119	111	4
Freeship		21	10	5	
Free Basic mess plus Pocket Allowance @ Rs.250/- p.m.	93	109	63	39	27
Aedunuthula Prasad Memorial	---	---	---	1	---
Anurag Bartaria	---	---	---	1	---
Arakere and Karen Vasudev	---	---	1	---	---
BGM Kumar Foundation	1	---	---	---	---
Bhuwan and Indira Joshi	---	---	1	---	---
Bishambar Gupta & Anguri Gupta	---	---	1	---	---
Balasubramaniam & Visalakshi	--	1	---	---	---
Biswanath Jha Memorial	1	---	---	---	---
Dr. Gurcharan Singh Kainth	---	1	1	1	---
Guru Ji Ghasit Ram	1	---	1	---	---

Harish and Sushila Chandra	1	---	---	---	---
Neeraj Kapoor Memorial	---	---	---	1	---
Khem Chandra Yadav	1	---	---	1	---
Kinra	1	---	---	1	---
Kunta Jha	1	---	---	---	---
Mahesh & Shashi Chandra	1	---	---	---	---
N.S. Rajaraman	1	---	---	---	---
Neta Ji Balwan Singh	1	---	---	1	---
Nita Goyal and Ashish Gupta	1	1	1	---	---
P.D.Murti Memorial	---	1	---	1	---
Pt. Balajee Govind Hardikar Memorial	1	---	---	---	---
Prof. Netarlal Kapur	---	---	1	---	---
Ram Rajendra Malhotra Education Society	3	---	---	---	---
Sarpanch Salik Ram Katiyar	1	1	---	---	---
Shiv Kumari Shukla	1	---	---	---	---
Shiv Prakash and Dayawanti Sharma	1	---	---	---	---
Shri D.P. Shukla	1	---	---	---	---
Smt. Jagat Kaur Memorial	---	1	---	---	---
Sri Jamuna Prasad and Basanti Gupta	---	1	---	---	---
Sri Temasek@iitk	---	1	---	---	---
Tapan Kumar and Swapna Bandhyopadgyay	---	1	---	---	---
Vasudeo Laxman Sahasrabuddhe Vaidya	---	---	---	1	---
Yasodha Yadav	1	1	---	---	---
Yogendra Nath and Sushma Gupta	1	---	---	---	---
Shrikant Mishra Scholarship	1	---	---	---	---
Shri Shankar Lal Shrimati Prema Debi	---	1	---	---	---
Tarun Sondhi Memorial Scholarship	---	1	---	---	---
Kemchand Memorial Scholarship	---	1	---	---	---
Dr. M. Anantaswamy and Mrs. Vijayalakshmi Rau	---	1	---	---	---
Shri Bihari Lal Srivastava and smt. Nalini Srivastava Memorial Scholarship	---	---	---	1	---
Shanti & Ram Kishore Sahai Saxena Memorial Scholarship	1	---	---	---	---
Shri Kalp Nath Singh	---	---	1	---	---
Shanti Devi and Omkar Nath Maewal Memorial	---	---	1	---	---
K. N. Saluja	2	3	2	2	---
Sri Singhasan Singh	---	---	1	---	---
Romesh Chandra Memorial	---	---	---	2	---
Dharmavati Garg	---	---	---	2	---
Durga Devi Memorial	---	1	---	---	---
Dr. K.P. Gupta	---	---	1	---	---
Baljit and Nirmal Dhinsa	1	2	---	---	---
Mona and Paramjit Singh	---	---	2	1	---
Rajnath Singh Scholarship	---	---	---	1	---
Nitish Thakor	1	---	----	---	---
Pushpa Garg	1	---	---	---	---

Aviation Development Award	---	---	13	---	---
Dr. D.R. Bhagat Scholarship	---	---	2	---	---
Sagnik Asis Ray	---	---	---	1	---
Anil and Reshma Nigam Scholarship	---	---	1	---	---
Govinda and Indira Srikantiah	---	---	1	---	---
Simran Mandeep Kainth Memorial	---	1	1	1	---
IWA Bonn	---	03	---	---	---
Pratima Ghosh Memorial	1	---	---	---	---
Ramesh Chandra Yadav	1	1	---	---	---
Jasmine and Mohiuddin	---	1	---	---	---
Seema Jain Memorial	---	1	---	---	---
ACC Fellowship	1	---	---	1	---
Anita & Santosh Mehra Foundation Scholarship	---	---	1	---	---
Class of 1984	1	---	---	---	---
Shanti & Ram Kishore sahai	1	---	---	---	---
Smt. Padmavathy & Prof. R. Sankar	---	1	---	---	---
Suman Gupta Scholarship	---	1	---	---	---

Scholarships from outside agencies

TABLE-I (B): Scholarships for B. Tech. / B. Tech.-M. Tech. (Dual degree)/ M. Sc. (Integrated) M. Sc. (02Year) & M.Sc.-Ph.D. (Dual Degree) for the year 2010-11

Undergraduate Scholarships	Year				
	I	II	III	IV	V
Post Matric Scholarship	---	1	---	---	1
NTS Scholarships	5	2	18	2	2
FAEA Scholarship	---	---	---	2	---
Aditya Birla	3	2	1	2	---
Inspire	55	49	37	25	30
TODAI Scholarship	02	02	02	02	---
O.P. Jindal Scholarship	01	01	01	01	---
State Scholarship	---	2	1	2	1
World Quant Scholarship	---	---	---	2	---

All the SC/ST category students get tuition fee waiver irrespective of their parents' income. Concession of free messing (basic menu only) plus pocket allowance of Rs. 250/- per month is provided to SC/ST category students whose parents' income do not exceed Rs. 4,50,000/- per annum, in the previous financial year.

AWARDS AND PRIZES TO MERITORIOUS STUDENTS

The students at IIT Kanpur are engaged throughout their programme in various academic, co-curricular and extracurricular activities. The outstanding students are given various awards and prizes for their achievements in their activities. Table-III shows the awards and prizes given during 2011-12. In addition, top 7% students in order of merit in each year are given a Certificate of Merit and a cash prize of Rs. 400/- for UG and Rs. 600/- for PG students.

TABLE-Ill: AWARDS AND PRIZES (2010-11)

S. No.	Awards and Prizes	B. Tech./ M. Sc. (Intg.)/Dual degree	M. Sc. (2-Year) / Dual degree
1	President Gold Medal	3	---
2	Directors Gold Medal	1	---
3	General Proficiency Medal	20	5
4	Proficiency Medal	25	5
5	Cadence Gold Medal	01 (M.Tech)	---
6	Cadence Silver Medal	1	---
7	Prof. Adidam S. R. Sai Memorial Gold Medal	01 (M.Tech.)	---
8	Prof. Adidam Sri Ranga Sai Memorial Medal	1	---
9	Ratan Swarup Memorial Prize	1	---
10	Banco Foundation Prize (ME)	1	---
11	Dr. Shanker Dayal Sharma Medal	01 (M.Tech.)	---
12	Prof. Vijay Mahajan Gold Medal	01 (MBA)	---
13	Batra Gold Medal	1	---
14	IEEE/Pedes'96 Award	01 (M.Tech.)	---
15	Bhagwani Devi Maheshwari Gold Medal	1	---
16	Prof. Bal Deva Upadhayaya Memorial Gold Medal	01 (M.Tech.)	---
17	Mars G. Fontana Prize (MME)	1	---
18	Sangeeta Pradhan Memorial Medal	1	---
19	Best Software Award	1	---
20	Binay Kumar Sinha Award	3	---
21	TATA Consultancy Services Awards	2	---
22	Dr. S.D. Bokil Memorial Medal	01 (M.Tech.)	
23	Mehta M.Tech. Gold Medal	01 (M.Tech.)	
24	IITK Excellance Award for Leadership	4	---
25	IITK Excellance Award for Art & Cultural	4	---
26	IITK Excellance Award in Community Services	4	---
27	Ellizabeth and Varkey Cherian Award	4	---
28	Trilok Chandra Goel Memorial gold Medal	01 (M.Tech.)	---
29	S.N. Mittal Gold Medal	1 (M.Tech.)	---
30	VLFM	03 (MBA)	---
31	Gopal Das Bhandari Memorial Distinguished Teacher Award	01 (Faculty)	---
32	Notional Prizes (UG)	193	12
33	Notional Prizes (PG)	56	
34	N. Balakrishnan Award	---	1
35	Prof. J. N. Kapur Prizes	1	1
36	Smt. P. K. Subbulakshmi Memorial Award	---	02
37	Gargi, Kritika & Maitreyi Awards	3	---

38	Sridhar Memorial Prize (EE)	1	---
39	Ajai Agarwal Memorial Prize	1	---
40	Dr. Sangeeta Goel Memorial Award	1	---
41	O. P. Bajaj Memorial Award	1	---
42	Amit Saxena Memorial Award	1	---
43	Dr. R.C. Srivastava Memorial Scholarship	---	1
44	Jayesh Memorial Award	3	---
45	Dr. V.Rajaraman Scholarship	2	---
46	Prof. J.N. Kapur Prizes	01	01

POSTGRADUATE STUDENTS

The amount of teaching/research assistantship or fellowship for M. Tech. students is Rs. 8000/- per month while that for Ph. D. students in engineering disciplines is (a) Rs. 18000/- for first two years and (b) Rs. 20,000/- for subsequent years. The amount of assistantship or fellowship for Ph. D. students in Sciences and Humanities & Social Science is (a) Rs. 16000/- per month for the first two years of their programmes and (b) Rs. 18000/-per month for subsequent years.

EDUCATIONAL GRANTS TO POSTGRADUATE STUDENTS

The Institute gives financial assistance to the M. Tech. / Ph. D. students who are in receipt of Institute scholarship in the form of grant for (a) the preparation of thesis, (b) purchase of books and stationary items and (c) charges for photocopying. The amounts of grants given under these heads are summarized in Table-II.

Table-II: Amount of Educational Grants given to Postgraduate Students

S. No.	Items of Expenditure	Ph. D.	M. Tech.
1.	Thesis Preparation Aid	3,000.00	750.00

4. SPECIAL ASSISTANCE TO SC/ST & OBC STUDENTS

Rules for admission to undergraduate programme through JEE are relaxed for the SC/ST categories of students. 15% of seats are reserved for the Scheduled Caste (SC), 7.5% for the Scheduled Tribes (ST) students & 18% seats are reserve for OBC (for non-creamy layer). A separate merit list is drawn for those OBC &SC/ST students, who appear for the Joint Entrance Examination. Cut-off point for calling them for the Counseling and thereafter for the offer of admission is based on the relaxed criteria.

In addition, SC/ST students are also selected from among the list of students who do not qualify for the admission for a one-year preparatory course scheme.

All the SC/ST category students get tuition fee waiver irrespective of their parent's income. Concession of free messing (basic menu only) plus pocket allowance of Rs. 250/- per month and room rent exemption are admissible to these SC/ST category students whose parents income does not exceed Rs. 4,50,000/- per annum, in the previous financial year.

While granting any financial assistance other than the teaching/research assistantship or fellowship available to all the students, including SC/ST students, the SC/ST students are given special consideration.

5. ACTIVITIES OF STUDENTS' GYMKHANA

As mentioned above, academic activities are only one facet of student's life at IIT Kanpur. Our students actively participate in various extra and co-curricular activities focussed towards the holistic development of their mind and body. The year 2010-2011 also saw a very active calendar in the form of various games and cultural events.

IIT Kanpur continually strives to encourage an equitable balance between academics and extra-curricular activities among its students. Our vision is to create future leaders in their chosen fields and not just technically accomplished individuals. The Institute strongly believes that an abiding social and humane engagement is the hallmark of its student body. To translate such a belief into reality, the Institute nurtures social, cultural and sporting activities pursued by the students' gymkhana and other student groups.

A variety of activities are pursued by various clubs coming under the broad ambit of the councils of the Gymkhana. They range from clubs like **Prayas,** where students teach children coming from socially disadvantaged and economically deprived backgrounds to the **Dramatics** club which stages thematically inspired and socially relevant plays. Other technically oriented student groups are engaged throughout the year in pursuing special interests like robotics, electronic aids, animation, aero-modeling, dance, fine arts, and astronomy to name but a few.

The overriding objective of the large-scale events of the Institute such as **Antaragni** (the cultural festival), **Techkriti (**the technical and entrepreneurship festival) and **Udghosh** (the sports festival) is to infuse a sense of richness and purpose in the lives of students. All these social, cultural and sporting activities play a crucial role in the transformation of a student into a complete human being. These festivals have seen vastly improved participation levels, both from within the Institute and also from students from other national and international institutions. The revenues generated for conducting these festivals saw an impressive growth last year, which is a tribute to the managerial and logistic skills of our students. During the year, several talks with eminent personalities and other luminaries were conducted throughout the year.

The institute sports teams also participated in the Inter IIT Sports meet this year held at IIT Kharagpur. The cricket team clinched gold after a gap of many years. The Badminton men's team was successful in defending their title and emerged as winners securing a Gold medal yet again. Almost all the teams made it to the semi finals. The girls volleyball team won silver after a nail bitting final.The athletics and squash teams won bronze. Viewing the big picture, the performance of all the teams was appreciable.

The annual inter college sports festival, Udhosh saw immense participation from a large number of colleges through the length and breadth of the nation. Our teams

proved their metal here as well. Athletics, badminton, hockey and weightlifting teams won gold in their respective sport. Chess, cricket, squash and table tennis teams won the Silver medal in their sport. The institute basketball team visited MNIT, Jaipur to participate in the sports festival and the girls' teams was successful in securing a Gold Medal.

The institute throughout the year was a buzz with sporting activities and events. The Institute Football League (IFL) proved to be an immense success amongst the campus community. Students and faculty alike enjoyed JOSH and it's open natured participation. The inter-hall sports festival Varchasva General Championship was fiercely competed with the halls organizing their intra hall festivals to form teams to compete. The Gym facility was upgraded and a new air-conditioned gym totally dedicated to Cardio workout was opened in the New Indoor Sports complex. Along with that the pool room saw the addition of three new pool tables.

The Institute witnessed stiff inter- hall competition in the form of **Galaxy, Takneek, Spectrum** and **Varchasva,** inter- hall Cultural, Science & Technology, Films & Media and Sports championships respectively. Fresher Varchasva tournament also had been organized to find some new talent from the incoming batch. The sole guiding principle to organize these championships is to provide the students of this campus, a much needed platform to compete and showcase their cultural and sports talents and to give them a reason and a motivation, strong enough, to come out of their rooms and participate in group activities.

Counselling Service

The Student Counselling Service is an active wing of our students. The activities include organizing the orientation programme for UG and as well as PG students; providing specific attention to students having academic, financial or personal problems; monitoring the progress of students who need special attention. It enjoys wide appreciation from both faculty and students alike.

PHYSICAL EDUCATION ACTIVITIES

With the objective of a sound physical health and an all round development of personality of students, several co-curricular and extracurricular physical activities have been integrated as Compulsory Physical Activities (CPA) with the regular curriculum at IIT Kanpur. The streams of activities are:

1. Games and Sports
2. National Cadet Corps (NCC)
3. National Service Scheme (NSS)
4. Yoga
5. Tae-Kwando
6. Aerobics (To be Introduced this year)
7. Skating (To be Introduced this year)

All the 1st year students admitted in the B. Tech. /BS programme are required to exercise their option for one of the above activities at the time of registration under the course PE. The two courses **PE 101 and PE 102** constitute Compulsory Physical Activities (CPA) at IIT Kanpur.

GAMES AND SPORTS

Under the Games and Sports stream, a student has an option to choose one of the following sports disciplines: Athletics, Basketball, Badminton, Cricket, Foot ball, Hockey, Squash, Swimming, Tennis, Table Tennis, Volleyball and weight-lifting. The institute has excellent facilities for these disciplines. Besides the responsibility of running the PE courses, Physical Education Section is responsible to supervise and provide Games & Sports facilities to all registered students of the institute and also to organize various games and sports tournaments and meets. The PE section is also responsible for preparing institute teams to participate in various sports tournaments. The outstanding players (students) have an opportunity to represent the institute team in various sports meets/festivals, such as, Inter IIT Sports Meet and District level tournaments. To encourage the participation in the Games and Sports, meritorious players are awarded prizes and medals at the Annual function of the Student Gymkhana. The achievements of the meritorious players are also considered for some institute awards and sports scholarships are also given to the best sports persons.

NATIONAL CADET CORPS (NCC)

It is a matter of grate pride that the National Cadet Corps (NCC) has been spearheading the youth movement in the country. It has played an important role in propagating the ideals of secularism, national integration and selfless service, which are ever so essential in the present day context. During the past 56 years, the NCC has come a long way. It has grown into a vibrant youth organization and has made substantial contribution for creation of disciplined, and well- motivated citizens, ready for service of the nation. Its credentials as the largest youth organization engaged in grooming the youth and endowing them with qualities of character, comradeship and leadership are unquestionable.

The NCC is authorized and administered by the Govt. of India as an integral part of its National Plan. For the successful implementation of the NCC Programme, the scheme has been inter-woven with the National Education Programme. In order the thoroughly groom the NCC cadets to be tomorrow leaders, they are exposed to every facet of the multi-dimensional training programme in as realistic a manner as possible. Due emphasis is given to constantly update and refine training method and ensure its proper implementation. The NCC training strives to inculcate in cadet the qualities of leadership, discipline, courage and corporate living, which stand them in good stead in whatever vocation they choose. The various activities undertaken by the NCC cadets, such as mountain craft, rock climbing, skiing/jumping, camping, gliding and flying and sea faring provide students an immense opportunity to be nature friendly and helps in self discovery.

NATIONAL SERVICE SCHEME (NSS)

The Scheme provides the most diversified opportunities to the students to upgrade their personality through social add community service of different variety, suiting different aptitudes and needs. Special emphasis is laid on tutorial assistance to the weaker sections of the campus. The students' volunteers participated in teaching at the opportunity school. Some volunteers visited non-formal schools. NSS volunteers visited nearby villages for distributing books and demonstrating science experiments.

YOGA

Classes to train students in Yoga, as one of the stream of PE courses, are conducted during both the semesters as part of PE 101 & PE 102 Courses. These classes included Joints and Glands exercises, Asanas (Postures) in standing, sitting and lying positions, Mudras (Gestures), Bandhas (Locks), body cleansing Kriyas (techniques); Pranayama (Breathing exercises) and Meditation. Counseling is also provided to students for solving their personal physical, mental and emotional problems through yoga.

TAE-KWON-DO

Classes of Tae-Kwon-Do to train students under the CPA activities are conducted during both the semesters as part of PE 101 & PE 102 Course.

SWIMMING POOL

Institute has a full size (50x20 meters) Swimming Pool for its students, faculty and staff and also for their family members**.** The membership is open to all on payment of a nominal fee. Arrangements have been made to coach beginners in swimming. To ensure maximum safety of the members, life-guards are engaged. The exact rates for these sessions are fixed and notified by the Swimming Pool Management Committee, for regular memberships as well as guest charges. The Pool has been operating for 7 months in a year, i.e. from April to October on monthly basis. Pool is operating in the morning as well as evening hours i.e. 5:30 am to 8:15 am and 3:30 pm to 8:00 pm divided into 45 minutes slots with 15 minutes free time in between. Swimmers and non-swimmers are separated.

AEROBICS

Aerobics which is a form of rhythmic physical exercise with stretching and strength training is taught to the students by a certified instructor in one of the streams of PE courses for improving the main elements of fitness: flexibility, strength, endurance and cardio-vascular fitness. The institute has a well equipped indoor aerobics hall.

SKATING

Skating, a fascinating sport is one of the streams in the PE courses. The students are going to be taught this sport by a qualified instructor. The students would be taught the basic skills initially and later introduced to the higher levels. The students in this

stream will have an opportunity to join the Skating Hockey Team. A proper skating hockey rink with flood lights is under construction in the institute.

GYMNASIUMS

The institute has two gymnasiums equipped with the latest cardio and strength equipment. A professional gym trainer has been employed for motivating the users, setting goals, providing feedbacks and measuring the users strength and weakness with fitness assessments. The membership for the gym is open to all the campus residents on payment of a nominal fee. The exact rates for these facilities are fixed and notified by the Sports & Physical Education Committee (SPEC).

6. FACULTY INCHARGES STUDENTS'S AFFAIRS

Dean, Students Affairs	Dr. A. K. Ghosh
Head, Counseling Service	Dr. A. R. Harish
Chairman, Council of Wardens	Dr. S. N. Singh
Vice-Chairman, Council of Wardens	Dr. J. Ramkumar

Counsellors, Students' Gymkhana

Chief Counsellor	Dr. A. K. Ghosh
Cultural Counsellor	Dr. Satyaki Roy
Games Counsellor	Dr. B. V. Phani
Films Counsellor	Dr. Satyaki Roy
Science & Technology Counsellor	Dr. Anurag Gupta
Treasurer	Dr. A. V. R. Sarma
Chairman Students Benefit Fund	Dr. A. R. Harish
Chairman Students' Placement Committee	Dr. Vimal Kumar
Faculty Advisor, NSS	Dr. H. C. Verma
Chairman, Swimming Pool Management Committee	Dr. Prabhat Munshi
Faculty Advisor, Yoga	Dr. S. C. Misra
Faculty Advisor, Tae-kwon-do	Dr. T. Ravishankar

7. WARDENS

HALL OF RESIDENCE No. I
Dr. Sudeep Bhattacharjee, Warden I/c
Dr. Krishnacharya, Warden
Dr. M. Jaleel Akhtar, Warden
HALL OF RESIDENCE No. II
Dr. Somesh K Mathur, Warden I/c
Dr. Debajyoti Paul, Warden
Dr. Anurag Gupta, Warden
HALL OF RESIDENCE No. III
Dr. M. K. Harbola, Warden I/c

Dr. Vimal Kumar, Warden
Dr. Tarun Gupta, Warden
HALL OF RESIDENCE No. IV
Dr. Anish Upadhyaya, Warden I/c
Dr. Deepu Philip, Warden
Dr. Kantesh Balani, Warden
HALL OF RESIDENCE No. V
Dr. A. V. R. Sarma, Warden I/C
Dr. Vineet Sahu, Warden
Dr. Sivakumar, Warden
HALL OF RESIDENCE No. VII
Dr. Kamal K Kar, Warden I/C
Dr. J. K. Bera, Warden
Dr. Saikat Chakrabarti, Warden
HALL OF RESIDENCE No. VIII
Dr. D. Bahuguna, Warden I/C
Dr. Priyanka Ghosh, Warden
Dr. Sumit Basu, Warden
HALL OF RESIDENCE No. IX
Dr. M. K. Ghorai, Warden I/C
Dr. Malay K. Das, Warden
Dr. Amit Dutta, Warden
HALL OF RESIDENCE No. X
Dr. J. Ramkumar, Warden I/C
Dr. Vaibhav Kr. Srivastava, Warden
Dr. Ashwani K. Thakur, Warden
HALL OF RESIDENCE for Girls (GH-1)
Dr. Jonaki Sen, Warden I/C
Ms. Koumudi Patil, Warden
Dr. Chaithra Puttaswamy, Warden
HALL OF RESIDENCE for Girls (GH-2)
Dr. Nishchal Verma, Warden I/C
Dr. Sohini Sahu, Warden
Dr. Veena Bansal, Warden
SBRA
Dr. A. R. Harish, Warden I/C
Mr. Jitendra Narayan Gangawar, Convener

8. STUDENTS' GYMKHANA EXECUTIVE

The philosophy followed at this Institute is to involve students at various decision-making levels. The President, Students' Gymkhana and the Convener, Students' Senate are special invitees to the Senate. Students' Senate also sends its nominees for various standing committees of the senate namely EPC, SPGC, SUGC, SSAC, SLC, SSPC and various other users committees. The following list gives the names of students holding various posts of the executive wing of students' Gymkhana.

President
Mr. Sanchit Singhal upto (Feb. 2012) and Mr. Abhay Jain (from March 2012)

Convenor, Students Senate
Mr. Aditya Gupta (upto Feb. 2012) and Mr. Ankit Bhutani (from March 2012)

General Secretary (Cultural)
Mr Shantanu Singh (upto Feb. 2012) and Ms. Sonal Kumari (from March 2012)

General Secretary (Games)
Mr. Anurag Agarwal (upto Feb. 2012) and Mr. Yuvraj Dhillon (from March 2012)

General Secretary (Films)
Mr. Rohit Singh (upto Feb. 2012) and Mr.Yashovardhan Bhagat (from March 2012)

General Secretary (Science & Technology)
Mr. Abhinav Prateek (upto Feb. 2012) and Mr. Subhojit Ghosh (from March 2012)

Students' Placement

Students' Placement Office

The present document describes the placement season 2011-12 of Students' Placement Office as on May 15th, 2012.

INTRODUCTION

Students' Placement Office (SPO) handles all aspect of placement, right from contacting companies to managing all logistics of arranging for test, pre-placement talks and conduction final Interview.

Role of SPO is of facilitator and counsellor for placement related activities. Apart from this office held various preparation sessions, so that students are well prepared and more informed while sitting for placements.

On the much broader level Pre-Placement Talk were held in 1st semester of 2011-12 and final placement from December 2nd onwards. The PPT's started from 18th Aug 2011.

Invitation letters for participating in the Campus Recruitment Programme 2011-12 were sent to over 2500 organizations. A total of 260 companies had filled in the proforma and finally 185 took part in the campus placements. 817 students registered for placements this year of which 691 have job offers from 185 companies that took part in placement process. Thus, the overall placement record stands at 85% as on 5th May, 2012.

The highest package offered this year within India was 52 LPA CTC, whereas in terms of foreign placements Pocket Gems (Silicon Valley, US) offered the most lavish package at $150,000.

The office continued with its policy of "one job per student", to ensure uniform opportunities to all students.

The placements in initial days were very promising but because of industrial slowdown, fog, sports meets, it gradually slowed down, though the totals of 452 students were placed in December. Many companies visited the campus for 1st time which including ANZ Bank, Bank of India, Flipkart, Paypal, Pocket Gems, Renault Nissan etc.

PLACEMENT PREPARATION ACTIVITIES

The following are the preparation activities that were carried out towards the placement season 2011-2012 of Students' Placement Office, IIT Kanpur:

1. Resume-making:
    a. There were two sessions taken by SPO's Career Counselor separately for the B.Tech and M.Tech students, held on the 20th and 22nd of Aug, respectively.
    b. The Career Counselor had reviewed the resumes of about 60 interested students.

2. Aptitude Tests:
    a. SPO collaborated with Career Launcher to hold a series of 6 lectures of two hours duration each, followed by 6 mock tests during September and October. About 360 students participated. The fee taken from each student was Rs.200 and SPO additionally paid Rs. 50 for each student
    b. Aspiring Minds took the AMCAT, a practice online aptitude test, once from 13th to 15th of August and again from 27th to 30th of September, for free. Around 700 students participated.

3. Interviews:
    a. There were two sessions taken by SPO's Career Counselor separately for the B.Tech and M.Tech students on 22nd October.
    b. SPO collaborated with Dialog Services to hold a 3-day Interview workshop from 12th to 15th of November. Around 120 students participated. The fee taken from each student was Rs. 100 and a total of Rs. 30,000 was paid to the trainer.

4. Group Discussions:
    a. There were two sessions taken by SPO's Career Counselor separately for the B.Tech and M.Tech students during mid-September
    b. Every fortnightly, GD sessions were organized at the institute level. The moderators would be student volunteers itself.

5. Technical preparation:
    a. Coordinating with the DPCs and Professors of respective departments, question banks were compiled and core technical tests were conducted.

6. Groups:
    a. Consulting group – Weekly practice mock case sessions used to be held for students to practice case solving.
    b. Finance group – Lectures on basics of finance, puzzle solving sessions.

PLACEMENT STATISTICS 2011-12

Program	Dept.	Registered	Placed	%age
Btech	AE	14	13	93%
	BSBE	20	18	90%
	CE	47	42	89%
	CHE	32	29	91%
	CSE	33	32	97%
	EE	57	54	95%
	ME	44	38	86%
	MME	55	44	80%
Total		302	269	89%
Program	Dept.	Registered	Placed	%age
Dual	AE	11	8	73%
	CE	18	16	89%
	CHE	12	11	92%
	CSE	25	24	96%
	EE	25	25	100%
	ME	22	21	95%
Total		113	105	93%
Program	Dept.	Registered	Placed	%age
Mtech	AE	24	19	79%
	BSBE	8	4	50%
	CE	30	28	93%
	CHE	20	9	45%
	CSE	26	25	96%
	EE	68	66	97%
	EEM	11	3	27%
	IME	9	9	100%
	LTP	8	2	25%
	ME	62	53	85%
	MME	8	5	63%
	MSP	3	1	33%
	NET	3	0	0%
Total		280	217	78%
Program	Dept.	Registered	Placed	%age
Msci	CHM	7	5	71%
	ECO	15	14	93%
	MSC	29	26	90%
	PHY	3	3	100%
Total		54	48	89%
Program	Dept.	Registered	Placed	%age
Msc2	CHM	8	3	38%
	MTH	23	13	57%
	PHY	1	0	0%
Total		32	16	50%
MBA	IME	26	25	96%
Mdes	Mdes	10	7	70%
Total		817	691	85%

SALARY DATA

Details of jobs in India:

Average salary offered per annum (in LPA)	7.1
Median salary offered per annum (in LPA)	7.5
Maximum salary offered per annum (in LPA)	52
Minimum salary offered per annum (in LPA)	4

Details of Foreign Jobs:

Percentage of students placed abroad	5%
Average salary offered per annum (in thousand)	US$ 120,000
Median salary offered per annum (in thousand)	US$ 125,000
Maximum salary offered per annum (in thousand)	US$ 150,000
Minimum salary offered per annum (in thousand)	US$ 80,000

*Location of foreign jobs are in US,Malaysia, Taiwan and Australia. We have salary in USD

Services / Amenities

INSTITUTE WORKS DEPARTMENT

Institute Works Department (IWD) is primarily responsible for the maintenance of capital assets for providing the following utility services to the resident community:

Civil, Electrical, Air-conditioning maintenance services
Water supply and sewage disposal unit
Power distribution
Estate Management
Sanitation and upkeep
Horticulture development & maintenance
Furniture repairs
Roads

In addition to the above IWD also executes development projects from concept to commissioning. It comprises of the following units for facilitating operation & maintenance of services and constriction activity, under the control of the Superintending Engineer.

Sl. No.	Unit	Responsibility	Unit-in-charge
1.	Civil Division-I	Maintenance, upgradation and development work. Water supply, furniture & roads	Executive Engineer
2.	Civil Division-II	Maintenance development works	Executive Engineer
3.	Electrical & Air-conditioning Division	Electrical maintenance domestic / central AC maintenance	Superintending Engineer
4.	Horticulture unit	Development & maintenance	Superintending Engineer
5.	Sanitation unit	House keeping of various building	Superintending Engineer

(A) The following works completed during 2011-2012:

Sl. No.	Name of work	Plinth Area (in sqm)
1.	Construction of Hall of Residence No. X (Phase-II)	6930
2.	Construction of 48 units SBRA	3878

(B) The following works are under execution:

Sl. No.	Name of work	Plinth Area (in sqm)
1.	Construction of Multi-storied Residential Flats Block-A & B.	12362
2.	Extension of RA hostel	13455
3.	Infrastructural work to create High Performance Computing set up at Computer Centre	252
4.	Construction of Hall of Residence for Girls (Phase-I).	6311
5.	Construction of Hall of Residence No. XI for Boys.	15876
6.	Construction of Rajeev Motwani building.	3510
7.	Construction of underground water storage tank & pump house to store the water from Ganga Barrage i/c modification in existing water supply network & additional pipe line to water supply network.	
8.	Providing underground power distribution system in place of existing over head distribution system.	

(C) The following works under planning:

1. Construction of Hall of Residence No. XII for Boys.
2. Construction of new Lecture Halls.
3. Extension Centre NOIDA.
4. Construction of faculty club building.
5. New building for Aerospace Department.
6. Construction of Hall of Residence for Girls (Phase-II).

STORES & PURCHASE SECTION

The Stores and Purchase Section is an important service unit to cater the needs of departments/units for purpose of various equipments, chemicals, glassware, hardware, consumables, stationery etc. and all medicines/pharmaceutical products, industrial gases etc., for research and general purpose. The procurements are from both indigenous and foreign source.

The Import Section handles customs clearance of all foreign consignments and matters relating to Import Licenses/Custom Duty Exemption Certificate/ Excise Duty Exemption Certificate and other certificates from Government of India. The re-export of

consignments to the suppliers for repairs/ replacements is also done through this section.

During the financial year 2011-2012 the Purchase Section places 1461 orders valued Rs. 1,18,06,55,557=00 which includes import order numbering 567 costing Rs.89,81,56,040=00 and indigenous order numbering 894 Costing 28,24,99,517=00. The purchase orders and their values under various categories are as follows.

Category	No. of P.O.	Amount (in Rs.)
Import :-		
(A) Institute fund		
Consumable	32	1,49,17,408
Non consumable	171	60,38,57,945
(B) Project fund		
Consumable	84	1,37,45,000
Non consumable	280	26,56,35,687
Total Import (A&B)	**567**	**89,81,56,040**
(C) Indigenous :-		
Institute fund		
Consumable	201	2,12,85,749
Non consumable	291	14,70,27,846
(D) Project fund		
Consumable	117	68,02,553
Non consumable	285	10,73,83,369
Total Indigenous (C&D)	**894**	**28,24,99,517**
Total Value	**1461**	**1,18,06,55,557**

Central Stores procure highly technical items as and when required by the different departments to maintain the pace with science and technology development. It stocks some items of consumable in nature like stationary, hardware, and liveries etc. The Central Store has four units, namely Purchase Unit, Import Unit, Bill Unit and Receipt/Issue Unit. This section is headed by a professionally competent person and he is also assisted by a professionally competent team of 22 personnel.

The stores also maintained the records of disposal of unusable and scrap materials. Clearance of parcels and dispatch of rejected materials to both local and foreign firms for repair/replacement is also done by this section. It assists the department in areas like transportation, procurements of furniture etc.

This Section also started reconditioning of wooden & steel furniture. During The Financial year 2011-2012 we have reconditioned different type of furniture and issued to various departments. The details of reconditioned furniture are as follows:
(1) Chair 289 nos
(2) Office Table 161 nos
(3) Almira 9 nos

(4) Racks 42 nos.
In this way we have saved lot of money of the institute.

We have been successful in computerizing the transactions both in Stores, Purchase & Import Section. We are processing all Indents through the software developed by Automation Division and each & every function of Store & Purchase has been automated. We can generate reports as our requirements as and when needed. We have full connectivity in Central Store through LAN/WAN for complete automation. Maximum correspondence is done by e-mail where it is available keeping in view the speedy action for the procurement. Stores and Purchase is now connected with main frame computer of Computer Center. Full communication with every net user is now possible in campus from Store and Purchase Section. We are also planning to provide the web based postal, so that department can send electronic indent directly to Central Store and check the status of this indent/sanction sheet on the monitor.

ESTATE OFFICE

The Institute has a sprawling area of 960 acres having total population around fifteen thousand. Being a residential campus with 1241 houses (including 213 SBRA and ACES Quarters) in various categories far away from the heart of the city, the Institute had to create its own infrastructure and civic amenities such as sanitation, water supply, sewage disposal, shopping complexes and similar other facilities, which are required for day-to-day living.

The estate office is entrusted with various kinds of activities including house allotment, commercial shop management, eviction of unauthorized occupants, realization of license fee and electric/water charges from shopkeepers & house allottees, estate management and civic amenities.

The Institute has various types of residential accommodation, i.e. Type-1A, IB, I, II, III, IV & V for Faculty members, Scientists, Research Engineers, Group-A Officers and other staff members of this Institute. We have mainly five shopping complexes at various locations, one of which is in the heart of campus called as main shopping complex., the others are at Type-II complex, at security crossing, at new SAC and at Type-I area consisting of various kinds of shops, which fulfill the basic needs of the residents.

Besides the above shopping complexes, we have 11 hostels for students accommodation out of which nine are for boys and two are for girls. Every hostel has shop like which mainly fulfills the immediate needs of students.

Further, a cable network for T.V. is also being operated round the clock by the Institute to provide entertainment to the entire campus community.

There was no decent canteen/lounge facility available in the campus for faculty and officers and their guests. They were to go at staff canteen alongwith their guests. 1968 batch donated 50% cost of the lounge (Rs 25.00 lakhs) for creating a decent lounge

facility in the campus, known as "Lounge - 68" and rest of the money was added by the Institute. The Lounge - 68 is now to be operational by M/s. Cafe Coffee Day.

Besides, the estate office is also managing different types of activities related to the estate successfully and cautiously by way of taking precautions to solve various types of problems. During the financial year 2011-12, the office has realized about Rs.1,03,12,757.00 (One Crore Three Lakh Twelve Thousand Seven Hundred Fifty Seven Only) from the different sources (it is notable that the tendering process of unserviceable materials has already shifted to central stores from August 2009.)

The break up of the above amount is as follows:

Particulars	Amount in Rs.
Amount collected through temporary houses allotment and temporary stalls at Shop C	
Rent From Temporary House allotment	33000.00
Electricity Charges of Temporary House Allotment	14925.00
Rent From Temporary Stall	34600.00
Electricity Charges of Temporary Stall	14600.00
Lawn Booking	8000.00

Amount collected towards rent and electricity charges for Shops, Canteen & Non Institute Employee Houses	
Charges for electricity	5001264.00
Rent for Shops, Canteen and House to Non-Institute employees & Administrative charges for delayed payment of Licence fee	2548802.00
Tender Process	
Sale of Tender forms (Rs. 22,000/-) + VAT (Rs. 530/-)	22530.00
Sale of Dry woods/Logs(Rs. 3,51,000/-) + VAT (Rs. 47,385/-)	398385.00
Sale of Amla (Rs.1,160/-) Mango (Rs. 10,485/-) & Beri Fruits (Rs. 200/-)	11845.00
Amount from Raddi & Kabad contractor (Rs. 2,70,340/-) + VAT (Rs. 2,822/-)	273162.00
Interest of Investment	2277.00
Amount collected towards Penal Charges, Eviction, Retirement, Death & Resignation	
Licence Fee	1113337.00
Water Charges	5263.00
Electricity Charges	362423.00

Amount collected through issue of Mobile Passes & Collection of amount at Cycle Stand, IIT/K	
Amount collected at Cycle Stand	302974.00
Charges for Entry passes, Rickshaw pullers, Supplier and vendor	141370.00
Amount of shopkeeper passes	24000.00
Grand Total	**1,03,12,757.00**

CAMPUS SCHOOL

Education aims at making children capable of becoming responsible, productive and useful members of a society. In short it should aim at developing the all-round personality of a child. It must therefore promote and nourish as wide a range of capacities and skills in our children as possible. The gamut of such skills include the performing arts including dance, drama, painting & craft and literary abilities (weaving stories, wielding language to portray different aspects of life, a flair for metaphorical and poetic expression, etc.) Also, skills as diverse as some children's special capacity to bond with nature – with trees, birds, and animal – need to be nurtured. We at Campus School are trying to develop an understanding of learner's educational aims and the nature of the school as a social space. Before mentioning about the recent developments I would like to throw some light on the history of the school.

History of the School

Campus School was started on 14 July 1964 when the founding Director Late P.K.Kelkar realized the needs of the high class faculty and staff in the field of Primary Education on the Campus. Mrs. Meera Parasnis was the first Chairperson. Dr. Kelkar arranged, through the KIAP Programme education experts from USA, to visit and advice in matters of child development and teaching methodology. This laid the foundation of the Campus School at IIT Kanpur.

Doing Science with actual laboratory experience rather than just reading and listening, regular classwise Science Exhibitions and Annual Open House were started then as a tradition are still the pivotal points of the school.

Physical Panorama:-

School strength –

- Students on roll – 388
- Regular Teachers - 7 and Principal
- Adhoc – 4
- Contractual Teachers and others – 13
- Supporting staff – 9

The recent years

In the last few years the school set up a Maths laboratory, which is now used for regular class room teaching. Innovative play-way method of learning got introduced in the K.G.Class. The K.G.Class is equipped with overhead projection system and educational software. The EVS and English Language Laboratories have started this year. Indradhanush, a programme of evening activities for Campus School, Kislaya Nursery School and Opportunity School has restarted with much enthusiasm. This year the Principal attended 3-day **International Teachers Training Programme**. **A Teachers Training Programme** was organized at the school. One innovator gave a demonstration of manually operated pump and a talk to Class IV and V students. **Thinkizm** team held a creative Wall Painting session in the school. Campus School children have regular appearance on radio FM 90.4 too.

FOR THE UPCOMING SESSION

Our plans for the forthcoming session are:

Kindergarten

Fostering learning in a playful manner where the potential of the child is identified and individual capabilities are developed for bringing out the best in them. We are in the process of:

Introducing a curriculum map to guide parents through this first important year – Setting up a separate open air play area with colourful, attractive and child safe play equipment. This will have playhouse, sandpit and lots more to develop motor skills and physical fitness:

- Bringing in a creative programme of arts with music, dance, craft, clay modeling and dramatics.
- Story narration and classroom library.
- Celebrating days like Carpenter's day, Farmer's day, Helper's day etc.
- Bird watching and outing to zoo, bank, petrol pump, post office, bakery, fire brigade etc.
- Use of educational software for the vocabulary and phrase enhancement.
- Organizing Orientation and Welcome Week for the children and parents of KG.
- Nurturing through mothers involvement in the school.

Class I to IV:

Allowing children free to explore on their own and learn through experience, making and doing things, experimenting, reading, discussing, listening, thinking and reflecting will be highlighted thus enabling them to express themselves better in speech and in writing. Framing of a well balanced curriculum, continuous evaluation of identified aspects of students growth and development spread over the entire span of the academic session, diagnosis of learning gaps, use of corrective measures retesting and feedback of evidence to teachers and students for their self evaluation will be implemented.

Celebrations:

Children learn in a variety of ways-through experince, making & doing things, experimentation, reading, discussion, asking, listening, thinking and reflecting, and expressing oneself in speech, movement or writing – both individually and with others. They require opportunities of all kinds in the course of their development.

Learning takes place both within school and outside school i.e. the Society. Learning is enriched if the two arenas interact with each other. Organizing of events like **OPEN HOUSE, SPORTS DAY, ANNUAL CONCERT** provide children a platform to acquire talent and display it. It brings lots of confidence in them and develops leadership quality in them.

This year **OPEN HOUSE** was organized in the month of February. Prof. Ashish Garg from Material Science & Engg Department was the Chief Guest. It showcased the skills acquired by the children in academics and co-curricular activities throughout the session. This time emphasis was laid on cent percent participation of the children and the major attraction was the Anchoring/Compering being done by the children. Skills acquired in English, Hindi, Maths, E.V.S, Computers, Sports, Music, Dance was displayed through skits, oration, dance and music performance, demonstrations, charts, quizzes, models (both working & non-working). A display of Adventure Sports was also conducted. In the inaugural speech the Chief Guest also emphasized the need of activity based learning. The Chairman Prof. Sangal also addressed the august gathering and assured the parents of qualitative changes in the near future. The vote of thanks was delivered by the Principal.

Sports Day was celebrated on 17 Dec.'11**.** Dr. Dheeraj Sanghi, Dean of Academic Affairs was the Chief Guest. The entire event was organized on the theme **'Healthy Mind Lives in a Healthy Body'**. The children presented special display with Umbrellas, Rings, Dumbbells, Tipri, Lazium, Stick Balloons. The tiny tots came up with beautiful placards spreading the message of brushing our teeth twice a day , washing our hands before eating food, doing Yoga regularly , eating plenty of leafy vegetables and avoiding junk food. Mass P.T. by the students was appreciated by one and all. Special races for the children, tug of war and passing the ball for the parents was thoroughly enjoyed. The gymnastics and pyramids made by the children were liked by all. Prizes were distributed to the children.

Besides the two mega events, **Independence Day, Teacher's Day, Republic Day** were also celebrated.

Festivals like **Dusshera, Diwali, Christmas, Eid** were celebrated with great enthusiasm, Special assemblies were conducted. Children's day was celebrated in the school. Children went to Outreach to watch movie. Class K.G., I, II watched one movie and Class III, IV & V watched another movie. A short cultural programme was organized and a gift of Rs. 10/= each was given to the children. The absent students received their gifts on the next day.

Competitions:

- In the Morning Assembly reading of English and Hindi News, Thought of the Day and some presentation by the children in the form of recitation, story narration was restarted.
- The children went out to Sudhanshu Jee Maharaj's Ashram to have a picnic and know about their surroundings.

The **pass–outs** of Campus School have done wonders in the past and I am sure the present batches are also going to win laurels for us by adding feathers to their caps both academically and professionally.

The school should give ample opportunities to the children to analyse and evaluate their experiences, It should also try to develop the mind to understand and cultivate thinking power in a cohesive and friendly manner.

We at Campus School are trying to develop an understanding of learner's educational aims, the nature of knowledge and the school as a Social Space because conceptual development is a continuous process of deepening & enriching connections and acquiring new layers of meaningful perceptions thus developing citizens with social values in a scientific way.

I would like to sum up by thanking our Chairman, Prof. Sandeep Sangal, Members of the SMC for their guidance and support and expecting the same in the future also.

HEALTH CENTRE

Health centre has been established with the objective of addressing health needs of the Institute community. Health centre provides service round the clock to meet out the objective. Health centre is manned by 10 Medical Officers and a Medical Advisor of the Institute.

The details of the Health Centre services provided for the period with effect from 01.04.2011 to 31.03.2012 are as follows:

Sl.No.	Particulars	Numbers
01.	Numbers of patient treated in OPD	67672
02.	Numbers of students treated	20671
03.	Numbers of patients manually registered	507
04.	Numbers of patients admitted in Indoor	903
05.	Numbers of patients treated in Homeopathy including students	10177
06.	Numbers of patients treated in Physiotherapy	5854
07.	Numbers of surgical operation(Minor)	Nil
08.	Numbers of Tubectomy	Nil
09.	Numbers of D&C	Nil

10.	Numbers of Deliveries	01
11.	Numbers of Plastering	52
12.	Numbers of surgical dressing	5906
13.	Numbers of Injections	35602
14.	Numbers of Tetvac	1511
15.	Numbers of Babies attended in Well Baby clinic	536
16.	Numbers of X-Ray done	2816
17.	Numbers of babies attended National Pulse Polio Programme	77
18.	Numbers of Anti Radies Injection	198
19.	Numbers of E.C.G done	370

Immunization is done round the year in the Health Centre for protection against Typhoid, Cholera, Tuberculosis, Diphtheria, Peruses Tetanus, Polio and Measles. Facilities for maternity management, Family Planning Counseling and Tubectomy operations are also available.

VISITORS' HOSTEL

Housed in an imposing double storeyed building and located at a central place, Visitors' Hostel provides boarding and lodging facilities for the Institute's guests, newly appointed faculty and staff members, delegates and participants attending various conferences, seminars, symposia and workshops. The Visitors' Hostel has some allied facilities on the campus and in Chittaranjan Park Colony, New Delhi also for the benefit of the Institute's Visitors.

Allied Facilities:

- Visiting Faculty Apartment at IIT Kanpur
- Service Apartment at Chittaranjan park , New Delhi
- Visitors' Hostel Extension
- Outreach 69 & 80 Building, IIT Kanpur
- Main Auditorium

The Visitors' Hostel and allied facilities are operated as a non-profit activity to mainly support the academic and research activity on the campus with a homely atmosphere and ambience, traditionally acclaimed for its environs of hygiene and food of homely relish and richness. The following are the various activities undertaken by the team managing the affairs of the Visitors' Hostel and allied facilities.

1. Accommodation: Visitors' Hostel has been equipped with fully furnished 70 Standard rooms, of which 55 are AC and 15 are Non-AC. Further, there are 15 Deluxe AC rooms. It can accommodate a maximum of 170 guests at a time on twin sharing basis. All the rooms have attached bathrooms with modern amenities.

Visitors' Hostel Extension has 44 Non-AC guest rooms, which can accommodate 88 guests on twin sharing basis.

2. Dining Facility: Visitors' Hostel provides dining facilities to in-house guests of Visitors' Hostel, VH Extension, Visiting Faculty Apartment and for important Institute activities. The Visitors' Hostel has 2 air-conditioned dining halls with capacity of 30 and 70 guests respectively. One of the dining halls has a well furnished sitting room attached with it.

3. Conferencing Facilities:

A. Pioneer Batch Continuing Education Center

S. No.	Name of Facility	Max. Capacity
1	VH Lounge (round table)	16
2	PBCEC Lawns	250
3	PBCEC Conference Room (U shaped)	18
4	PBCEC Small Class Room	36
5	PBCEC Big Class Room	65
6	PBCEC Committee Room	11

B. Outreach 69 & 80

S. No.	Name of Facility	Max. Capacity
7	Auditorium	210
8	Seminar Room -1	40
9	Video-Conferencing Room	30

C. Main Auditorium

S. No.	Name of Facility	Max. Capacity
10	Main Auditorium	1250

4. Additional Facilities:

- Centralised booking system for all facilities at VH and Allied Services through a common requisition form. All the forms are made available in departmental offices as well as downloadable from the website of VH at http://www.iitk.ac.in/vh.
- All the Deluxe AC rooms have a PC.
- All the rooms, Meeting Lounge, PBCEC and Dining Hall have Wi-fi connectivity.

- DHCP: All the guest rooms have DHCP (Dynamic Host Control Protocol) for direct Internet Connection, i.e. No IP Address, no User ID or password is required for accessing the Wi-Fi enabled internet services through their laptop.
- All the rooms have cable connections with Color Television Set.
- All the deluxe rooms have a small pantry and a small refrigerator.
- Intimation of confirmation of bookings through e-mail.
- For detailed information, website of Visitors' hostel can be accessed at http://www.iitk.ac.in/vh.

Management of day-to-day hospitality service has been outsourced to a private agency. An increase in facilities, services and a more professional approach has led to more transparency in day-to-day functioning of the system and increased occupancy rate, thus achieving more financial viability in terms of operational expenditure.

Publication and Outreach Activities

BOOKS & BOOK CHAPTERS PUBLISHED

Books

1. Gas Turbine Propulsion, D. P. Misra (AE), Annamaya Publisher, New Delhi.
2. Engineering Thermodynamics, D. P. Mishra (AE), Cengage Learning India Pvt. Ltd, India.
3. Advanced Control of Aircraft, Spacecraft and Rockets, Ashish Tewari (AE), John Wiley & Sons, Chichester, U.K.
4. Automatic Control of Atmospheric and Space Flight Vehicles, A. Tewari (AE), Springer (Birkhauser), Boston, USA.
5. Introduction to Integral Calculus - A syste.matic studies with engineering applications for beginners, Ulrich L. Rohde, G, C. Jain, Ajay K. Poddar and A. K. Ghosh (AE), Wiley, USA.
6. Introduction to Differential Calculus - A systematic studies with engineering applications for beginners, Ulrich L. Rohde, G, C. Jain, Ajay K. Poddar and A. K. Ghosh (AE), Wiley, USA.
7. SI adaptation Solid Waste Engineering and Solution Manual, Worrell and Vesilind and Tarun Gupta (CE), Cengage Learning, CT, USA.
8. Psychological Model of Illness, Dr. Rajbala Singh, former PhD student (HSS), Cambridge Scholars Publishing, U.K., 2011. This book is published based on her PhD work.
9. Economics of Nuclear Power: Modeling and Scenario Analysis for Light Water Reactors in India, Dr. Saurabh Sharma, Prof. Anoop Singh (IME) and Prof. M S Kalra (ME), LAP LAMBERT Academic Publishing, Saarbrucken.
10. Services, Marketing, 7th Editor, Christopher Lovelock Jochen Wirtz, Jayanta Chatterjee (IME), Pearson Education, South Asia, 2012.
11. Advanced Structural Ceramics, Bikramjit Basu and Kantesh Balani (MSE), John Wiley & Sons, Inc., USA.
12. Tribology of Ceramics and Composites: Materials Science Perspective, Bikramjit Basu (MSE) and Mitjan Kalin, John Wiley & Sons, USA.
13. The Science and Engineering of Materials, Donald R. Askeland et al (Book Adaptation), Kantesh Balani (MSE), Cengage Learning, USA.
14. Optimality conditions in convex optimization. A finite-dimensional view, Anulekha Dhara and Joydeep Dutta (MATH), CRC Press, Taylor and Francis, Boca Raton, FL.
15. Heat Transfer (Second Edition), P S Ghoshdastidar (ME), Oxford University Press.
16. Multi-Objective Evolutionary Optimisation for Product Design and Manufacturing, Wang, L., Ng, A. and Deb, K. (ME), Springer-Verlag., London.

Book chapters

Biological Sciences and Bioenginnering

1. Ashok Kumar and Anuj Tripathi, A. Tiwari and R.B.Shrivastava, Biotechnology in Biopolymers Developments, Applications & Challenging Areas, i-Smithers Repra Publication Ltd., UK., 233-285, Biopolymeric Scaffolds for Tissue Engineering.
2. Radha Gupta and Ashok Kumar, Monzer Fanun, Colloids in Biotechnology, Taylor & Francis/CRC Press, Boca Raton, USA, 455-514, Sol gel Materials for Biotechnological and Bioengineering Applications.
3. Jose M. Serratosa, Berge A. Minassian B, and Subramaniam Ganesh, Jeffrey Noebels, Massimo Avoli, Michael Rogawski, Richard Olsen and Antonio Delgado-Escueta, Jasper's Basic Mechanisms of the Epilepsies - 4th edition, Oxford University Press, USA, 2012, 874-878, Progressive myoclonus epilepsy of Lafora.

Chemical Engineering

4. R. P. Chhabra, Y. I. Cho & G. Greene, Advances in Heat Transfer,43, Academic Press, New York, 289-417, Fluid flow and heat transfer from circular and non-circular cylinders submerged in non-Newtonian liquids.
5. R. Mukherjee, A. Sharma and U. Steiner, Eduard Arzt and Aranzazu del Campo, Generating Micro- and Nanopatterns on Polymeric Materials, Wiley-VCH Verlag, 217-265, Surface instability and pattern formation in thin polymer films.
6. R. Mukherjee and A. Sharma, H. S. Nalwa, Encyclopedia of Nanoscience and Nanotechnology, American Scientific Publishers, 1-51, Self-organized meso-patterning of thin polymer films.
7. Verma S., Joshi, Y. M. and Muralidhar K., Mark E. Russo, Interferometry Principles and Applications, Nova Books, Chapter 13, Optical interferometers: principles and applications in transport phenomena.
8. Singh J K, Docherty H and Cummings PT, E. Bichoutskaia, Computational Nanoscience, RSC, 82-108, Phase transition under confinement.
9. Khan S and Singh JK, B. Rai, Modeling for the Design of Novel Chemicals and Material, CRC Press, 219-242, Molecular simulation of wetting transitions on novel materials.
10. Kwak S K and Singh JK, B. Rai, Modeling for the Design of Novel Chemicals and Material, CRC Press, 269-286, Solidliquid phase transition under confinement in Molecular Modeling.
11. Singh S K and Singh JK, B. Rai, Modeling for the Design of Novel Chemicals and Material, CRC Press, 243-268, Molecular modeling of capillary condensation in porous materials.
12. V. Gera, N. Kaistha, M. Panahi, S. Skogestad, E. Pistikopoulos, Michael C. Georgiadis, Antonis C. Kokossis, Computer Aided Chemical Engineering Vol 29, ELSEVIER, 522-526, Plantwide control of a cumene manufacture process.
13. R. Jagtap, S. Goenka, N. Kaistha, E. Pistikopoulos, Michael C. Georgiadis, Antonis C. Kokossis, Computer Aided Chemical Engineering Vol 29, ELSEVIER, 487-491, Economic Plantwide Control of C4 Isomerization Process.

14. R. Jagtap , N. Kaistha, Gade Pandu Rangaiah , Vinay Kariwala, plant wide control: Recent development and application, WILEY, 121-146, Throughput Manipulator Selection for Economic Plantwide Control.

Chemistry

15. A. P. Rahalkar, S. D. Yeole, V. Ganesh and S. R. Gadre, An Art of the Possible for Ab Initio Treatment of Large Molecules and Molecular Clusters, Molecular Tailoring, R. Zaleśny, M.G. Papadopoulos, P.G. Mezey and J. Leszczynski, Springer (2011), 199-225.
16. Manas K. Ghorai, Deo Prakash Tiwari and Aditya Bhattacharyya, Asymmetric Hydroamination and Reductive Amination in Total Synthesis, Stereoselective Synthesis of Drugs & Natural Products, Vasyl Andrushko and Natalia Andrushko, Wiley-VCH, 2012, Chapter 33, 000.
17. Manas K. Ghorai, Sandipan Halder and Sauvik Samanta, Carbo-Amination and Alkylative Cylization with C-N Bond Formation in Stereoselective Syntheses, Stereoselective Synthesis of Drugs & Natural Products, Vasyl Andrushko and Natalia Andrushko, Wiley-VCH, 2012, Chapter 34, 000.
18. Maddali L. N. Rao (Co-authored with S. Shimada), Transition-Metal Catalyzed C-C bond Formation Using Organobismuth Compounds, Topics in Current Chemistry, 2012311, 199-228.
19. K. Srihari, Symmetry in molecular structure and dynamics, in Symmetry: A Multi-Disciplinary Perspective, Mathematical Society Lecture Note Series No. 16, I. B. Passi, Ramanujan, RMS Publications, pages 71-95, 2011.

Civil Engineering

20. Sailesh N. Behera, Mukesh Sharma, Onkar Dikshit, S. P. Shukla, Farhad Nejadkoorki, Advanced Air Pollution, Intech Publisher, 279-293, Development of GIS-Aided Emission Inventory of Air Pollutants for an Urban Environment.

Humanities and Social Sciences

21. A. K. Sharma and Rohini Ghosh, Anand, Sandeep, Ibha Kumar, and Anjula Srivastava, Challenges of the Twenty First Century: A Trans-displinary Perspective, Macmillan Publishers, 78-89, Economy and Sex Determination: A Study of Sex Determination and Female Foeticide in a Peri-urban Area of Northern India.
22. Binay Kumar Pattnaik and Subhasis Sahoo, Manoj K Patairiya and Maria I Nogueira, Sharing Science, India-Brazil Dialouge on Public Communication of Science, Technlogy, Culture and Society, National Council for Science & Technology Communication, Government of India, New Delhi and University of Sao Paulo, Brazil, 205-228, Studying science Communications in India through People's Science Movements.
23. T. Ravichandran, Viney Kirpal and Shridhar B. Gokhale, Unlock their Future: A Skills-based Approach to Teaching and Learning English, Sterling Paperbacks, New Delhi, 43-52, Computer Assisted Language Learning.

24. T. Ravichandran and Adrene Freeda D' Cruz, G. Baskaran, Native Visions and Alien Voices: Essays on Commonwealth Literature, V. H. N. S. N. College, Virudhunagar, 1-10, Rupturing Homogeneity: The Differential Nature of 'Fury' in Salman Rushdie's Fury.

Industrial Management and Engineering

25. Varman, Rahul & Chakrabarti, M, Big Business and Indian Maoists, Alternative Economic Survey, India 2011, Alternative survey Group, Indian Political Eco. Assn., Yuvasamvad Prakashan, New Delhi, 127-144.
26. Anoop Singh, At a Crucial Juncture: A perspective on development of electricity and REC markets in India, 3 years of Indian Energy Exchange: Vision and Views of Industry Leaders, Powerline / IEX, New Delhi

Mathematics and Statistics

27. J. Dutta and KKT Strong, Second Order Conditions and Nonsolid Cones in Vector Optimization, published as Chapter 5 in Recent Developments in Vector Optimization, Q. H. Ansari and J. C. Yao, Eds. Springer 2011.

Materials Science and Engineering

28. A. Garg, M. Gulati and N. Tiwari, Moving Towards Low Carbon Economy: The Need for Renewable Energy Solutions: Part-I, Renewable Energy in India: Capability, Challenges and Prospects, India Infrastructure Report 2010 (Infrastructure Development in a Low Carbon Economy), Oxford University Press.
29. Ashutosh K. Dubey, Kantesh Balani and Bikramjit Basu, Electrically active biocomposites as smart scaffold for bone tissue engineering, Nanomedicine: Technologies and Applications, Woodhead Publishing Ltd.
30. Anup Kumar Keshri, Kantesh Balani, Debrupa Lahiri, Arvind Agarwal, Carbon Nanotube Reinforced Ceramic Matrix Composites, Wood head publishing, Cambridge, UK. (Book Chapter).
31. Deepak, Vikram Verma, Monica Katiyar, Fabrication of Microelectronic Devices in Micromanufacturing Processes, CRC Press (Taylor and Francis), USA in press.

Mechanical Engineering

32. S. Verma, Y. M. Joshi, K. Muralidhar, Mark E. Russo, Interferometry, Principles and Applications, Nova, USA, 353-414, Optical interferometers: Principles and Applications in Transport Phenomena.

Physics

33. Debashish Chowdhury, J. Frank, Molecular Machines in Biology: Workshop of the Cell, Cambridge University Press, (2011), 38-58, Statistical mechanical treatment of molecular machines.

JOURNAL PAPERS

Aerospace Engineering

1. Kumar, Rakesh, and Ghosh, A. K., Parameter Estimation using Unsteady Downwash Model from Real Flight Data of Hansa-3 Aircraft, The Aeronautical Journal, Royal Aeronautical Society, UK, Vol. 115, No. 1170, pp.577-588, 2011.
2. Kumar, Rakesh, and Ghosh, A. K., Nonlinear Longitudinal Aerodynamic Modeling using Quasi-steady Stall Model and Neural Gauss-Newton Method, Journal of Aircraft, AIAA, USA, Vol. 48, No. 5, pp. 1809-1812, 2011.
3. Kumar, Rakesh, and Ghosh, A. K., Nonlinear Modeling of Cascade Fin Aerodynamics using Kirchhoff's Steady-stall Model, Journal of Aircraft, AIAA, USA, Vol. 49, No. 1, pp. 315-319, 2012.
4. Kumar, Rakesh, Misra, A., and Ghosh, A. K., Modeling of Cascade Fin Aerodynamics near stall using Kirchhoff's Steady-stall Model, Defense Science Journal, India, Vol. 61, No.2, pp. 157-164, 2011.
5. Kumar, Rakesh, Srivastava, S., Gupta, B., Kumar, A., and Ghosh, A. K., Parametric Trend Study during the Stability Analysis of a Tethered Aerostat, Journal of Aerospace Sciences and Technologies, AeSI, India, Vol. 63, No.2, pp.107-124, 2011.
6. Kumar, Rakesh and Ghosh, A. K., Nonlinear Aerodynamic Modeling of Hansa-3 Aircraft using Neural Gauss-Newton Method, Journal of Aerospace Sciences and Technologies, AeSI, India, Vol. 63, No. 3, pp. 194-204, 2011.
7. Kumar, Rakesh, Misra, A., and Ghosh, A. K., Nonlinear Aerodynamic Modeling of Cascade Fins and Delta-wing Aircraft Model, Journal of Aerospace Sciences and Technologies, AeSI, India, Vol. 63, No. 4, pp. 306-317, 2011.
8. Venkatesan C., Feeling: a measurable quantity?, Current Science, Vol. 100, No. 9, 1289-1290, 2011.
9. Lakshmana Dora, D. Saravanan, Karunakar and Debopam Das., Characteristics of Embedded-shock free compressible vortex rings: A detailed study using PIV, Advances in Mechanical Engineering, 2011, 10.1155/2011/650871, 1-13, 2011.
10. Murugan T, S. De, C. L. Dora and Debopam Das., Numerical simulation and PIV study of compressible vortex ring evolution, Shock Waves, 22, 1, 10.1007/s00193-011-0344-9, 69-83, 2012.
11. Abhijit Banerjee, Saurav K. Ghosh, and Debopam Das, Aerodynamics of Flapping Wing at Low Reynolds Numbers: Force Measurement and Flow Visualization, ISRN Mechanical Engineering, vol. 2011, 162687, 1-8, 2012.
12. P. K. Ezhil Kumar, and D. P. Mishra, Numerical Modeling of an Axisymmetric Trapped Vortex Combustor, International Journal of Turbo & Jet Engines, Volume 28, Issue 1, pp. 41–52, 2011.
13. M. Muralidhar, P. K. Ezhil Kumar, and D. P. Mishra, Experimental Investigation of a Twin Fluid Atomizer Spray Using a Laser Based Optical Patternator, International Journal of Turbo & Jet Engines, Vol. 28, Issue 1, pp. 109–117, 2011.
14. D. P. Mishra and K. Rukmangdhan, Experimental Investigation of n-Heptane Droplet at High Pressure Conditions, Archivum Combustionis, V31, N1-2, pp. 17-27, 2011.

15. D. P. Mishra A. Patyal and Manisha, Effects of Gellant Concentration on the Burning and Flame Structure of Organic Gel Propellant Droplets, Fuel, Volume 90, Issue 5, Pages 1805–1810, 2011.
16. S Mahesh and D. P. Mishra, Study of Turbulent Inverse Diffusion Flame in Recessed Backstep and Coaxial Burners, Combustion, Explosion, and Shock Waves, 4, 2011.
17. Jejurkar S J and D. P. Mishra, Flame Stability Studies in a Hydrogen-Air Premixed Flame Annular Microcombustor, International Journal of Hydrogen, vol 36, issue 12, Pages 7326-7338, 2011.
18. Jejurkar S J and D. P. Mishra, Effects of Combustor Geometry on Hydrogen-Air Premixed Flame Combustion in an Annular Microcombustor, Proc. IMechE, Part Journal of Aerospace Engineering, 225:1310–1321, 2011.
19. P. K. Ezhil Kumar and D. P. Mishra, Numerical Simulation of Cavity Flow Structure in an Axisymmetric Trapped Vortex Combustor, Aerospace Science and Technology, doi:10.1016/j.ast.2011.04.007.
20. Jejurkar S J and D. P. Mishra, Effects of Wall Thermal Conductivity on Entropy Generation and Exergy Losses in a H2–Air Premixed Flame Microcombustor, International Journal of Hydrogen, 36:15851–15859, 2011.

Biological Science and Bio-engineering

21. D. Lama, R. Sankararamakrishnan, Molecular dynamics simulations of pro-apoptotic BH3 peptide helices in aqueous medium: Relationship between helix stability and their binding affinities to the anti-apoptotic protein Bcl-XL, J. Comput. Aided Mol. Des, Vol. 25, 413-426, 2011.
22. A. Jain, R. Sankararamakrishnan, Dynamics of non-covalent interactions in all-alpha and all-beta class proteins: Implications for the stability of amyloid aggregates., J. Chem. Inf. Model., Vol. 51, 3208-3216, 2011.
23. A. B. Gupta, R. K. Verma, V. Agarwal, M. Vajpai, V. Bansal, R. Sankararamakrishnan, MIPModDB: A central resource for the superfamily of major intrinsic proteins, Nucleic Acids. Res., Vol. 40, D362-D369, 2012.
24. Sami, H, Maparu, A.K, Kumar, A, Sivakumar, S., Generic Delivery of Payload of Nanoparticles Intracellularly via Hybrid Polymer Capsules for Bioimaging Applications, PloS ONE, Vol. 7, e36195, 2012.
25. Kumar, A., Tripathi, A. and Jain, S., Extracorporeal Bioartificial Liver (BAL) for Treating Acute Liver Diseases., The J Extracorporeal Technology, Vol. 43, Issue 4, 195-206, 2012.
26. Shakya, A. K., Kumar, A. Klaczkowska, D., Hultqvist, M., Hagenow, K., Holmdohl, R. and Nandakumar, K. S., Influence of MHC, T cells and oxidation status on arthritis induced with collagen and a thermo-responsive polymeric adjuvant., American Journal Pathology, Vol. 179, Issue 5, 2490-2500, 2012.
27. Jurga, M., Dainiak, M. B., Sarnowska, A., Jablonska, A., Tripathi, A., Plieva, F. M., Irina N. Savina, I. N., Strojek, L., Jungvid, H., Kumar, A., Lukomska, B., Domanska-Janik, K., Forraz, N., McGuckin, C. P., The performance of laminin-containing cryogel scaffolds in neural tissue regeneration., Biomaterials, Vol. 32, Issue 13, 3423-3434, 2011.

28. Shakya, A. K., Kumar, A. and Nandakumar, K. S., Adjuvant properties of a biocompatible thermo-responsive polymer of N-isopropylacrylamide in autoimmunity and arthritis., J Royal Society Interface, Vol. 8, 1748-1759, 2011.
29. Tripathi, A. and Kumar, A, Multi-featured Macroporous Agarose-Alginate Cryogel: Synthesis and Characterization for Bioengineering Applications, Macromolecular Bioscience, Vol. 11, 22-35, 2011.
30. Bhat, S., Tripathi, A. and Kumar, A., Supermacroprous chitosan-agarose-gelatin cryogels: In vitro characterization and in vivo assessment for cartilage tissue engineering, J Royal Society Interface, Vol. 8, Issue 57, 540-554, 2011.
31. Jain, E., Karande, A. A. and Kumar, A., Supermacroporous Polymer Based Cryogel Bioreactor for Monoclonal Antibody Production in Continuous Culture using Hybridoma Cells., Biotechnology Progress, Vol. 27, Issue 1, 170-180, 2011.
32. Gupta, R. and Kumar, A., Synthesis and characterization of molecular imprinted polymeric materials for cholesterol recognition, J Sol-gel Sci. Technology, Vol. 58, 182-194, 2011.
33. Mishra, R. and Kumar, A., Inorganic/organic biocomposite cryogels for regeneration of bony tissues, Journal of Biomaterial Science: Polymer Edn., Vol. 22, Issue 16, 2107-2126, 2011.
34. Singh, D., Tripathi, A., Nayak, V. and Kumar, A., Proliferation of chondrocytes on three-dimensional modelled elastic and macroporous hydroxyethyl methacrylate (HEMA)-gelatin cryogel, J of Biomaterial Science: Polymer Edn., Vol. 22, Issue 13, 1733-1751, 2011.
35. Jayaraman M, Mishra R, Kodali R, Thakur AK, Koharudin LM, Gronenborn AM, Wetzel R, Kinetically competing huntingtin aggregation pathways control amyloid polymorphism and properties, Biochemistry, Vol. 51, Issue 13, 2706- 16, 2012.
36. Mishra R, Jayaraman M, Roland BP, Landrum E, Fullam T, Kodali R, Thakur AK, Arduini I, Wetzel R, Inhibiting the nucleation of amyloid structure in a huntingtin fragment by targeting Î±-helix-rich oligomeric intermediates., Journal of Molecular Biology, Vol. 415, Issue 5, 900-17, 2011.
37. Rajesh Vasita, Dhirendra S. Katti, Structural and functional characterization of proteins adsorbed on hydrophilized polylactide-co-glycolide microfibers, International Journal of Nanomedicine, Vol. 7, Issue 1, 61-71, 2012.
38. Jayaraman M, Kodali R, Sahoo B, Thakur AK, Mayasundari A, Mishra R, Peterson CB, Wetzel R, Slow amyloid nucleation via Î±-helix-rich oligomeric intermediates in short polyglutamine-containing huntingtin fragments., Journal of Molecular Biology, Vol. 415, Issue 5, 881-99, 2011.
39. Gupta, S., Maurya, R., Saxena, M. and Sen, J., Defining structural homology between the mammalian and avian hippocampus through conserved gene expression patterns observed in the chick embryo., Developmental Biology, Vol. 366, 125-41, 2012.
40. R. Mainpal, A. Priti and K. Subramaniam, PUF-8 suppresses the somatic transcription factor PAL-1 expression in C. elegans germline stem cells, Developmental Biology, Vol. 360, 195-207, 2011.
41. Singh S and Ganesh S, Phenotype variations in Lafora progressive myoclonus epilepsy: possible involvement of genetic modifiers?, Journal of Human Genetics, Vol. 57, Issue 5, 283-285, 2012.

42. Puri R, Ganesh S., Autophagy defects in Lafora disease: cause or consequence?, Autophagy, Vol. 8, Issue 2, 289- 290, 2012.
43. Singh PK, Singh S, Ganesh S., The laforin-malin complex negatively regulates glycogen synthesis by modulating cellular glucose uptake via glucose transporters, Mol Cell Biol., Vol. 32, Issue 3, 652-63, 2012.
44. Puri R, Suzuki T, Yamakawa K, Ganesh S., Dysfunctions in endosomal-lysosomal and autophagy pathways underlie neuropathology in a mouse model for Lafora disease, Hum Mol Genet, Vol. 21, Issue 1, 175-84, 2012.
45. Dubey D, Parihar R, Ganesh S., Identification and characterization of novel splice variants of the human EPM2A gene mutated in Lafora progressive myoclonus epilepsy, Genomics, Vol. 99, Issue 1, 36-43, 2012.
46. Puri R, Jain N, Ganesh S., Increased glucose concentration results in reduced proteasomal activity and the formation of glycogen positive aggresomal structures, FEBS J, Vol. 278, Issue 19, 3688-98, 2011.
47. Sushil Kumar Tomar, Prashant Kumar, Balaji Prakash, Deciphering the catalytic machinery in a universally conserved ribosome binding ATPase YchF, Biochem.Biophys. Res. Commun., Vol. 408, Issue 3, Index. Pubmed, 459-64, 2011.
48. Ashish Arora, Nagasuma R. Chandra , Amit Das , Balasubramanian Gopal, Shekhar C. Mande, Balaji Prakash, Ravishankar Ramachandran, Rajan Sankaranarayanan , K. Sekar, Kaza Suguna, Anil K. Tyagi, Mamannamana Vijayan, Structural biology of Mycobacterium tuberculosis proteins: The Indian efforts, Tuberculosis, Tuberculosis, Vol. 91, Issue 5, Index. PubMed, 456-68, 2011.

Chemical Engineering

49. H. Sahni, S. K. Gupta and A. Mehra, Modeling of the Continuous Entrapment and Growth of Gas Bubbles During the Polymerization of Methyl Methacrylate, Polym. Eng. Sci., Vol. 51, 1942-1956, 2011.
50. V. Sresht, J. B. Bellare and S. K. Gupta, Modeling the Cytotoxicity of Cisplatin, Indus. Eng. Chem. Res., Vol. 50, 12872-12880, 2011.
51. P. Chaudhari and S. K. Gupta, Multi-Objective Optimization of a Fixed Bed Maleic Anhydride Reactor using an Improved Bio- mimetic Adaptation of NSGA-II, Indus. Eng. Chem. Res., Vol. 51, 3279-3294, 2012.
52. D. Song, R. K. Gupta and R. P. Chhabra, Drag on a sphere in Poiseuille flow of power-law fluids, Industrial and Engineering Chemistry Research, Vol. 50, 13105-13115, 2011.
53. M. K. Rao, A. K. Sahu and R. P. Chhabra, Effect of confinement on power-law fluid flow past a circular cylinder, Polymer Engineering & Science, Vol. 51, 2044-2065, 2011.
54. P. K. Rao, C. Sasmal, A. K. Sahu, R. P. Chhabra and V. Eswaran, Effect of power-law fluid behaviour on momentum and heat transfer characteristics of an inclined square cylinder in steady flow regime, Int. J. Heat Mass Transfer, Vol. 54, 2854 - 2867, 2011.
55. A. Chandra and R. P. Chhabra, Momentum and heat transfer characteristics of a semi-circular cylinder immersed in power-law fluids in the steady flow regime, Int. J. Heat Mass Transfer, Vol. 54, 2734-2750, 2011.

56. C. Sasmal and R. P. Chhabra, Laminar natural convection from a heated square cylinder immersed in power-law liquids, J. Non-Newt. Fluid Mech., Vol. 166, 811-830, 2011.
57. A. Prhashanna, A. K. Sahu and R. P. Chhabra, Flow of power-law fluids past an equilateral triangular cylinder: Momentum and heat transfer characteristics, Int. J. Thermal Sciences, Vol. 50, 2027-2042, 2011.
58. A. Chandra and R. P. Chhabra, Influence of power-law index on transitional numbers for flow over a semi-circular cylinder, Applied Mathematical Modelling, Vol. 35, 5766-5785, 2011.
59. N. Nirmalkar and R. P. Chhabra, Forced convection in power-law fluids from an asymmetrically confined heated cylinder, International Journal of Heat and Mass Transfer, Vol. 55, 235-250, 2012.
60. A. Chandra and R. P. Chhabra, Mixed convection from a heated semi-circular cylinder to power-law fluids in the steady flow regime, International Journal of Heat and Mass Transfer, Vol. 55, 214-234, 2012.
61. Amol Gode, A. K. Sahu and R. P. Chhabra, Two-dimensional steady flow over a semi-circular cylinder: drag coefficient and Nusselt number, International Journal of Advances in Engineering Sciences and Applied Mathematics, Vol. 3, 44-59, 2012.
62. D. Song, R. K. Gupta and R. P. Chhabra, Heat transfer to a sphere in tube flow of power-law liquids, International Journal of Heat and Mass Transfer, Vol. 55, 2110-2121, 2012.
63. N. Nirmalkar, R. P. Chhabra and R. J. Poole, On creeping flow of a Bingham plastic fluid past a square cylinder, J. Non-Newt. Fluid Mech, Vol. 171-172, 17-30, 2012.
64. E. P. Arul, A. Ghatak, Control of Adhesion via Internally Pressurized Subsurface Microchannels, Langmuir, Vol. 28(9), 4339-4345, 2012.
65. A. Ranjan, M. Kulkarni, A. Karim and A. Sharma, Diblock copolymer lamellae on sinusoidal and fractal surfaces, J. Chem. Phys., Vol. 136, 094903 (Article number), 2012.
66. S. Patil, A. Malasi, A. Majumder, A. Ghatak, A. Sharma, Reusable antifouling viscoelastic adhesive with an elastic skin, Langmuir, Vol. Vol 28(1), 42-46, 2012.
67. D. Bhandary, Ed. P. Arul and A. Ghatak, Sub-surface fracture of a thin metallic foil under impact loading, International Journal of Solids and Structure, Vol. 48(10), 2902-2908, 2011.
68. A. S. Ghatak and A. Ghatak, Controlled Crystallization of Macro-molecules using Patterned Substrates in a Sandwiched Plate Geometry, Industrial and Engineering Chemistry Research, Vol. 50(23), 12984-12989, 2011.
69. D. Bhandary, V. Madnani, S. Mondal, and A. Ghatak, Microchannel embedded elastomeric layers for impact damping, Journal of Adhesion, Vol. 87, 531-546, 2011.
70. S. Das and A. Ghatak, Puncturing of soft gels with multi-tip needles, Journal of Material Science, Vol. 46(9), 2895- 2904, 2011.
71. G. Tomar and A. Sharma, Contact instabilities of anisotropic and inhomogeneous soft elastic films, Phys. Rev. E, Vol. 85, 021603 (Article number), 2012.
72. Gunjan K. Agrahari, Sajal K. Shukla, Nishith Verma and Prashant K. Bhattacharya, Model prediction and experimental studies on the removal of dissolved NH3 from water applying hollow fiber membrane contactor, Journal of Membrane Science, Vol. 390- 391, 164-174, 2012.

73. Ravi Thiyagarajan, Siddana Ravi and Prashant K. Bhattacharya, Pervaporation of methyl-ethyl ketone and water mixture: determination of concentration profile, Desalination, Vol. Desalination, 178- 186, 2011.
74. Dwaipayan Sen, Ankur Sarkar, Aaron Gosling, Sally L. Gras, Geoff W. Stevens, Sandra E. Kentish, P.K. Bhattacharya, Andrew R. Barber, Chiranjib Bhattacharjee, Feasibility study of enzyme immobilization on polymeric membrane: A case study with enzymatically galacto-oligosaccharides production from lactose, Journal of Membrane Science, Vol. 378, 471-478, 2011.
75. Gunjan Kumar Agrahari, Nishith Verma and Prashant K. Bhattacharya, Application of hollow fiber membrane contactor for the removal of carbon dioxide from water under liquid-liquid extraction mode, Journal of Membrane Science, Vol. 375, 323-333, 2011.
76. Dwaipayan Sen, Aaron Gosling, Geoff W. Stevens, Prashant K. Bhattacharya, Andrew R. Barber, Sandra E. Kentish, Chiranjib Bhattacharjee, Sally L. Gras, Galactosyl oligosaccharide purification by ethanol, Precipitation, Food Chemistry, Vol. 128, 773-777, 2011.
77. R. Jagtap, N. Kaistha, S. Skogestad, Plantwide control for economic optimum operation of a recycle process with side reaction, IECR, Vol. 50, Issue 15, 8571-8584, 2011.
78. Baldewa B., Joshi Y. M, Delayed Yielding in Creep, Time -Stress Superposition and Effective Time Theory for a Soft Glass, Soft Matter, Vol. 8, 789 - 796, 2012.
79. R. S. Thakur., N. Kaistha, D. P. Rao, Process intensification in duplex pressure swing adsorption, CACE, Vol. 35, Issue 5, 973-983, 2011.
80. Shaukat A., Sharma A. Joshi Y. M., Squeeze flow behavior of (soft glassy) thixotropic material, Journal of Non- Newtonian Fluid Mech., Vol. 167, 9 - 17, 2012.
81. Kaushal M. , Joshi Y. M, Self-Similarity in Electrorheological Behavior, Soft Matter, Vol. 7, 9051 - 9060, 2011.
82. S. Kazim, S. Ahmad, J. Pfleger,J. Plestil, Y. M. Joshi., Polyaniline-Sodium Montmorillonite Clay Nanocomposites: Effect of Clay Concentration on Thermal, Structural and Electrical Properties, Journal of Materials Science, Vol. 47, 420 - 428, 2011.
83. Shahin A., Joshi Y. M., Ramakrishna S. Anantha, Interface Induced Anisotropy and nematic glass/gel state in Jammed Aqueous Laponite Suspensions, Langmuir, Vol. 27, 14045 - 14052, 2011.
84. Baldewa B. , Joshi Y. M, Thixotropy and Physical Aging in Acrylic Emulsion Paint, Polymer Engineering & Science, Vol. 51, 2084 - 2091, 2011.
85. M. Ravi Sankar, V. K. Jain, J. Ramkumar, Y. M. Joshi, Rheological characterization of styrene-butadiene based medium and its finishing performance using rotational abrasive flow finishing process, International Journal of Machine Tools and Manufacture, Vol. 51, 947 - 957, 2011.
86. Agrahari, G. Shukla, S.K., Verma, N. Bhattacharya, P.K, Model prediction and experimental studies on the removal of dissolved NH3 from water applying hollow fiber membrane contactor, J. Membrane Science, Vol. 390-391, 164-174, 2012.
87. Mekala, B., Mathur, G.N., Sharma, A., Verma, N., Surfactant enhanced multiscale carbon webs of nanofibers and nickel nanoparticles for the removal of gaseous persistent organic pollutants, Ind. Eng. Chem. Res., Vol. 51 (4), 2104-2112, 2012.

88. Katepalli, H., Mekala B., Sharma, C. S., Verma, N., Sharma, A., Synthesis of hierarchical fabrics by electrospinning of PAN nanofibers on activated carbon microfibers for environmental remediation applications, Chemical Eng. J., Vol. 171(3), 1194-1200, 2011.
89. Khan S and Singh J K, Surface phase transition of associating fluids on functionalized surfaces, J. Physical Chemistry C, Vol. 115, 17861-17869, 2011.
90. Srivastava S, Dochtery H, Singh JK and Cummings PT, Phase Transitions of Water in Graphite and Mica Pores, J. Physical Chemistry C, Vol. 115, 12448-12457, 2011.
91. Kumar, V., Talreja, N., Deva, D., Sankararamakrishnan, N., Sharma, A., Verma, N., Development of bi-metals doped micro- and nano multi-functional polymeric adsorbents for the removal of fluoride and arsenic(V) in wastewater, Desalination, Vol. 282(1), 27-38, 2011.
92. Naik, J., Mekala B., Singh, R.K., Sharma, A., Verma, N., Joshi, H.C., Srivastava, A., Preparation, surface functionalization and characterization of carbon micro fibers for adsorption applications, Environmental Eng Sci., Vol. 28(10), 725-733, 2011.
93. Agrahari, G., Verma, N., Bhattacharya, P.K., Application of hollow fiber membrane contactor for the removal of carbon dioxide from water, J. Membrane Sci., Vol. 375(1-2), 323-333, 2011.
94. Chakraborty, A., Deva, D., Sharma, A., Verma, N., Adsorbents based on carbon microfibers and carbon nanofibers for the removal of phenol and lead from water, J. Colloid and Interface Sci., Vol. 359(1), 228-239, 2011.
95. Mekala B., Mandal, S., Mathur, G.N., Sharma, A., Verma, N., Modification of activated carbon fiber by metal dispersion and surface functionalization for the removal of 2-chloroethanol, Ind. Eng. Chem. Res., Vol. 50 (23), 13092-13104, 2011.
96. Mekala B., Sharma, A., Sharma, A., Verma, N., Preparation of carbon molecular sieves from carbon micro and nanofibers for sequestration of CO2, Chem Eng Res Design, Vol. 89(9), 1736-1746, 2011.
97. Huang H, Singh JK, Lee JM and Kwak SK, Confining Effect of Carbon Nanotube Configuration on Phase Behavior of Hard-Sphere Fluid, Fluid Phase Equilibria, Vol. 318, 19-24, 2012.
98. Metya AK, Hens A and Singh JK, Molecular dynamics study of vapor-liquid equilibria and transport properties of Sodium and Lithium based on EAM potentials, Fluid Phase Equilibria, Vol. 3132, 15-24, 2012.
99. T. Das, G. Deo, Synthesis, characterization and In-Situ DRIFTS during the CO2 hydrogenation reaction over supported cobalt catalysts, Journal of Molecular Catalysis A, Vol. 350, Issue 1-2, 75-82, 2011.
100. S. Patil, A. Ranjan and A. Sharma, Pre-fracture instabilities govern generation of self- affine surfaces in tearing of soft viscoelastic elastomeric sheets, Macromolecules, Vol. 45, 2066-2073, 2012.
101. Ghosh A, Patra TK, Rishikant, Singh RK, Singh JK and Bhattacharya S, Surface electrophoresis of ds-DNA across orthogonal pair of surfaces, Applied Physics Letters, Vol. 98, 164102-1 to 164102-3, 2011.
102. K. Nayani, H. Katepalli, C. S. Sharma, S. Patil, A. Sharma and R. Venkataraghavan, Electrospinning combined with non-solvent induced phase separation to fabricate highly porous and hollow sub-micrometer polymer fibers, Ind. Eng. Chem. Res., Vol. 51, 1761-1766, 2012.

103. M. Pandey and R. Pala, Stabilization and growth of non-native nanocrystals at low and atmospheric pressures, Journal of Chemical Physics, Vol. 136, Issue 4, 044703-1 to 044703-6, 2012.
104. A. Helman and R. Pala, A First-Principles Study of Photo-Induced Water-Splitting of Fe2O3, Journal of Physical Chemistry C, Vol. 115, Issue 26, 12901-12907, 2011.
105. M. Bikshapathi, G. N. Mathur, A. Sharma and N. Verma, Surfactant-enhanced multiscale carbon webs including nanofibers and Ni-nanoparticles for the removal of gaseous persistent organic pollutants, Ind. Eng. Chem. Res., Vol. 51, 2104-2112, 2012.
106. A. Verma and A. Sharma, Sub-40 nm polymer dot arrays by self-organized dewetting of e-beam treated ultrathin polymer Films, RSC Advances, Vol. 2, 2247-2249, 2012.
107. T. Maitra, S. Sharma, A. Srivastava, Y.-K. Cho, M. Madou and A. Sharma, Improved graphitization and electrical conductivity of suspended carbon nanofibers derived from carbon nanotube/polyacrylonitrile composites by directed electrospinning, Carbon, Vol. 50, 1753-1761, 2012.
108. S. Patil, A. Malasi, A. Majumder, A. Ghatak and A. Sharma, A reusable and antifouling viscoelastic adhesive with an elastic skin, Langmuir, Vol. 28, 42-46, 2012.
109. S. Sharma, A. Sharma, Y.-K. Cho and M. Madou, Increased graphitization in electrospun single suspended carbon nanowires integrated with carbon-MEMS and carbon-NEMS platforms, ACS Applied Materials & Interfaces, Vol. 4, 34- 39, 2012.
110. M. M. Kulkarni, C. S. Sharma, A. Sharma, S. Kalmodia and B. Basu, Multiscale micro-patterned polymeric and carbon substrates derived from buckled photoresist films: fabrication and cytocompatibility, J. Materials Science, Vol. 47, 3867-3875, 2012.
111. Ray, P. D. S. Reddy, D. Bandyopadhyay, S. W. Joo, A. Sharma, S. Qian and G. Biswas, Instabilities in freesurface electroosmotic flows, Theoretical and Computational Fluid Dynamics, Vol. 26, 311-318, 2012.
112. R. Mukherjee and A. Sharma, Creating self-organized sub-micron contact instability patterns in soft elastic bilayers with a topographically patterned stamp, ACS Applied Materials & Interfaces, Vol. 4, 355-362, 2012.
113. D. Bandyopadhyay, P. D. S. Reddy, A. Sharma, S. W. Joo and S. Qian, Electro-magnetic field induced flow and instabilities in confined stratified liquid layers, Theoretical and Computational Fluid Dynamics, Vol. 26, 23-28, 2012.
114. A. Shaukat, A. Sharma and Y. M. Joshi, Squeeze flow behavior of soft glassy thixotropic material, J. Non Newtonian Fluid Mech., Vol. 167-168, 9-17, 2012.
115. B. Ray, G. Biswas and A. Sharma, Oblique drop impact on deep and shallow liquid, Communications in Computational Physics, Vol. 115, 1386-1396, 2012.
116. B. Ray, P. D. S. Reddy, D. Bandyopadhyay, S. W. Joo, A. Sharma, S. Qian and G. Biswas, Surface instability of a thin electrolyte film undergoing coupled electroosmotic and electrophoretic flows in a microfluidic channel, Electrophoresis, Vol. 32, 3257-3267, 2011.
117. B. Mekala, S. Mandal, G. N. Mathur, A. Sharma and N. Verma, Modification of activated carbon fiber by metal dispersion and surface functionalization for the removal of 2-chloroethanol, Ind. & Eng. Chem. Res., Vol. 50, 13092-13104, 2011.

118. A. Verma and A. Sharma, Self-organized nano-lens arrays by intensified dewetting of electron beam modified polymer thin-films, Soft Matter, Vol. 7, 11119-11124, 2011.
119. C. S. Sharma, K. Abhishek, H. Katepalli, and A. Sharma, Bio-mimicked superhydrophobic polymeric and carbon surfaces, Ind. Eng. Chem. Res., Vol. 50, 13012-13020, 2011.
120. L. Xu, A. Sharma and S. W. Joo, Growth of noncircular and faceted holes in liquid-liquid dewetting of thin polymer bilayers, Macromolecules, Vol. 44, 9335-9340, 2011.
121. V. Kumar, N. Talreja, D. Deva, N. Sanakararamakrishnan, A. Sharma and N. Verma, Development of bi-metal doped micro- and nano multi-functional polymeric adsorbents for the removal of fluoride and arsenic (V) from wastewater, Desalination, Vol. 282, 27-38, 2011.
122. L. Xu, D. Bandyopadhyay, A. Sharma and S. W. Joo, Switching of interfacial instabilities from the polymer-air interface to the polymer-polymer interface in a thin bilayer, Soft Matter, Vol. 7, 8056-8066, 2011.
123. J. Naik, M. Bikshapati, R. Singh, A. Sharma, N. Verma, H. Joshi and A. Srivastava, Preparation, surface functionalization and characterization of carbon micro fibers for adsorption applications, Environmental Engineering Sci., Vol. 28, 725-733, 2011.
124. Y. Ai, B. Mauroy, A. Sharma and S. Qian, Electrokinetic motion of a deformable particle: dielectrophoretic effect, Electrophoresis, Vol. 32, 2282-2291, 2011.
125. G. Tomar, D. Bandyopadhyay and A. Sharma, Instabilities of soft elastic micro-tubes filled with viscous fluids: pearls, wrinkles and sausage strings, Phys. Rev. E, Vol. 84, 031603, 2011.
126. L. Xu, D. Bandyopadhyay, T. Shi, L. An, A. Sharma and S. W. Joo, Dewetting kinetics of thin polymer bilayers: role of underlayer, Polymer, Vol. 52, 4345-4354, 2011.
127. R. Mukherjee and A. Sharma, Self-organized meso-patterning of thin polymer films, Encyclopedia of Nanoscience and Nanotechnology, Vol. 23, 1-51, 2011.
128. B. Mekala, A. Sharma, A. Sharma and N. Verma, Preparation of carbon molecular sieves from carbon micro and nanofibers for sequestration of CO2, Chem. Eng. Res. & Des., Vol. 89, 1737-1746, 2011.
129. M. Zhang, Y. Ai, A. Sharma, S. W. Joo, D.-S. Kim and S. Qian, Electrokinetic particle translocation through a nanopore containing a floating electrode, Electrophoresis, Vol. 32, 1864-1874, 2011.
130. A. Verma and A. Sharma, Submicrometer pattern fabrication by intensification of instability in ultrathin polymer films under a water-solvent mix, Macromolecules, Vol. 44, 4928-4935, 2011.
131. H. Katepalli, M. Bikshapathi, C. S. Sharma, N. Verma and A. Sharma, Synthesis of hierarchical fabrics by electrospinning of PAN nanofibers on activated carbon microfibers for environmental remediation applications, Chem. Eng. J., Vol. 171, 1194-1200, 2011.
132. W. S. Choi, A. Sharma, S. Qian, G. Lim and S. W. Joo, On steady two-fluid electroosmotic flow with full interfacial electrostatics, J. Colloid Interface Sci., Vol. 357, 521-526, 2011.

133. A. Verma, A. Sharma and G. U. Kulkarni, Ultrafast large area micropattern generation in non-absorbing polymer thinfilms by pulsed laser diffraction, Small, Vol. 7, 758-765, 2011.
134. Chakraborty, D. Deva, A. Sharma and N. Verma, Adsorbents based on carbon microfibers and carbon nanofibers for the removal of phenol and lead from water, J. Colloid Interface Sci., Vol. 359, 228-239, 2011.
135. C. S. Sharma, H. Katepalli, A. Sharma and M. Madou, Fabrication and conductivity measurement of suspended carbon nanofiber arrays, Carbon, Vol. 49, 1727-1732, 2011.
136. P. D. S. Reddy, D. Bandyopadhyay, S. W. Joo, A. Sharma and S. Qian, Parametric study on instabilities in a twolayer electromagnetohydrodynamic channel flow confined between two parallel electrodes, Phys. Rev. E, Vol. 83, 036313 (Article Number), 2011.
137. A. Rammohan, P. K. Dwivedi, R. Martinez-Duarte, H. Katepalli, M. J. Madou and A. Sharma, One-step grayscale technique for the fabrication of 3-dimensional structures, Sensors and Actuators B, Vol. 153, 125-134, 2012.
138. J. Sarkar, H. Annepu and A. Sharma, Contact instability of a soft elastic film bonded to a patterned substrate, Journal of Adhesion, Vol. 87, 214-234, 2011.
139. S. E. Yalcin, A. Sharma, S. Qian, S.W. Joo and O. Baysal, On-demand particle enrichment in a microfluidic channel by a locally controlled floating electrode, Sensors and Actuators B, Vol. 153, 277-283, 2011.
140. Peela, N.R., Kunzru, D., Steam reforming of ethanol in a microchannel reactor: Kinetic study and reactor simulation, Industrial and Engineering Chemistry Research, Vol. 50, Issue 23, 12881-12894, 2011.
141. Mitra, B., Chakraborty, J.P., Kunzru, D., Disproportionation of toluene on ZSM5 washcoated monoliths, AIChE Journal, Vol. 57, Issue 12, 3480-3495, 2011.
142. Mitra, B., Kunzru, D., Disproportionation of toluene on monoliths washcoated with metal oxide modified ZSM5, Catalysis Letters, Vol. 141, Issue 10, 1569-1579, 2011.
143. Yamini Sudha. S, Ashok Khanna, Validation and prediction of temperature dependent Henry Constant for CO2- Ionic Liquid systems using COSMO-RS, J. Chem. Eng. Data, Vol. 56, Issue 11, 4045-4060, 2011.

Chemistry

144. R. K. Das, A. Aijaz, M. K. Sharma, P. Lama and P. K. Bharadwaj, Direct Crystallographic Observation of Catalytic Reactions inside the Pores of a Flexible Coordination Polymer, Chem. Eur. J., Issue 1, 2012.
145. P. Lama, J. Mrozinski, and P. K. Bharadwaj, Co(II) Coordination Polymers with Co-ligand Dependent Dinuclear to Tetranuclear Core: Spin-Canting, Weak Ferromagnetic and Antiferromagnetic Behavior, Cryst. Growth Des, 2012.
146. R. A. Agarwal, A Aijaz, M Ahmad, E.C. Sañudo, Q. Xu, and P. K. Bharadwaj, Two New Coordination Polymers with Co(II) and Mn(II): Selective Gas Adsorption and Magnetic Studies, Cryst. Growth Des, 2012.
147. M. Ahmad, M. K. Sharma, R. Singh, J. Mrozinski and P. K. Bharadwaj, Unprecedented Mn(II)-phosphate 3D coordination polymer with novel pkb1

topological network showing spin-canted anti ferromagnetism, Australian Journal of Chemistry. (Special Issue), 2012.

148. M. Ahmad, M. K. Sharma, R. Das, P. Poddar, and P. K.Bharadwaj, Syntheses, Crystal Structures and Magnetic Properties of Metal-Organic Hybrid Materials of Co(II) Using Flexible and Rigid Nitrogen Based Ditopic Ligands as Spacers, Cryst. Growth Des, Vol 12, 1571, 2012.
149. P. Lama, E. C. Sañudo and P. K. Bharadwaj, Coordination Polymers of Mn^{2+} and Dy^{3+} Ions Built with a Bent Tricarboxylate: Metamagnetic and Weak Anti-ferromagnetic Behavior, Dalton. Trans., 2979, 2012.
150. P. Lama and P. K. Bharadwaj, Three New Isostructural Coordination Polymers with Cd(II) Clusters as the SBU: Synthesis, Structural Characterization, and Luminescence Properties, Cryst. Growth Des., Vol 11, 5434, 2011.
151. S. B. Maity and P. K. Bharadwaj, Cryptand Receptors in Metal Ion Induced Fluorescence Signaling, Inorg. Chim. Acta (Special Issue), Vol 5, 2012.
152. S. B. Maity and P. K. Bharadwaj, A Rhodamine Piperazine Conjugate as a Fluorogenic Sensor for Hg(II) ion in Aqueous Ethanol Medium, Ind. J. Chem. (A) (Special Issue on P C Roy), Vol 42A, 1298, 2011.
153. M. K. Sharma, P. P. Singh and P. K. Bharadwaj, Two-Dimensional Rhombus Grid Coordination Polymers showing Heterogeneous Catalytic Activities, J. Mol. Catal. A (Editor's choice), Vol 6, 2011.
154. S. Das, S. Sen and P. K. Bharadwaj, Anion Control Structural Variation of Silver(I) Coordination Polymers with a New Donor π-Acceptor Ligand, Inorg. Chim. Acta, Vol 372(1), 425, 2011.
155. A. Aijaz, E. C. Sañudo and P. K. Bharadwaj, Construction of Coordination Polymers with a Bifurcating Ligand: Synthesis, Structure, Photoluminescence and Magnetic Studies, Cryst. Growth Des., Vol 11, 1122, 2011.
156. M. K. Sharma, P. Lama and P. K. Bharadwaj, Reversible Single-Crystal to Single-Crystal Exchange of Guests in a Seven-Fold Interpenetrated Diamondoid Coordination Polymer, Cryst. Growth Des., Vol 11, 1411, 2011.
157. A. Jana, J. M. Lim, S. W. Park, D. Kim and P. K. Bharadwaj, A Comparative Study of Third-Order Optical Nonlinearity of Symmetrical Dipolar Chromogenic Probes and Their Enhancement by Diffrent Metal Ions, Indian J. Chem. (A) (special issue), Vol 511, 2011.
158. M. K. Sharma and P. K. Bharadwaj, A Dynamic Open Framework Exhibiting Guest and/or Temperature Induced Bicycle Pedal Motion in Single-crystal to Single-crystal Transformation, Inorg. Chem, Vol 50, 1889, 2011.
159. M. K. Sharma, Irena Senkovska, Stefan Kaskel and P. K. Bharadwaj, Three-Dimensional Porous Cd(II) Coordination Polymers with Large One-Dimesional Hexagonal Channels: High Pressure CH4 and H2 Adsorption Studies, Inorg. Chem, Vol 50, 539, 2011.
160. K. K. Sadhu S. Sen and P. K. Bharadwaj, Cryptand Derived Fluorescence Signaling Systems for Sensing Hg(II) ions: A Comparative Study, Dalton. Trans, 2011.
161. Raj K. Das, M. Sarkar, S. M. Wahidur Rahaman, H. Doucet and J. K. Bera, Binuclear Copper Complexes and Their Catalytic Evaluation, Eur. J. Inorg. Chem, 1680, 2012.
162. V. Chandrasekhar, T. Hajra, J. K. Bera, S.M. Wahidur Rahaman, N. Satumtira, O. Elbjeirami and M. A. Omary, Ligand-Bridged Dinuclear Cyclometallated Ir^{III}

Complexes: From Metallamacrocycles to Discrete Dimers, Inorg. Chem, Vol 51, 1319, 2012.

163. C. B. Bheeter, J. K. Bera, and H. Doucet, Palladium-Catalysed Direct Arylations of NH-Free pyrrole and N-tosylpyrrole with Aryl Bromides, Tetrahedron Letters, Vol 53, 509, 2012.
164. A. Sinha, A. Sarbajna, S. Dinda and J. K. Bera, A Rh^{III}–NHC (N-Heterocyclic Carbene) Complex from Metal-Metal Singly Bonded [Rh^{II}-Rh^{II}] Precursor, Journal of Chemical Sciences, Vol 123, 799, 2011.
165. T. Hajra, S. Ghosh, J. K. Bera and V. Chandrasekhar, Cyclometalated Ir(III) complexes containing ancillary pyrazole-based ligands, Indian Journal of Chemistry- A, Vol 50, 1290, 2011.
166. V. Chandrasekhar, S. M. W. Rahaman, T. Hajra, D. Das, T. Ghatak, S. Rafiq, P. Sen, and J. K. Bera, A Trinuclear Bright Red Luminophore Based on Cyclometallated Ir(III) Motifs, Chem. Commun, Vol 47, 10836, 2011.
167. R. K Das, T. Ghatak, R. C. Samanta and J. K Bera, A fluoro-bridged dinuclear nickel(II) compound from tetrafluoroborate precursor: Making sense of a serendipitous reaction, Indian Journal of Chemistry- A, Vol 50, 1350, 2011.
168. B. Saha, S. M. Wahidur Rahaman, A. Sinha, and J. K. Bera, Contrasting Reactivity of 2-Mesityl-1,8-Naphthyridine (Mes-NP) with Singly-Bonded [Rh^{II}–Rh^{II}] and [Ru^{I}–Ru^{I}] Compounds, Aus. J. Chem, Vol 64, 583, 2011.
169. C. B. Bheeter, J. K. Bera, and H. Doucet, Palladium-Catalyzed Direct Arylation of Thiophenes Bearing SO_2R Substituents, J. Org. Chem, Vol 76, 6407, 2011.
170. T. Hajra, J. K. Bera and V. Chandrasekhar, Cyclometalated Ir(III) Complexes Containing Pyrazole/Pyrazine Carboxylate Ligands, Aus. J. Chem., Vol 64, 561, 2011.
171. Subha Pratihar and A. Chandra, A first principles molecular dynamics study of excess electron and lithium atom solvation in water–ammonia mixed clusters: Structural, spectral, and dynamical behaviors of [(H2O)5NH3]− and Li(H2O)5NH3 at finite temperature, J. Chem. Phys, Vol 134, 034302, 2011.
172. Rini Gupta and A. Chandra, Structural, single-particle and pair dynamical properties of acetone–chloroform mixtures with dissolved solutes, Chem. Phys, Vol 383, 41-49, 2011.
173. Debashree Chakraborty and A. Chandra, Diffusion of ions in supercritical water: Dependence on ion size and solvent density and roles of voids and necks, J. Mol. Liq., Vol 162, 12-19, 2011.
174. Rini Gupta and A. Chandra, Nonideality in diffusion of ionic and neutral solutes and hydrogen bond dynamics in dimethyl sulfoxide–chloroform mixtures of varying composition, J. Comp. Chem., Vol 32, 2679-89, 2011.
175. Bhabani S. Mallik and A. Chandra, An ab initio molecular dynamics study of supercritical aqueous ionic solutions: Hydrogen bonding, rotational dynamics and vibrational spectral diffusion, Chem. Phys, Vol 387, 48-55, 2011.
176. Debashree Chakraborty and A. Chandra, An analysis of voids and necks in supercritical water, J. Mol. Liq., Vol 163, 1-6, 2011.
177. Arindam Bankura and A. Chandra, A first principle theoretical study of the hydration structure and dynamics of an excess proton in water cluster of varying size and temperature, Chem. Phys, Vol 387, 92-102, 2011.

178. Debashree Chakraborty and A. Chandra, Hydrogen bonded structure and dynamics of liquid-vapor interface of water ammonia mixture: an ab initio molecular dynamics study, J. Chem. Phys, Vol 135, 114510, 2011.
179. Rini Gupta and A. Chandra, An ab initio molecular dynamics study of diffusion, orientational relaxation and hydrogen bond dynamics in acetone water mixture, J. Mol. Liq., Vol 165, 1-6, 2012.
180. Debashree Chakraborty and A. Chandra, A first principles simulation study of fluctuations of hydrogen bonds and vibrational frequencies of water at liquid-vapor interface, Chem. Phys., Vol 165, 96-109, 2012.
181. Bhabani S. Mallik and A. Chandra, Bhabani S. Mallik and A. Chandra (2012), "Hydrogen bond dynamics and vibrational spectral diffusion in aqueous solution of acetone: A first principles molecular dynamics study, J Chem. Sci, Vol 124, 215-221, 2012.
182. Arindam Bankura and A. Chandra, A first principles molecular dynamics study of the solvation structure and migration kinetics of an excess proton and a hydroxide ion in binary water-ammonia mixtures, J Chem. Phys, Vol 136, 114509, 2012.
183. Debashree Chakraborty and A. Chandra, Voids and necks in liquid ammonia and their roles in diffusion of ions of varying size, J Comp. Chem, Vol 33, 843, 2012.
184. Arindam Bankura and A. Chandra, Hydration structure and dynamics of a hydroxide ion in water clusters of varying size and temperature: Quantum chemical and ab initio molecular dynamics studies, Chem. Phys., http://dx.doi.org/10.1016/j.chemphys., 2012.03.016, 2012.
185. V. Chandrasekhar, P. Singh, Reactions of in situ generated hydrated organotin cations with chelating O, O- or O,N-ligands: a possible structure-directing influence of the organic substituent on tin, Dalton Trans, 114-123, 2011.
186. V. Chandrasekhar, T. Senapati, A. Dey, E. C. Sanudo, Rational Assembly of Soluble Copper(II) Phosphonates: Synthesis, Structure and Magnetism of Molecular Tetranuclear Copper(II) Phosphonates, Inorg. Chem., Vol 50, 1420-28, 2011.
187. V. Chandrasekhar, R. Thirumoorthi, R. K. Metre, B. Mahanti, Steric control in the reactions of 3-pyrazolecarboxylic acid with diorganotin dichlorides, J. Organomet. Chem., Vol 696, 600-606, 2011.
188. V. Chandrasekhar, V. Krishnan, R. Azhakar, T. Senapati, A. Dey, R. Suriyanarayanan, Carbophosphazene-Supported Ligand Systems Containing Pyrazole/Guanidine Coordinating Groups, Inorg. Chem., Vol 50, 2568-79, 2011.
189. V. Chandrasekhar, M. D. Pandey , B. Das B, B. Mahanti , T. Senapati, A phosphorus-supported coumarin-containing ligand as a fluorescence probe for detection of Cu(II) and Ag(I) ions, Ind. J. Chem. Section A (Special issue on Prof. Samaresh Mitra's 70th birthday), Vol 50, 453-58, 2011.
190. V. Chandrasekhar, T. Senapati , A. Dey, S. Hossain, Molecular transition-metal phosphonates, Dalton Transactions, 5394-5418, 2011.
191. V. Chandrasekhar, M. D. Pandey, Fluorescence sensing of Cu2+ and Hg2+ by a dipyrene ligand involving an excimer-switch off mechanism, Tetrahedron Letters, Vol 52, 1938-1941, 2011.
192. T. Hajra, J. K. Bera, V. Chandrasekhar, Cyclometalated Ir(III) Complexes Containing Pyrazole/Pyrazine Carboxylate Ligands, Aus. J. Chem., Vol 64, 561-566, 2011.

193. T. Hajra, J. K. Bera, V. Chandrasekhar, Multimetallic compounds containing cyclometalated Ir(III) units: Synthesis, structure, electrochemistry and photophysical properties, Inorg. Chim. Acta (Special issue on Prof. S. S. Krishnamurthy's 70th Birthday), Vol 372, 53-61, 2011.
194. V. Chandrasekhar, Professor S S Krishnamurthy, Inorg. Chim. Acta (Special issue on Prof. S. S. Krishnamurthy's 70th Birthday), Vol 372, 1-1, 2011.
195. V. Chandrasekhar, B. Mahanti, P. Bandipalli, K. Bhanuprakash, N. N. Nair, Cyclometalated Ir(III) complexes containing N-aryl picolinamide ancillary ligands, J. Organomet. Chem, Vol 696, 2711-2719, 2011.
196. V. Chandrasekhar, P. Thilagar, A. Steiner, Carbophosphazene-Based Multisite Coordination Ligands: Metalation Studies on the Pyridyloxy Carbophosphazene, $[NC(NMe_2)]_2$ $[NP(p\text{-}OC_5H_4N)_2]$, Crystal Growth & Design, Vol 11, 1512-1519, 2011.
197. V. Chandrasekhar, M. D. Pandey, K. Gopal, R. Azhakar, The Assembly of a Dinuclear Silver Complex Containing an Ag_2S_2 Motif from a Phosphorus-supported Tris hydrazone Ligand. P=S→Ag(I) Coordination., Dalton Trans, 7873-78, 2011.
198. V. Chandrasekhar, R. Suriya Narayanan, Organostannoxane-Supported Pd(0) Nanoparticles as Efficient catalysts for Heck-Coupling Reactions, Tetrahedron Letters, 3527-31, 2011.
199. V. Chandrasekhar, M. D. Pandey, S. K. Maurya, P. Sen, D. Goswami, Two-Photon Absorption Technique for Selective Detection of Copper(II) ions in Aqueous Solution Using a Dansyl-Pyrene Conjugate, Chemistry-an Asian Journal, Vol 6, 2246-50, 2011.
200. V. Chandrasekhar, M. D. Pandey, B. Das, B. Mahanti, K. Gopal, R. Azhakar, Synthesis, Structure and Photo-physical Properties of Phosphorus-Supported Fluorescent Probes, Tetrahedron, Vol 67, 6917-26, 2011.
201. T. Hajra, S. Ghosh, J. K. Bera, V. Chandrasekhar, Cyclometalated Ir(III) complexes containing ancillary pyrazole-based ligands, Ind. J. Chem.Sec. A. (Special P. C. Ray issue), Vol 50, 1290-97, 2011.
202. V. Chandrasekhar, S. M. W. Rahaman, T. Hajra, D. Das, T. Ghatak, S. Rafiq, P. Sen, J. K. Bera, A trinuclear bright red luminophore containing cyclometallated Ir(III) motifs, Chem. Commun., Vol 47, 10836-38, 2011.
203. A. P. Rahalkar, S. D. Yeole, V. Ganesh and S. R. Gadre, Linear-Scaling Techniques in Computational Chemistry and Physics, Ed. R. Zaleśny, M.G. Papadopoulos, P.G. Mezey and J. Leszczynski, Molecular Tailoring: an Art of the Possible for Ab Initio Treatment of Large Molecules and Molecular Clusters, Springer, 199-225, 2011.
204. M. M. Deshmukh, L. J. Bartolotti and S. R. Gadre, Estimation of hydrogen bond energies in Alpha, Beta and Gamma cyclodextrins, J. Comp. Chem, Vol 32, 2996, 2011.
205. S. D. Yeole and S. R. Gadre, Topography of Scalar Fields: Molecular Clusters and π-Conjugated Systems, J. Phys. Chem. A, Vol 115, 12769, 2011.
206. A. P. Rahalkar, B. K. Mishra, V. Ramanathan and S. R. Gadre, Gold Standard" Coupled Cluster Study of Acetylene Pentamers and Hexamers via Molecular Tailoring Approach, Theor. Chem. Acc., theor. Chem. Acct., Vol 130, 491, 2011.

207. A. P. Rahalkar, S. D. Yeole and S. R. Gadre, Acetylene aggregates via Cluster Building Algorithm and Tailoring Approach, Theor. Chem. Acc. Theor. Chem. Acct, Vol 131, 1095, 2012.
208. A. P. Rahalkar and S. R. Gadre, Tailoring Approach for obtaining Molecular Orbitals of Large Systems, J. Chem. Sci., Vol 124, 149, 2012.
209. S. D. Yeole, N. Sahu and S. R. Gadre, Structures, Energetics and Vibrational Spectra of CO2 Clusters through Molecular Tailoring and Cluster Building Algorithm, Phys. Chem. Chem. Phys. DOI: 10.1039/C2CP23761J, 2012.
210. Manas K. Ghorai, Y. Nanaji and A. K. Yadav, Ring Opening/C-N Cyclization of Activated Aziridines with Carbon Nucleophiles: Highly Diastereo- and Enantioselective Synthesis of Tetrahydroquinolines, Organic Letters, Vol 13, 4256, 2011.
211. Manas K. Ghorai, Ashis K. Sahoo and Sarvesh Kumar, Synthetic Route to Chiral Tetrahydroquinoxalines via Ring-Opening of A activated Aziridines, Organic Letters, Vol 13, 5972, 2011.
212. Manas K Ghorai, Deo Prakash Tiwari, Amit Kumar and Kalpataru Das, SN2-type ring opening of substituted-N-tosylaziridines with zinc (II) halides: Control of racemization by quaternary ammonium salt, J. Chem. Sci., Vol 123, 951, 2011.
213. Manas K. Ghorai, Sandipan Halder and Sauvik Samanta, Regioselective addition of 1, 3-dicarbonyl dianions to carbonyl compounds: one pot lactonization and ketalization of δ-hydroxyl-β-keto esters to protected pyrone derivatives, Aus. J. Chem., 2012.
214. Manas K. Ghorai, Dipti Shukla and Aditya Bhattacharyya, Syntheses of Chiral & #946 - & #947; -Amino Ethers, Morpholines and Their Homologues via Nucleophilic Ring Opening of Chiral Activated Aziridines and Azetidines, J. Org. Chem., Vol 77, 3740, 2012.
215. V. Chandrasekhar, M. D. Pandey, S. K. Maurya, P. Sen and D. Goswami, Two-photon absorption technique for selective detection of Cu2+ in aqueous solutions using Chemistry - An Asian Journal, 6(9), 2246-2250 (2011).
216. Jyotsana Gupta, Sandeep Kumar Maurya, D. Goswami and C. Vijayan, Efficient ultrafast optical limiting using single walled carbon nanotubes functionalized noncovalently with free base and metalloporphyrins, J. Appl. Phys. (Selected paper: Virtual Journal of Ultrafast Science, 10(7) (2011)), 109, 113101(1-6), 2011.
217. Arijit Kumar De, Debjit Roy and Debabrata Goswami, Two-photon fluorescence diagnostics of femtosecond laser tweezers, Current Science, Vol 101(7), 935-938, 2011.
218. Arijit Kumar De and Debabrata Goswami, Towards controlling molecular motions in fluorescence microscopy and optical trapping: a spatiotemporal approach, International Reviews in Physical Chemistry, Vol 30(3), 275-299, 2011.
219. Arijit Kumar De, Debjit Roy and Debabrata Goswami, Selective two-photon fluorescence suppression by ultrafast pulse-pair excitation: control by selective one-color stimulated emission, Journal of Biomedical Optics Letters (Selected paper: Virtual Journal of Ultrafast Science, 10(11) (2011).
220. Jyotsana Gupta, C. Vijayan, Sandeep Kumar Maurya, and D. Goswami, Ultrafast nonlinear optical response of carbon nanotubes functionalized with water soluble porphyrin, Optics Communications, Vol 285(7), 1920-1924, 2012.

221. Amit Nag and Debabrata Goswami, Effect of linear chirp on femtosecond two-photon processes in solution, J. Spectrosc. Dyn, 2:11, 2012.
222. D. Goswami and A. Nag, Journal of Chemical Sciences, Exploring control parameters of two photon processes in solutions, Journal of Chemical Sciences, 124(1), 281-289, 2012.
223. Tapas Goswami, Dipak K. Das, S. K. Karthick Kumar and Debabrata Goswami, Chirp and polarization control of femtosecond molecular fragmentation, Indian Journal of Physics, Vol 86, 181-185, 2012.
224. Jungdon Suk, J.; Natarajan, P.; Moorthy, J. N.; Bard, A. J., Electrochemistry and Electrogenerated Chemiluminescence of Twisted Anthracene-Functionalized Bimesitylenes, J. Am. Chem. Soc, 2012.
225. Natarajan, P.; Bajpai, A.; Venugopalan, P.; Moorthy, J. N, Rational Molecular Design for Multicomponent Guest Inclusion in the Solid State: Differential Binding of Small and Large Aromatic Guests, Curr. Sci. (Invited Article, Special Issue), Vol 101, 939-945, 2011.
226. Moorthy, J. N.; Senapati, K.; Parida, K. N.; Jhulki, S.; Sooraj, K.; Nair, N. N., Twist Does a Twist to the Reactivity: Stoichiometric and Catalytic Oxidations with Twisted Tetramethyl-IBX, J. Org. Chem, Vol 76, 9593−9601, 2011.
227. Mandal, S.; Parida, K.N.; Samanta, S.; Moorthy, J. N., Influence of (2,3,4,5,6-Pentamethyl/phenyl)phenyl Scaffold: Stereoelectronic Control of the Persistence of o-Quinonoid Reactive Intermediates of Photochromic Chromenes, J. Org. Chem, 7406–7414, 2011.
228. Moorthy, J. N.; Natarajan, P. Bajpai, A.; Venugopalan, P., Trigonal Rigid Triphenols: Self-Assembly and Multicomponent Lattice Inclusion, Cryst. Growth & Des, Vol 11, 3406–3417, 2011.
229. Neogi, I.; Moorthy, J. N., IBX-mediated one-pot synthesis of benzimidazoles from primary alcohols and arylmethyl bromides, Tetrahedron Lett, Vol 52, 3868–3871, 2011.
230. Moorthy, J. N.; Samanta, S.; Koner, A. L.; Nau, W. M., Steady-State Photochemistry (Pscorr Cyclization) and Nanosecond Transient Absorption Spectroscopy of Twisted 2-Bromoaryl Ketones (Invited Article), Pure Appl. Chem., Vol 83, 841–860, 2011.
231. S. Pandey, P. P. Das, A. K. Singh, and R. N. Mukherjee, Cobalt(II), Nickel(II) and Copper(II) complexes of a Hexadentate Pyridine Amide Ligand. Effect of Donor Atom (Ether vs. Thioether) on Coordination Geometry, Spin-State of Cobalt and M^{III}–M^{II} redox potential, Dalton Trans, 10758-10768, 2011.
232. H. Arora, J. Cano, F. Lloret, and R. N. Mukherjee, Unprecedented Heptacopper(II) Cluster with Body-Centred Anti-Prismatic Topology. Structure, Magnetism and Density Functional Study, Dalton Trans., 10055-10062, 2011.
233. S. Javed, V. Balamurugan, W. Jacob, A. K. Sharma, and R. N. Mukherjee, Discrete monomeric and chloride-bridged and 1D coordination polymeric mercury(II) complexes of a class of pyridyl-pyrazole lignd with variable denticity and flexibility, Indian J. Chem. Sec (Special issue dedicated to 150th birth anniversary of Acharya Prafulla Chandra Ray), 1248-1256, 2011.
234. A.K. Sharma, A. De, V. Balamurugan and R. N. Mukherjee, Conformational Flexibility of 2,6-Bis(pyrazol-1-ylmethyle)pyridine (L^5) in $[L^5Co^{II}(H_2O)_3]Cl_2$ and $[L^5Ni^{II}(H_2O)_2]Cl{\cdot}H_2O$. Molecular Structures and Non-covlant Interactions, Inorg.

Chim. Acta (Special issue dedicated to Professor S. S. Krishnamurthy on the occasion of his 70th birthday), Vol 372, 327-332, 2011.

235. A. Mukherjee and R. N. Mukherjee, Bidentate Coordination of a Potentially Tridentate Ligand. A Mononuclear Four-Coordinate Ni(II) Complex Supported by Two o-Iminobenzosemiquinonato Units, Indian J. Chem. (Special Issue on Bioinorganic Chemistry: Dedicated to Professor S. Mitra on the occasion of his 70th birthday), Vol 50A, 484-490, 2011.
236. Basanta K. Rajbongshi, Nisanth N. Nair, M. Nethaji, and Gurunath Ramanathan, Segregation into Chiral Enantiomeric Conformations of an Achiral Molecule by Concomitant Polymorphism, Crystal Growth and Design, Vol 12, 1823-1829, 2012.
237. Tushar K. Ghosh and Nisanth N. Nair, Oxidative Addition of Water to Rhn (n=1-4) Clusters on Alumina Surfaces and Spontaneous Formation of H2, J. Phys. Chem. C, Vol 115, 15403-15409, 2011.
238. Nisanth N. Nair, Ligand Exchanges and Hydroxypalladation Reactions of the Wacker Process in Aqueous Solution at High Cl- Concentration, J.Phys.Chem.B, Vol 115, 2312-2321, 2011.
239. Jarugu N. Moorthy, Kalyan Senapati, Keshaba N. Parida, Samik Jhulki, Kunnikuruvan Sooraj, and Nisanth N. Nair, Twist Does a Twist to the Reactivity: Stoichiometric and Catalytic Oxidations with Twisted Tetramethyl-IBX, J.Org.Chem., Vol 76, 9593-9601, 2011.
240. Shahnawaz Rafiq, Basanta K. Rajbongshi, Nisanth N. Nair, Pratik Sen, and Gurunath Ramanathan, Excited State Relaxation Dynamics of Model Green Fluorescent Protein Chromophore Analogs: Evidence for cis-trans isomerism, J. Phys. Chem. A, Vol 115, 13733-13742, 2011.
241. V. Chandrasekhar, B. Mahanti, P. Bandipalli, K. Bhanuprakash, Nisanth N. Nair, Cyclometalated Ir(III) complexes containing N-aryl picolinamide ancillary ligands, J. Organometallic Chem., Vol 696, 2711-2719, 2011.
242. E. Schreiner, Nisanth N. Nair, C. Wittekindt, D. Marx, Peptide Synthesis in Aqueous Environments: The Role of Extreme Conditions and Pyrite Mineral Surfaces on Formation and Hydrolysis of Peptides, J. Am. Chem. Soc, Vol 133, 8216-8226, 2011.
243. R. Pollet, Nisanth N. Nair, D. Marx, The water exchange of ProHance MRI contrast agent: Isomer-dependent free energy landscapes and mechanisms, Inorg. Chem., Vol 50, 4791-4797, 2011.
244. Harald Forbert, Marco Masia, Anna Kaczmarek-Kedziera, Nisanth N. Nair, and Dominik Marx, Aggregation-Induced Chemical Reactions: Acid Dissociation in Growing Water Clusters, J. Am. Chem. Soc, Vol 133, 4062-4072, 2011.
245. Janos Kiss, Johannes Frenzel, Nisanth N. Nair, Bernd Meyer, and Dominik Marx, Methanol synthesis on ZnO(000). III. Free energy landscapes, reaction pathways, and mechanistic insights, J. Chem. Phys., Vol 134, 064710, 2011.
246. Shradhey Gupta, Shahnawaz Rafiq, Mainak Kundu and Pratik Sen, Origin of Strong Synergism in Weakly Perturbed Binary Solvent System: A Case Study of Primary Alcohols and Chlorinated Methanes, J. Phys. Chem. B, Vol 116, 1345, 2012.
247. Shahnawaz Rafiq, Basanta K. Rajbongshi, Nisanth N. Nair, Pratik Sen* and Gurunath Ramanathan, Excited State Relaxation Dynamics of Model Green Fluorescent Protein Chromophore Analogs: Evidence for Cis–Trans Isomerism, J. Phys. Chem. A, Vol 115, 13733, 2011.

248. Vadapalli Chandrasekhar,* S. M. Wahidur Rahaman, Tanima Hajra, Dipak Das, Tapas Ghatak, Shahnawaz Rafiq, Pratik Sen* and Jitendra K. Bera*, A Trinuclear Bright Red Luminophore Containing Cyclometallated Ir(III) Motifs, Chem. Comm., Vol 47, 10836, 2011.
249. Shahnawaz Rafiq, Rajeev Yadav and Pratik Sen, Femtosecond Excited State Dynamics of 4-Nitrophenyl Pyrrolidinemethanol: Evidence of Twisted Intramolecular Charge Transfer and Intersystem Crossing involving Nitro Group, J. Phys. Chem. A, Vol 115, 8335, 2011.
250. Vadapalli Chandrasekhar,* Mrituanjay D. Pandey, Sandeep Kumar Maurya, and Pratik Sen* and Debabrata Goswami, Two-photon absorption technique for selective detection of Cu2+ in aqueous solutions using a dansyl-pyrene conjugate, Chem. Asian J., Vol 6, 2246, 2011.
251. M. L. N. Rao, D. K. Awasthi, J. B. Talode , Palladium-catalyzed cross-couplings of functionalized 2-bromobenzofurans for atom-economic synthesis of 2-arylbenzofurans using triarylbismuth reagents, Tetrahedron Letters, Vol 53, 2662-2666, 2012.
252. S. Shimada, M.L.N. Rao, Transition-metal catalyzed C-C bond formation using organobismuth compounds, Topics in Current Chemistry, Vol 311, 199-228, 2012.
253. M. L. N. Rao, P. Dasgupta, Palladium catalyzed atom-economic synthesis of functionalized 9-(diarylmethylene)-9H-fluorenes using triarylbismuths in one-pot bis-coupling process, Tetrahedron Letters, Vol 53, 62-165, 2012.
254. M. L.N. Rao, D. Banerjee, R. J. Dhanorkar, Synthesis of functionalized 2-arylthiophenes with triarylbismuths as atom-efficient multi-coupling organometallic nucleophiles under palladium catalysis, Synlett, 1324-1330, 2011.
255. M.L.N. Rao, D. Banerjee, R.J. Dhanorkar, Palladium-catalzed novel arylations of cyclic β-bromo-α, β-unsaturated aldehydes with triarylbismuths as multi-coupling organometallic nucleophiles, Synlett, 273-279, 2011.
256. A.Chaudhary, S. P. Rath, Encapsulation of TCNQ and Acridinium Ion within Bisporphyrin Cavity: Synthesis, Structure, Photophysical and HOMO-LUMO Gap Mediated Electron Transfer Properties, Chem. Eur. J. ASAP, Vol 18, 7404, 2012.
257. S. Brahma, Sk. A. Ikbal, S. Dey, S. P. Rath, Induction of Supramolecular Chirality in Di-Zinc(II) Bisporphyrin via Tweezer Formation: Synthesis, Structure and Rationalization of Chirality, Chem. Commun, Vol 48, 4070, 2012.
258. A.Chaudhary, S. P. Rath, Efficient Complexation of Pyrrole-bridged Di-Zinc(II) Bisporphyrin with Fluorescent Probe Pyrene: Synthesis, Structure, and Photoinduced Singlet-Singlet Energy Transfer, Chem. Eur. J, Vol 17, 11478, 2011.
259. S. Bhowmik, D. Sil, R. Patra, S. P. Rath, Axial Phenoxide Coordination on Di-Iron(III)bisporphyrin: Insights from Experimental and DFT Studies, J. Chem. Sci., Indian J. Chem., Sec. A., Vol 123, 827, 2011.
260. A. Chaudhary, R. Patra, S. P. Rath, Models for the Photosynthetic Reaction Center: Synthesis, Structure, and Electrochemical Properties of a Cofacial Di-palladium Bisporphyrin, J. Chem. Sci., Indian J. Chem., Sec. A., Vol 50, 1436, 2011.
261. S. Bhowmik, S. K. Ghosh and S. P. Rath, Control of Spins by Ring Deformation in a Diiron(III)bisporphyrin: Reversal of ClO_4^- and $CF_3SO_3^-$ Ligand Field Strength on the Magnetochemical Series, Chem. Commun., Vol 47, 4790, 2011.

262. S. Brahma, S. A. Ikbal and S. P. Rath, Syn-anti Conformational Switching: Synthesis and X-ray Structures of Tweezer and Anti Form in a Zinc Porphyrin Dimer Induced by Axial Ligands, Inorg. Chim. Acta., Vol 47, 4790, 2011.
263. A. Chaudhary, R. Patra, and S. P. Rath, Synthesis, Structure and Properties of a High-Spin Fe(III) Porphyrin with Nonequivalent Axial Ligands: Implications for the Hemoproteins, Indian J. Chem., Sec. A. (Invited article in the Special Issue on Bioinorganic Chemistry dedicated to Professor S. Mitra on the occasion of his 70th birth anniversary), Vol 50, 432, 2011.
264. Manav Saxena and Sabyasachi Sarkar, Synthesis of Carbogenic Nanosphere from Peanut Skin, Diamond & Related Materials, Vol 24, 11, 2012.
265. Manas Roy, Sumit Kumar Sonkar, Shweta Tripathi, Manav Saxena, Sabyasachi Sarkar, Non-toxicity of water soluble multi-walled carbon nanotube on Escherichia-coli colonies, Journal of Nanoscience and Nanotechnology, Vol 12, 1754, 2012.
266. Ameerunisha Begum, Golam Moula, Moumita Bose and Sabyasachi Sarkar, Super-reduced Fe_4S_4 Cluster of Balch's Dithiolene Series, Dalton Trans, Vol 41, 3536, 2012.
267. Jagannath Bhuyan, Rudra Sarkar and Sabyasachi Sarkar, A Magnesium Porphyrin Bicarbonate Complex with CO_2-Modulated Photosystem I Action, Angew. Chem. Int. Ed., Vol 50, 10603, 2011.
268. Golam Moula, Ameerunisha Begum, and Sabyasachi Sarkar, Dangling Thiyl Radical: Stabilized in $[PPh_4]_2[(bdt)WVI(O)(\mu\text{-}S)_2CuI(SC_6H_4S\cdot)]$ Moumita Bose, Inorg. Chem, 3852, 2011.
269. Jagannath Bhuyan and Sabyasachi Sarkar, Self-assembly of Mg and Zn TMP Porphyrin Polymer as Nanospheres and Nanorods. Crystal, Growth and Design, Vol 11, 5410-5414, 2011.
270. Mitrajit Ghosh, Sumit Kumar Sonkar, Manav Saxena and Sabyasachi Sarkar, Carbon Nano-onins for imaging the Life Cycle of Drosophila Melanogaster, Small, Vol 22, 3170-3177, 2011.
271. Ameerunisha Begum, Sumit Kumar Sonkar, Manav Saxena, and Sabyasachi Sarkar, Nanocomposites of Carbon Quantum Dots-Nickel (II) Dithiolene as Nanolights, Journal of Materials Chemistry, Vol 21, 19210-19213, 2011.
272. Ameerunisha Begum and Sabyasachi Sarkar, An iron(III) dithiolene complex as a functional model of iron-hydrogenase, Eur. J. Inorg. Chem., Vol 42, 43, 2011.
273. Biplab Maiti, Kuntal Pal and Sabyasachi Sarkar, Selective Inclusion of DMF Molecules Within Non-covalent Cavity, Inorg. Chim. Acta, Vol 372(1), 213, 2011.
274. Joyee Mitra and Sabyasachi Sarkar, Hydrosulfido molybdenum(V) complexes in relevance to xanthine oxidase, Ind. J. Chem. Sect A (A Special Issue on Bioinorganic), Vol 50A, 401-408, 2011.
275. Shweta Tripathi, Sumit Kumar Sonkar and Sabyasachi Sarkar, Growth Stimulation of Gram (Cicer arietinum) Plant by Water Soluble Carbon Nanotubes, Nanoscale, Vol 3, 1176, 2011.
276. Ameerunisha Begum and Sabyasachi Sarkar, An iron(III) dithiolene complex as a functional model of iron-hydrogenase, Eur. J. Inorg. Chem, Vol 42, 43, 2011.
277. Ameerunisha Begum, Manav Saxena, Sumit Kumar Sonkar and Sabyasachi Sarkar, Molecular-level understanding of nanocrystals of a nickel(II) dithiolene complex, Ind. J. Chem. Sect A (A Special Issue dedicated to Acharya P. C. Ray), Vol 50A, 1257, 2011.

278. Amit Majumdar and Sabyasachi Sarkar, Bioinorganic Chemistry of Molybdenum and Tungsten Enzymes: A Structural - Functional Modeling Approach, Coord. Chem. Rev, 50A, 1257, 2011.
279. Pradeep K. Chaudhury, Prashant Dubey, Manav Saxena and Sabyasachi Sarkar, Multiwalled carbon nanotube-polystyrene composite modified Pt electrode as an electrochemical gas sensor, Advance Science Letters, Vol 255 (9-10), 1039, 2011.
280. S. Keshavamurthy, On the nature of highly vibrationally excited states of thiophosgene, J. Chem. Sci., Vol 124, 291-300, 2012.
281. A.Sethi and S. Keshavamurthy, Driven coupled Morse oscillators - visualizing the phase space and characterizing the transport, Mol. Phys., 1-12, 2012.
282. Gour, N., Mondal, S., Verma, S, Synthesis and self-assembly of a neoglycopeptide: Morphological studies and ultrasound mediated DNA encapsulation, J. Pep. Sci., Vol 17, 148-153, 2011.
283. Nagapradeep, N., Verma, S., Characterization of an unprecedented organomercury adduct via Hg(II)-mediated cyclization of N9-propargylguanine, Chem.Commun., Vol 47, 1755-57, 2011.
284. Singh, P., Maria Toma, F., Kumar, J., Venkatesh, V., Raya, J., Prato, M., Verma. S., Bianco, A. Carbon nanotube-nucleobase hybrids: Nanorings from uracil-modified single-walled carbon nanotubes, Chem. -Eur. J., Vol 17, 6772-6780, 2011.
285. Mishra, A. K., Kumar, J., Khanna, S., Verma, S., Crystallographic signatures of cobalt coordination with modified adenine nucleobase containing carboxyl group pendants, Cryst. Growth Des., Vol 11, 1623-1630, 2011.
286. Prajapati, R. K., Verma, S., Adenine coordination around a Cu6I6 core, Inorg. Chem., Vol 50, 3180- 3182, 2011.
287. Vijaya Krishna, K., Verma, S, Investigating the avidin-biotin interaction on chiral soft structure platforms., Vijaya Krishna, K., Verma, S., Aust. J. Chem., Vol 64, 576-582, 2011.
288. Venkatesh, V., Kumar, J., Verma, S, Adenine containing architectures from silver supported dimeric units, CrystEngComm, Vol 13, 6030-6032, 2011.
289. Singh, P., Lamanna, G., Menard-Moyon, C., Maria Toma, F., Magnano, F., Bondino, F., Prato, M., Verma, S.,* Bianco, A, Adenine functionalization tailors the formation of efficient catalytic silver nanoparticles on carbon nanotubes, Angew. Chem., Int. Ed., Vol 50, 9893-9897, 2011.
290. Kumar, J., Verma, S., Nucleobase assemblies supported by uranyl cation coordination and other non-covalent interactions, J. Chem. Sci., Vol 123, 927-935, 2011.
291. Singh, P., Venkatesh, V., Nagapradeep, N., Verma, S.,* Bianco, A, 153G-quartet type self-assembly of guanine-functionalized singled walled carbon Nanotubes, Nanoscale, Vol 4, 1972-1974, 2012.
292. Kumar, J., Kanoo, P., Maji, T. K., Verma, S, Water-absorbing silver-adenine interpenetrated framework, CrystEngComm, Vol 14, 3012-3014, 2012.
293. Singh, P., Menard-Moyon, C., Kumar, J., Fabre, B., Verma, S.,* Bianco, A, Nucleobase-pairing triggers the self-assembly of uracil-ferrocene on adenine functionalized multi-walled carbon nanotubes, Carbon 2012 (accepted; DOI: 10.1016/j.carbon.2011.10.037), 2012.

Civil Engineering

294. J. Jai devi, S. N. Tripathi, T. Gupta, B. N. Singh, V. Gopalakrishnan, S. Dey, Observation-Based 3-D View of Aerosol Radiative Properties over Indian Continental Tropical Convergence Zone: Implications to Regional Climate, Tellus Series B: Chemical and Physical Meteorology, Vol. 63, Issue 5, 971-989, 2011.
295. M. Lemos, E.A Diaz, T. Gupta, C.M Kang, P. Ruiz, B. Coull, J.J Godleski, G. Flecha, Cardiac and Pulmonary Oxidative Stress in Rats Exposed to Realistic Emissions of Source Aerosols, Inhalation Toxicology, Vol. 23, Issue S2, 75-83, 2011.
296. S. Behera, M. Sharma, Degradation of SO2, NO2 and NH3 Leading to Formation of Secondary Inorganic Aerosols: An Environmental Chamber Study, Atmospheric Environment, Vol. 45, Issue 24, 4015-4024, 2011.
297. M.R Ferrat, D.J Weiss, Strekopytov, S. Dong, H. Chen, J. Najorka, Y. Sun, S. Gupta, R. Tada, R. Sinha,, Improved Provenance Tracing of Asian Dust Sources Using Rare Earth Elements and Selected Trace Elements for Palaeomonsoon Studies on the Eastern Tibetan Plateau, Geochimica et Cosmochimica Acta, Vol. 75, Issue 21, 6374-6399, 2011.
298. J.N. Malik, M Shishikura, T Echigo, Y Ikeda, K Satake, H Kayanne, Y. Sawai, C.V.R Murty, O Dikshit., Geologic evidence for two pre-2004 earthquakes during recent centuries near Port Blair, South Andaman Island, India, Geology, Vol. 39, Issue 6, 559-562, 2011.
299. D.M Giles, B.N Holben, S.N Tipathi, T.F Eck, W.W Newcomb, I. Slutsker, R.R Dickerson, A.M Thompson, S. Mattoo, S.H Wang, R.P Singh, A. Sinyuk, J.S Schafer, Aerosol Properties over the Indo-Gangetic Plain: A Mesoscale Perspective from the TIGERZ Experiment, Journal of Geophysical Research, Vol. 116, 2011.
300. S.N Behra, M. Sharma, Transformation of Atmospheric Ammonia and Acid Gases into Components of PM2.5: An Environmental Chamber Study, Environmental Science and Pollution Research, Vol. 19, Issue 4, 1187-1197, 2011.
301. M.R Gibling, C.R Fielding, R. Sinha,, Alluvial Valleys and Alluvial Sequences: Towards a Geomorphic Assessment, Society for Sedimentary Geology, Vol. V 97, 423-447, 2011.
302. J Moore, W. M White, D. Paul, R.A Duncan, W Abouchami, S.J.G Galer, Evolution of shield-building and rejuvenescent volcanism of Mauritius, Journal of Volcanology and Geothermal Research, Vol. 207, Issue 1-2, 47-66, 2011.
303. D.S Kaul, T. Gupta, S.N Tripathi, J. Collett jr, Secondary Organic Aerosol: A Comparison between Foggy and Nonfoggy Days, Environmental Science & Technology, Vol. 45, Issue 17, 7307-7313, 2011.
304. P. Ghosh, D. Choudhury, Seismic Bearing Capacity Factors for Shallow Strip Footings by Pseudo-Dynamic Approach, Disaster Advances, Vol. V 4, Issue 3, 34-42, 2011.
305. P. Ghosh, S. Kolathayar, Seismic Passive Earth Pressure Behind Non Vertical Wall with Composite Failure Mechanism: Pseudo-Dynamic Approach, Geotechnical and Geological Engineering, Vol. 29, Issue 3, 63-73, 2011.
306. S. Kolathayar, P. Ghosh, Seismic Passive Earth Pressure on Walls with Bilinear Backface Using Pseudo-Dynamic Approach, Geotechnical and Geological Engineering, Vol. 29, Issue 3, 307-317, 2011.

307. S. Das, V.K Gupta, A Wavelet-Based Parametric Characterization of Temporal Features of Earthquake Accelerograms, Engineering Structures, Vol. 33, Issue 7, 2173-2185, 2011.
308. P.K Sharma, R. Srivastava, Numerical Analysis of Virus Transport through Heterogeneous Porous Media, Journal of Hydro-environment Research, Vol. 5, Issue 2, 93-99, 2011.
309. M.Z Khan, P.K Mondal, S. Sabir, V. Tare, Degradation Pathway, Toxicity and Kinetics of 2,4,6-Trichlorophenol with Different Co-substrate by Aerobic Granules in SBR, Bioresource Technology, Vol. 102, Issue 13, 7016-7021, 2011.
310. J.B Barnes, A.L. Densmore, M. Mukul, R. Sinha, V Jain, S.K. Tandon,, Interplay between faulting and base level in the development of Himalayan frontal fold topography, Journal of Geophysical Research F: Earth Surface, Vol. 116, 2011.
311. A Shelke, N.R. Patra, Effect of Compressive Load on Uplift Capacity of Cast-In situ Bored PileS, Geotechnical and Geological Engineering, Vol. 29, Issue 5, 927-934, 2011.
312. D.K Srivastava, A.K. Agarwal, T. Gupta, Effect of Engine Load on Size and Number Distribution of Particulate Matter Emitted from a Direct Injection Compression Ignition Engine, Aerosol and Air Quality Research, Vol. 11, Issue 7, 915-920, 2011.
313. B.V.S Viswanadham, R. Sathiyamoorthy, P.V Divya, J.P Gourc, Influence of Randomly Distributed Geofibers on the Integrity of Clay-Based Landfill Covers: A Centrifuge Study, Geosynthetics International, Vol. 18, Issue 5, 255- 271, 2011.
314. V.P Aneja, W.H Schlesinger, J.W Erisman, S.N Behera , M. Sharma, W. Battye, Reactive Nitrogen Emissions from Crop and Livestock Farming in India, Atmospheric Environment, Vol. 47, 93-103, 2011.
315. K. Gaurav, R .Sinha, P.K Panda, The Indus Flood of 2010 in Pakistan: A Perspective Analysis Using Remote Sensing Data, Natural Hazards, Vol. 59, Issue 3, 1815-1826, 2011.
316. G. Mondal, A. Prashant, S.K Jain, Simplified Seismic Analysis of Soil-Well-Pier System for Bridges, Soil Dynamics and Earthquake Engineering, Soil Dynamics and Earthquake Engineering, Vol. 32, Issue 1, 42-55, 2012.
317. K. Mitra, A. Das, S. Basu, Mechanical Behavior of Asphalt Mix: An Experimental and Numerical Study, Construction and Building Materials, Vol. 27, Issue 1, 545-552, 2012.
318. J. N. Gangwar, T. Gupta, A.K. Agarwal, Composition and Comparative Toxicity of Particulate Matter Emitted from a Diesel and Biodiesel Fuelled CRDI Engine, Atmospheric Environment, Vol. 46, 472-481, 2012.
319. U.J Na, S.J Kwon, S.R Chaudhury, M. Shinozuka, Stochastic Model for Service Life Prediction of RC Structures Exposed to Carbonation Using Random Field Simulation, KSCE Journal of Civil Engineering, Vol. 16, Issue 1, 133-143, 2012.
320. S. Komaraneni, D.C Rai, M. Eeri, V. Singhal, Seismic Behavior of Framed Masonry Panels with Prior Damage When Subjected to Out-of-Plane Loading, Earthquake Spectra, Vol. V 27, Issue 4, 1077-1103, 2011.
321. D. Karmakar , S.R Chaudhuri, M. Shinozuka, Conditional Simulation of Non-Gaussian Wind Velocity Profiles: Application to Buffeting Response of Vincent Thomas Suspension Bridge, Probabilistic Engineering Mechanics, Vol. 29, 167-175, 2012.

322. S. Misra, S. Varsney, Need for guidelines to address environmental concerns in a ready mixed concrete plant (Review), Indian Concrete Journal, Vol. 85, Issue 10, 11-20, 2011.
323. R. Sathiyamoorthy, B.V.S Viswanadham, Centrifuge Modeling and Instrumentation of Geogrid-Reinforced Soil Barriers of Landfill Covers, ASCE Journal of Geotechnical and Geoenvironmental Engineering, Vol. 138, Issue 1, 26-37, 2012.
324. D. Vikram, S. Mittal, P. Chakraborty, A Stabilized Finite Element Formulation for Continuum Models of Traffic Flow, Computer Modeling in Engineering & Sciences, Vol. 79, Issue 3-4, 237-259, 2011.
325. J.N. Malik, A. Kumar, S. Satuluri, B. Puhan, A. Mohanty, Ground-Penetrating Radar Investigations along Hajipur Fault: Himalayan Frontal ThrustAttempt to Identify Near Subsurface Displacement, NW Himalaya, India, International Journal of Geophysics, Vol. 2012, Issue 7, 2012.
326. K.D. Yadav, V. Tare, M.M. Ahammed, Vermicomposting of source-separated human faeces by Eisenia fetida: Effect of stocking density on feed consumption rate, growth characteristics and vermicompost production, Waste Management, Vol. 31, Issue 6, 1162-1168, 2011.
327. P.K. Mohapatra, M.H. Chaudhry, Frequency responses of single and multiple partial pipeline blockages, Journal of Hydraulic Research, Vol. 49, Issue 2, 263-266, 2011.
328. S.N. Behera,M. Sharma, O. Dikshit, P.S. Shukla, GIS-Based Emission Inventory, Dispersion Modeling, and Assessment for Source Contributions of Particulate Matter in an Urban Environment, Water Air And Soil Pollution, Vol. 218, 423-436, 2011.
329. P. Chakraborty, Sustainable transportation for Indian cities: Role of intelligent transportation systems, Current Science, Vol. 100, Issue 9, 1386-1390, 2011.
330. A.R Quaff, S .Guha, Evaluation of Mixing and Performance of Lab-Scale Upflow Anaerobic Sludge Blanket Reactors Treating Domestic Wastewater, Journal Of Environmental Engineering-ASCE, Vol. 37, Issue 5, 322-331, 2011.
331. F. Hashmi, H.C Upadhyaya, S.N Tripathi, O.P Sharma, Y. Fangqun, On radiative forcing of sulphate aerosol produced from ion-promoted nucleation mechanisms in an atmospheric global model, Meteorology and Atmospheric Physics, Vol. 112, 101-115, 2011.
332. S. Hait, V. Tare, Wastewater treatment by high-growth bioreactor integrated with settling-cum-membrane separation, Desalination, Vol. 270, 233-240, 2011.
333. D.G.Kaskaoutis , P.G. Kosmopoulos, P.T. Nastos, H.D. Kambezidis, M. Sharma, W. Mehdi, Transport pathways of Sahara dust over Athens, Greece as detected by MODIS and TOMS, Geomatics, Natural Hazards and Risk, Natural Hazards and Risk, Vol. 3, Issue 1, 35-54, 2012.
334. A.K Srivastava, S. Tiwari, P.C.S Devara, D.S Bisht, K.M Srivastava, S.N Tripathi, P. Goloub, B.N Holben, Premonsoon aerosol characteristics over the Indo-Gangetic Basin: implications to climatic impact, Annales Geophysicae, Vol. 29, Issue 5, 789-804, 2011.
335. S.R Chaudhuri, C.T Hutchinson, Effect of Nonlinearity of Frame Buildings on Peak Horizontal Floor Acceleration, Journal of Earthquake Engineering, Vol. 15, Issue 1, 124-142, 2011.

336. Anubhav, P.K. Basudhar, Experimental studies of strip footing on model wrap-around reinforced soil walls, Electronic Journal of Geotechnical Engineering, Vol. 17A, 1-12, 2012.
337. V.P. Kanawade, B.T. Jobson, A.B. Guenther, M.E. Erupe, S.N. Pressley, S.N. Tripathi, S.H. Lee, Isoprene suppression of new particle formation in a mixed deciduous forest, Atmospheric Chemistry And Physics, Vol. 11, Issue 12, 6013-6027, 2011.
338. K. Ram, M.M. Sarin, S.N.Tripathi, Temporal Trends in Atmospheric PM2.5, PM10, Elemental Carbon, Organic Carbon, Water-Soluble Organic Carbon, and Optical Properties: Impact of Biomass Burning Emissions in the Indo- Gangetic Plain, Environmental Science & Technology, Vol. 46, Issue 2, 686-695, 2011.
339. D.P.Mishra, S. Das, P.K. Mohapatra, Effect of a subsonic air stream on a two-dimensional transverse water jet, International Journal of Turbo and Jet Engines, Vol. 28, Issue 4, 321-328, 2011.
340. W. Rahaman, S.K.Singh, R. Sinha, S.K.Tandon, Sr, C and O Isotopes in Carbonate Nodules from the Ganga Plain: Evidence for Recent Abrupt Rise in Dissolved 87Sr/86Sr Ratios of the Ganga, Chemical Geology, Vol. 285, Issue 1-4, 184-193, 2011.
341. N.G Roy, R. Sinha, M.R Gibling, Aggradation, Incision and Interfluve Flooding in the Ganga Valley over the Past 100,000 Years: Testing the Influence of Monsoonal Precipitation, Palaeogeography, Palaeoclimatology, Palaeoecology, 2011.
342. R.N.V Chalapati, D. Paul, A. Saikia, National Workshop on Critical Appraisal of Plume and Alternate Hypotheses into the Origin of Melting Anomalies: Perspectives and Prospects of Research in India, Journal of Geological Society of India, Vol. 78, 94, 2011.
343. A. Sinha, P. Bose, 2-Chloronaphthalene Dehalogenation by High-Carbon Iron Filings: Formation of Corrosion Products on High-Carbon Iron Filings Surface, Environmental Engineering Science, Vol. 28, Issue 10, 701-710, 2011.
344. S. Tripathi, R. S. Govindaraju, Appraisal of statistical predictability under uncertain inputs: SST to rainfall, ASCE Journal of Hydrologic Engineering, Vol. 16, Issue 6, 970-983, 2011.

Computer Science and Engineering

345. Surya Prakash and Phalguni Gupta, "An E_cient Ear Localization Technique", Image and Vision Computing Journal, Elsevier, 2011.
346. Surya Prakash and Phalguni Gupta, "An E_cient Ear Recognition Technique Invariant to Illumination and Pose", Telecommunication Systems Journal, special issue on Signal Processing Applications in Human Computer Interaction, Springer, 2011.
347. G S Badrinath, Phalguni Gupta and Hunny Mehrotra, "Score Level Fusion of Voting Strategy of Geometric Hashing and SURF for an E_cient Palmprint based Identi_cation", Journal of Real-Time Image Processing, Springer Verlag, 2011.
348. Jayesh Gaur, Mainak Chaudhuri, and Sreenivas Subramoney. Bypass and Insertion Algorithms for Exclusive Last- level Caches. In Proceedings of the 38th IEEE/ACM International Symposium on Computer Architecture (ICSA 2011), pages 81-92, June 2011.

349. Badrinath G S and Phalguni Gupta, "Palm-print based Recognition System using Phase-Di_erence", Future Generation Computer Systems, Elsevier Science, 2011.

Electrical Engineering

350. Potluri, R., Comments on "Chattering Free Robust Control for Nonlinear Systems'', IEEE Transactions on Control Systems Technology, 20, 2, 562, March, 2012.
351. Potluri, R., Comments on "Optimal Fault-Tolerant Path-Tracking Control for 4WS4WD Electric Vehicles'', IEEE Transactions on Intelligent Transportation Systems, 12, 2, 622-623, June 2011.
352. Sanjay Kumar Soni and Puspraj Singh Chauhan and K Vasudevan, A novel approach for turbo decoding in ISI channel, International Journal of Computer Applications, 41, 5, 7-13, March 2012.
353. B. Amanulla, S. Chakrabarti, and S. N. Singh, Reconfiguration of power distribution systems considering reliability and power loss, IEEE Transactions on Power Delivery, 26, 4, Jan 2012.
354. G. Valverde, S. Chakrabarti, E. Kyriakides, and V. Terzija, A constrained formulation for hybrid state estimation, IEEE Transactions on Power Systems, 26, 3, 1102-1109, Aug. 2011.
355. YN Trivedi and AK Chaturvedi, Performance Analysis of Multiple Input Single Output Systems Using Transmit Beam forming and Antenna Selection with Delayed Channel State Information at the Transmitter, IET Communications, 5, 6, 827-834, 2011.
356. G Manglani and AK Chaturvedi, Multi-tone CDMA Design for Arbitrary Frequency Offsets Using Orthogonal Code Multiplexing at the Transmitter and a Tunable Receiver, IET Communications, 5, 15, 2157-2166, 2011.
357. Sohil Mahajan, Aditya K. Jagannatham, Hierarchical DWT Based Optimal Diversity Power Allocation for Video Transmission in OFDMA/MIMO Wireless Systems, International Journal on Internet Protocol Technology (IJIPT), Vol. 7, I, 39-51, 2012.
358. Shreyans Parakh, Aditya K. Jagannatham, Optimal Resource Allocation and VCG Auction-Based Pricing for H.264 Scalable Video Quality Maximization in 4G Wireless Systems, Advances in Multimedia, 2012, 13 pages, 2012.
359. Aditya K. Jagannatham, Bhaskar D. Rao, Fisher-Information-Matrix Based Analysis of Semiblind MIMO Frequency Selective Channel Estimation, ISRN Signal Processing, 2011, Article ID 758918, doi:10.5402/2011/758918, 2011.
360. R. K. Chaudhary, V. V. Mishra, K. V. Srivastava and A. Biswas, Improved Spurious Free Performance of Multi-layer Multi-permittivity Dielectric Resonator in MIC Environment, Progress in Electromagnetics Research B, 30, 135-156, 2011.
361. G. K. Singh, Raghvendra Kumar Chaudhary and K. V. Srivastava, A Compact Zeroth Order Resonating Antenna Using Complementary Split Ring Resonator With Mushroom Type of Structure, Progress In Electromagnetics Research (PIER) Letters, 28, 139-148, 2012.
362. Santanu Mishra, Kapil Jha, and Khai D. T. Ngo, Dynamic Linearizing Modulator for Large-signal Linearization of a Boost Converter, IEEE Tran. On Power Electronics, 26, 3046-3054, Oct. 2011.

363. Saurabh Upadhyay, Santanu Mishra, and Avinash Joshi, A Wide Bandwidth Electronic Load, IEEE Tran. On Ind. Elect., 59, 733-739, Feb 2012.
364. Santanu Mishra, Ravindranath Adda, and Avinash Joshi, Inverse Watkins-Johnson Topology based Inverter, IEEE Tran. On Power Electronics, 27, 1066-1070, March 2012.
365. Ram Narayan Chauhan, C.Singh, R.S. Anand and Jitendra Kumar, Effect of Sheet Resistance and Morphology of ITO Thin Films on Polymer Solar Cell Characteristics, International Journal of Photoenergy, Volume 2012 (2012), Article ID 879261, doi:10.1155/2012/879261, 2012.
366. Atul Goel, Vijay Kumar, Pankaj Nag, Vikas Bajpai, Brijesh Kumar, Charan Singh, Sattey Prakash and RS Anand, Thermally Stable Nonaggregating Pyrenylarenes for Blue Org. Light Emitting Devices, Accepted in Journal of Organic Chemistry, Journal of Organic Chemistry, 76, 18, DOI**:** 10.1021/jo2011768, 7474–7481, 2011.
367. K Bhaskar and SN Singh, AWNN Assisted Wind Power Forecasting Using Feed-Forward Neural Network, IEEE Trans on Sustainable Energy, Vol. 3, 2, 306-315, 2012.
368. Pushpendra Singh and P. Sircar, Time delays and angles of arrival estimation using known signals, Signal Image and Video Processing, Vol 6, 2, 171-178, 2012.
369. Seethalekshmi K, SN Singh and SC Srivastava, A Classification Approach Using Support Vector Machines to Prevent Distance Relay Mal-operation under Power Swing and Voltage Instability, IEEE Trans on Power Delivery, VOL. 27, NO. 3, 1124-1133, JULY 2012.
370. Rahul Pandey and A.K. Dutta, A Unified Analytical One-Dimensional Surface Potential Model for Partially Depleted (PD) and Fully Depleted(FD) SOI MOSFETs, Journal of Semiconductor Technology and Science, Vol.11, No.4, pp. 262-271, December,2011.
371. R. Sonkar and U. Das, Quantum well intermixed waveguide grating, Optical and Quantum Electronics, 42, No.9-10, 631-643, September 2011.
372. V. P. Singh, T. Gupta, S. N. Tripathi, C. Jariwala, and U. Das, Experimental Study of the Effects of Environmental and Fog Condensation Nuclei Parameters on the Rate of Fog Formation and Dissipation Using a New Laboratory Scale Fog Generation Facility, Aerosol and Air Quality Res, 11, 140-154, 2011.
373. Ankur Solanki, S. Sundar Kumar Iyer and Ashish Garg, Effect of PEDOT: PSS layer and ITO Ozonization in Arylenevinylene-co-pyrrolenevinylene (AVPV) based Solar Cell Devices, Materials Sciences and Applications, Vol. 2, pp. 1702-1707, December 2011.
374. Anirban Bagui and S. Sundar Kumar Iyer, Effect of Solvent Annealing in the Presence of Electric Field on P3HT: PCBM Films Used in Organic Solar Cells, IEEE Transactions of Electron Devices, Vol. 58, No. 11, pp. 4061-4066, November 2011.
375. Arun Tej Mallajosyula, S. Sundar Kumar Iyer, and Baquer Mazhari, Increasing the Efficiency of Charge Extraction Limited P3HT: PCBM Solar Cells Using SWNTs with Metallic Characteristics, Journal of Applied Physics, 109, 12, 124908 - 124908-10, 24 June 2011.
376. Hazra, S., Sensarma, P. Vector approach for self-excitation and control of induction machine in stand-alone wind power generation, Renewable Power Generation, IET, vol.5, no.5, pp.397-405, September 2011.

377. Dasgupta, A., Sensarma, P., An integrated filter and controller design for direct matrix converter, Energy Conversion Congress and Exposition (ECCE), 2011 IEEE, pp.814-821, 17-22 Sept. 2011.
378. S K Jain and S N Singh, Harmonics Estimation in Emerging Power System: Key Issues and Challenges, Electric Power Systems Research, Vol. 81, No. 9, pp. 1754-1766, September 2011.
379. Seethalekshmi K., SN Singh and SC Srivastava, A GRNN based scheme for predicting trip boundary of distance relays in the presence of UPFC utilizing synchro-phasor Measurements, IEEE Systems Journal, Vol. 5, No. 3, pp. 396-405, September 2011.
380. SK Parida, SN Singh and SC Srivastava, A review on reactive power management in electricity markets, International Journal of Energy Sector Management, Vol. 5, No.2, pp. 201 – 214, 2011.
381. SN singh, D Saxena and Jacob Ostegaard, Assessment of Emission Trading Impacts on Competitive Electricity Market Price, International Journal of Electricity Sector Management, Vol. 5, No. 3, pp. 333-344, 2011.
382. Dipendra Singh, KS Verma and SN Singh, Changing Scenario of Electric Power Injection: Generation Side to Load Side, Electrical India, Vol. 51, No. 12, pp 56-64, December 2011.
383. Daniel Hernandez Gonzalez, Guillermo Gutierrez Alcaraz and SN Singh, GENCOs Multi-Period Expansion Model in a Competitive Electricity Market, International Journal of Power and Energy Conversion, 2012, Vol. 3, No.1/2, pp. 77 – 93, 2012.
384. Choudhary S. & Qureshi, Theoretical Study on Transport Properties of a BN Co-Doped SiC Nanotube, Physics Letters A, 375, 38, 3382-3385, 2011.
385. Patil G. C. & Qureshi S, Engineering Spacers in dopant-segregated Schottky barrier SOI MOSFET for Nanoscale CMOS logic Circuits, Semiconductor Science and Technology, 27, 4, 4-12, February 2012.
386. Patil G. C. & Qureshi S, Impact of Segregation layer on Scalability and Analog/RF performance of Nanoscale Schottky barrier SOI MOSFET, Journal of Semiconductor Technology and Science, 12, 1, 66-74, March, 2012.
387. Choudhary S. & Qureshi S, Power Aware Channel Width Tapering of Serially Connected MOSFETs, Springer's Analog Integrated Circuits and Signal Processing, 70, 3, 370-383, 2012.
388. Choudhary S. & Qureshi S, Theoretical Study on the Effect of Vacancy Defect Reconstruction on Electron Transport in Si-C Nanotubes, Physics Letters B, 25, 28, 1-12, June 2011.
389. Choudhary S. and Qureshi S., Effect of Radial and Axial Deformation on Electron transport Properties in a Semiconducting Si-C Nanotube, Journal of Nano & Electronic Physics, 3, 1, 584-589, June, 2011.
390. Choudhary S. & Qureshi S, Inductance Modelling of SWCNT Bundle Interconnects using Partial Element Equivalent Circuit Method, Springer's Journal of Computational Electronics, 10, 1-2, 241-247, 2011.

Humanities and Social Sciences

391. A. K. Sharma and Sonal Mobar, Stigma and Social Exclusion among Tuberculosis Patients: A Study of Ladakh, India, The International Journal of Health, Wellness and Society, Vol. 1, Issue 4, 119-140, 2011.
392. A. K. Sharma, On the Need for Combining Sciences, Social Sciences and Humanities, Everyman's Science, Vol. 46, Issue 1, 3-5, 2011.
393. B. Bhushan and J. S. Kumar, A study of posttraumatic stress and growth in tsunami relief volunteers, Journal of Loss & Trauma, Vol. 17, Issue 2, 113-124, 2012.
394. B. Bhushan, S. Kumar, and S. Harizuka, Bereavement, cognitive-emotional processing and coping with loss: A study of Indian and Japanese students, Journal of Social Work in End-of-Life & Palliative Care, Vol. 7, Issue 2-3, 263-280, 2011.
395. B. Bhushan and D. Hussain, Cultural factors promoting coping among Tibetan refugees: A qualitative investigation, Mental Health, Religion & Culture, Vol. 14, Issue 6, 575-587, 2011.
396. Somesh K. Mathur, Trade Analysis of CSG subcategories for Regional Groups and Some Selected Member states of ESCAP in 2002-2008, Ovidius University Annals, Economi Sciences Series, Vol. 11, Issue 1, 1264-1279, 2011.
397. K. K. Saxena and Ruchi Sharma, Strengthening the Patent Regime: Benefits for Developing Countries - A Survey, Journal of Intellectual Property Rights, Vol. 17, 122-132, 2012.
398. G. Neelakantan and Srirupa Chatterjee, Rage, Revenge and Regeneration in Joyce Carol Oate's The Rise of Life on Earth, Notes on Contemporary Literature, Vol. 42, Issue 2, 8-10, 2012.
399. G. Neelakantan, Review of the Early Fiction of Philip Roth, by Balbir Singh, Philip Roth Studies, Vol. 7, Issue 1, 103-106, 2011.
400. Binay Kumar Pattnaik, Globalization of Industrial R&D in Developing Countries: A Sociological Perspective, FORESIGHT: Information-Analytical Journal, Vol. 5, Issue 3, 4-16, 2011.
401. Nirmalya Guha, Knowledge Engineering and an Indian Epistemological Model, Reformare: Journal of Educational Research, Vol. 1, Issue 1, 36-56, 2011.
402. Nirmalya Guha, Tarka as Cognitive Evaluator, Journal of Indian Philosophy, Vol. 40, Issue 1, 47-66, 2012.
403. T. Ravichandran, Disordered Reality, Diseased Cities and Desperate Detectives in Thomas Pynchon's The Crying of Lot 49 and Inherent Voice, East West Cultural Passage: A Journal of the "C. Peter Magrath" Research Center for Cross Cultural Studies, Vol. 10, 26-35, 2011.
404. T. Ravichandran, Mixing of the Mythical and the Hyperreal in Cyberhell: Fixing the Topology of Cybermancy, Creative Forum, Vol. 24, Issue 1-2, 71-76, 2011.

Industrial Management & Engineering

405. Varman, Rahul & Chakrabarti, M, Notes from small industry clusters: making sense of knowledge and barriers to innovation, AI & Society, Vol 26, Issue 4, 393-415, 2011.
406. Varman, Rahul, Corporate personhood: Rights without responsibilities, Infochange News & Features, December 2011.

407. Raghu Nandan Sengupta, Angana Sengupta, Some variants of adaptive sampling procedures and their applications, Computational Statistics & Data Analysis, Vo, 55, Issue 12, 3183-319, 2011.
408. Rajesh P Mishra, RRK Sharma and SP Singh, A lagrangian relaxation procedure for solving twin objective facility layout problem, International Journal of Business Research, 2011, V 11(2), pp. 170-174.
409. Namrata Gupta, RRK Sharma and NK Sharma, Role of culture in academic performance: Case of two Indian Institutes of Technology, Review of Business Research, 2011, V 11(1), pp. 145-150.
410. Priyanka Verma and RRK Sharma, Vertical Decomposition Approach to solve Single Stage Capacitated Warehouse Location Problem, American Journal of Operational Research, V 1 (3), 2011, pp. 1-18.
411. RRK Sharma and Priyanka Verma, Hybrid Formulations of single stage uncapacitated warehouse location problem: Few theoretical and empirical results, International Journal of Operations and Quantitative Management, V 18 (1), Mar 2012, pp. 53-69.
412. Ram Misra, RRK Sharma, Hemant Kakkar, A case based study of relationship between innovation, organization structure and architecture, Journal of Academy of Business and Economics, V 11 (4), 2011, pp. 198-203.
413. Maureen L. Cropper, Alexander Limonov, Kabir Malik and Anoop Singh, Estimating the Impact of Restructuring on Electricity Generation Efficiency: The Case of the Indian Thermal Power Sector, NBER Working Paper, 17383, Vol I, 2011.
414. Smita Pandey, NK Sharma, Ashok K Mittal, Information Search behavior of Individual Investors, Jr. of international finance and Economics, Vol11, N01, 128-135, 2011.
415. P. K. Rai, PN RamKumar, A I Sivakumar, Ashok K Mittal, Peeyush Mehta, Impact of aggregating Supplies from single supplier to a cluster of producers; opportunities for 3PL service providers, Int J operational Res, Vol12, No2, 192-206, 2011.

Materials Science and Engineering

416. S. Mukherjee, A. Garg and R. Gupta, Spin Glass-like Phase below ~ 210 K in Magnetoelectric Gallium Ferrite, Applied Physics Letters, Vol 100, 112904, 2012.
417. A. Roy, R. Prasad, S. Auluck and A. Garg, First Principle Study of Magnetism and Magneto-structural Coupling in Gallium Ferrite, Journal of Applied Physics, Vol 111, 043-915, 2012.
418. A. Solanki, S.S.K. Iyer and A. Garg, Effect of PEDOT:PSS layer and ITO Ozonization in Arylenevinylene-co-pyrrolenevinylene (AVPV) based Solar Cell Devices, Materials Science and Applications, Vol 2, 1702, 2011.
419. S. Mukherjee, R. Gupta and A. Garg, Probing Magnetoelastic Coupling and Structural Changes in Magnetoelectric Gallium Orthoferrite, Journal of : Condensed Matter Physics, Vol 23, 445-403, 2011.
420. S. Adhikari, R. Gupta, Deepak, and A. Garg, An Investigation in InGaO3(ZnO)m Pellets as a Cause of Variability in Thin Film Transistor Characteristics, Bulletin of Materials Science, Vol 34(3), 447-454, 2011.

421. Siddhartha Omar, Saumen Mandal, Arjit Ashok, A.R. Harish, Monica Katiyar, Organic Inverter: Theoretical Analysis Using Load Matching Technique, Microelectronics Reliability, Vol 51, 2173– 2178, 2011.
422. Ashish, S. Mandal, M. Katiyar, Y.N. Mohapatra, Low temperature solution process for fabrication of electrodes on flexible substrate using gold nanoparticles, International Journal of Nanosciences, Vol 10, 659-663, 2011.
423. A. Roy, S. Mukherjee, R. Gupta, R. Prasad, S. Auluck and A. Garg, Electronic structures, born effective charges and spontaneous polarization in magnetoelectric gallium ferrite, Journal of Physics: Condensed Matter, Vol 23, 325-902, 2011.
424. J.L. Campbell, J. Arora, S.F. Cowell, A. Garg, P. Eu, S.K. Bhargava, and V. Bansal, Quasi-cubic Magnetite/ Silica Core-Shell Nanoparticles as Enhanced MRI Contrast Agents for Cancer Imaging, PLoS ONE, 6 (7), 21857, 2011.
425. S. Gupta, S. Bhattacharjee, D. Pandey, V. Bansal, S.K. Bhargava, J.L. Peng and A. Garg, Absence of Morphotropic Phase Boundary Effects in BiFeO3-PbTiO3 Thin Films Grown via a Chemical Multilayer Deposition Method, Applied Physics A, Vol 10 (1), 395-400, 2011.
426. Amartya Mukhopadhyay and Bikramjit Basu, Recent development of WC-based cermets and nanocomposites, Journal of Materials Science, Vol 46, 571-589, 2011.
422. Garima Tripathi, Ashutosh Dubey and Bikramjit Basu, Evaluation of physico-mechanical properties and in vitro biocompatibility of compression molded HDPE Based Biocomposites with HA/Al2O3 Ceramic Fillers and titanate coupling agents, Journal of Applied Polymer Science, Vol124, 3051-3063, 2012.
423. Garima Tripathi and Bikramjit Basu, Injection-Molded High-Density Polyethylene–Hydroxyapatite–Aluminum Oxide Hybrid Composites for Hard-Tissue Replacement: Mechanical Biological, and Protein Adsorption Behavior, Journal of Applied Polymer Science, Vol 124, 2133–2143, 2012.
424. Alok Kumar, Awadesh Kumar Mallik, Nurcan Calis Acikbas, Merve Yaygingol, Ali Celic, Ferhat Kara, Hasan Mandal, Debabrata Basu, Krishanu Biswas and Bikramjit Basu, Cytocompatibility property evaluation of gas pressure sintered SiAlON-SiC composites with L929 fibroblast cells and Saos-2 osteoblast-like cells, Mat. Sc. Engg, Vol C 32, 464–469, 2012.
425. Manish M. Kulkarni, Chandra S. Sharma, Ashutosh Sharma, Sushma Kalmodia and Bikramjit Basu, Multiscale Micro-patterned Polymeric and Carbon Substrates Derived from Buckled Photoresist Films: Fabrication and Cytocompatibility, J. Mat. Sc.: Materials in Medicine, Vol 47, 3867–3875, 2012.
426. Garima Tripathi and Bikramjit Basu, Processing and biological evaluation of Porous HA/poly (methyl methacrylate) Hybrid composite, International Journal of Advances in Engineering Sciences and Applied Mathematics, Vol 2, issue 4, 161-167, 2012.
427. Siddhartha Omar, Saumen Mandal, Arjit Ashok, A.R. Harish, Monica Katiyar, Organic Inverter: Theoretical Analysis Using Load Matching Technique, Microelectronics Reliability, Vol 51, 2173–2178, 2011.
428. Ashish, S. Mandal, M. Katiyar, Y.N. Mohapatra, Low temperature solution process for fabrication of electrodes on flexible substrate using gold nanoparticles, International Journal of Nanosciences, Vol 10, 659-663, 2011.

429. A. K. Dubey, R. Kumar, M. Banerjee and B. Basu, Analytical Computation of Electric Field for onset of Electroporation, Journal of Computational and Theoretical Nanoscience, Vol 9, 1-7, 2012.
430. Naresh Saha, Ashutosh K. Dubey and Bikramjit Basu, Cellular proliferation, cellular viability, and biocompatibility of HA-ZnO composites, J Biomed Mater Res Part B, Vol 100B, 256-264, 2012.
431. Garima Tripathi and Bikramjit Basu, A porous hydroxyapatite scaffold for bone tissue engineering: Physico-mechanical and biological evaluations, Ceramics International, Vol 38, 341-349, 2012.
432. Ankush Kothalkar, Amit S. Sharma, Krishanu Biswas and B. Basu, Novel HDPE-quasicrystal composite fabricated for wear resistance, Philosophical Magazine, Vol 91, 2944-2953, 2011.
433. Deepak, Vikram Verma, Monica Katiyar, Fabrication of Microelectronic Devices in "Micromanufacturing Processes, CRC press (Taylor and Francis), USA in press.
434. A. K. Dubey, B. Basu, K. Balani, R. Guo and A. S. Bhalla, Dielectric and Pyroelectric Properties of HAp-BaTiO3 Composite, Ferroelectrics, Vol 423, 63-76, 2011.
435. A. K. Dubey, B. Basu, K. Balani, R. Guo and A. S. Bhalla, Multifunctionality of Perovskites BaTiO3 and CaTiO3 in a Composite with Hydroxyapatite as Orthopedic Implant Materials, Integrated Ferroelectrics, Vol 131, Issue 1, 119-136, 2011.
436. S. Reddy, A. K. Dubey, B. Basu, R. Guo and A. S. Bhalla, Thermal Expansion Behavior of Biocompatible Hydroxyapatite-BaTiO3 Composites for Bone Substitutes, Integrated Ferroelectrics, Vol 131, Issue 1, 147-152, 2011.
437. Richard A. Martin, Zahira Jaffer, Garima Tripathi, Shekhar Nath, Mira Mohanty, Victoria FitzGerald, Pierre Lagarde, Anne-Marie Flank, Artemis Stamboulis and Bikramjit Basu, An X-ray micro-fluorescence study to investigate the distribution of Al, Si, P and Ca ions in the surrounding bone tissue after implantation of a Hydroxyapatite-Mullite ceramic composite in a rabbit animal mode, Journal of Materials Science: Materials in Medicine, Vol 22, 2537–2543, 2011.
438. Brajendra Singh, Ashutosh Dubey, S. Kumar, Naresh Saha, Bikramjit Basu and Rajeev Gupta, In vitro biocompatibility and antimicrobial activity of wet chemically prepared Ca10-xAgx(PO4)6(OH)2 ($0.0 \leq x \leq 0.5$) hydroxyapatites, Mat. Sc. Engg, Vol C 31, 1320-1329, 2011.
439. David A. Stout, Bikramjit Basu, and Thomas J., Webster, Poly Lactic-Co-Glycolic Acid: Carbon Nanofiber Composites for Myocardial Tissue Engineering Applications, Acta Biomaterialia, Vol 7, 3101-3112, 2011.
440. Ashutosh Dubey, Shouriya Dutta Gupta and Bikramjit Basu, Optimization of electrical stimulation conditions for enhanced fibroblast cell proliferation on biomaterial surfaces, Journal of Biomedical Materials Research: Part B - Applied Biomaterials, Vol 98B, Issue 1, 18–29, 2011.
441. Bikramjit Basu, Divya Jain, Nitish Kumar, Pritha Choudhury, Animesh Bose, Shree Bose and Pinaki Bose, Processing, tensile and fracture properties of Injection Molded HDPE-Al2O3-HAp Hybrid Composites, Journal of Applied Polymer Science, Vol 121, 2500-2511, 2011.
442. Ashutosh Kumar Dubey, Geet Sitesh, Shekhar Nath and Bikramjit Basu, Spark plasma sintering to restrict sintering reactions and enhance properties of

Hydroxyapatite-mullite biocomposites, Ceramics International, Vol 37, 2755-2761, 2011.

443. Stout, D.A., B. Basu, and T. J, Webster. Cytocompatible Poly-Lactic-co-Glycolic Acid: Carbon Nanofiber Composite Analysis for Cardiovascular Applications, Northeast Bioengineering Conference, IEEE, Vol 978, 1-61284-826-6, 2011.
444. Raghunandan Ummethala, Florian Despang, Michael Gelinsky, Bikramjit Basu, In vitro corrosion and mineralization of novel Ti-Si-C alloy, Electrochimica Acta, Vol 56, 3809–3820, 2011.
445. S. Kalmodia, V. Sharma, Alok Pandey, Alok Dhawan and Bikramjit Basu, Cytotoxicity and genotoxicity property of Hydroxyapatite-mullite eluates, Journal of Biomedical Nanotechnology, Vol 7, 74-75, 2011.
446. A. K. Dubey, M. Banerjee and B. Basu, Biological cell–electrical field interaction: stochastic approach, Journal of Biological Physics, Vol 37, 39-50, 2011.
447. Neha Gupta, Amartya Mukhopadhyay, K. Pavani, Bikramjit Basu, Spark Plasma Sintering of novel ZrB2-SiC-TiSi2 composites with better mechanical properties, Mat. Sc. Engg. A, Vol 534, 111-118, 2011.
448. Amit S. Sharma, K. Biswas and B. Basu, Microstructure development and properties of Cu-Pb nanocomposites, Metallurgical and Materials Transactions A, Vol 42, 2072-2084, 2011.
449. N. Calis Acikbas, R. Kumar, F. Kara, H. Mandal and B. Basu, Influence of β-Si3N4 particle size and heat treatment on microstructural evolution of α:β-SiAlON ceramics, J. Eur. Cer. Soc., Vol31, 629-635, 2011.
450. P. Suresh Babu, Bikramjit Basu and G. Sundararajan, The influence of erodent hardness on the erosion behavior of detonation sprayed WC-12Co coatings, Wear, Vol 270, 903–913, 2011.
451. Awadesh Kumar Mallik, K. Madhav Reddy, Nurcan Calis Acikbas, Ferhat Kara, Hasan Mandal, Debabrata Basu, Bikramjit Basu, Influence of SiC addition on tribological properties of SiAlON, Ceramics International, Vol 37, 2495-2504, 2011.
452. Md. A.F. Afzal, P. Kesarwani, K.M. Reddy, S. Kalmodia, B. Basu, Kantesh Balani, Functionally Graded Hydroxyapatite-Alumina-Zirconia Biocomposite: Synergy of Toughness and Biocompatibility, Mater. Sci. Engg., Vol 10.1016, 03.003, 2012.
453. S. Ariharan, A. Gupta, A. Keshri, A. Agarwal, Kantesh Balani, Size Effect of Yttria Stabilized Zirconia Addition on Fracture Toughness and Thermal Conductivity of Plasma Sprayed Aluminum Oxide Composite Coatings, Nanoscience and Nanoletters, Vol 10.1166, 2012.1317, 2011.
454. Kantesh Balani, S. R. Bakshi, T. Mungole, A. Agarwal, Ab-initio Molecular Modeling of Interfaces in Tantalum-Carbon System, In press, J. Appl. Physics, Vol 10.1063, 1.3695368, 2011.
455. A. Gupta, G. Tripathi, B. Basu, Kantesh Balani, Dependence of Protein Adsorption on Wetting Behavior of UHMWPE-HA-Al2O3-CNT Hybrid Biocomposites, Journal of Minerals, Metals, and Materials (JOM), Vol 10.1007, Index s11837-012-0295-3.
456. Md A.F. Afzal, S. Kalmodia, P. Kesarwani, B. Basu, Kantesh Balani, Bactericidal effect of silver reinforced carbon-nanotube and hydroxyapatite composites, Journal of Biomaterials Applications, Vol 10.1177, 08853282 11431856.

457. Y. Chen, Kantesh Balani, A. Agarwal, Do thermal residual stresses contribute to the improved fracture toughness of carbon nanotube/alumina nanocomposites, Scripta Materialia, Vol 66, 347-350, 2012.
458. A. K. Dubey, B. Basu, Kantesh Balani, R. Guo & A. S. Bhalla, Multifunctionality of Perovskites BaTiO3 and CaTiO3 in a Composite with Hydroxyapatite as Orthopedic Implant Materials, Integrated Ferroelectrics, Vol 131, 119-126, 2011.
459. A. K. Dubey, B. Basu, Kantesh Balani, R. Guo & A. S. Bhalla, Dielectric and Pyroelectric Properties of HAp-BaTiO3 Composites, Ferroelectrics, Vol 423, Issue 1, 63-76, 2011.
460. N. Mahato, A. Gupta, and Kantesh Balani, Doped zirconia and ceria based electrolytes for solid oxide fuel cells: A review, Nanomaterials and Energy, Vol 10.1680, Index 11.00004, 2011.
461. Kantesh Balani, R.R. Patel, A.K. Keshri, D. Lahiri, and A. Agarwal, Multi-scale Hierarchy of Turtle Shell's Microstructure and its Mechanical Properties, J. Mech. Behav. Biomed. Mater, Vol 4, 1440-1451, 2011.
462. M.K. Samal, M. Seidenfuss, E. Roos, Kantesh Balani, Investigation of failure behavior of ferritic-austenitic type of dissimilar steel welded joints, Engineering Failure Analysis, Vol 18, 999-1008, 2011.
463. M. Bhardwaj, Kantesh Balani, R. Balasubramaniam, S. Pandey and A. Agarwal, Effect of current density and grain refining agents on the pulsed electrodeposition of nanocrystalline nickel, Surface Engineering, Vol 27, 642-648, 2011.
464. Siddhartha Omar, Saumen Mandal, Arjit Ashok, A.R. Harish, Monica Katiyar, Organic Inverter: Theoretical Analysis Using Load Matching Technique, Microelectronics Reliability, Vol 51, 2173–2178, 2011.
465. Ashish, S. Mandal, M. Katiyar, Y.N. Mohapatra, Low temperature solution process for fabrication of electrodes on flexible substrate using gold nanoparticles, International Journal of Nanosciences, Vol 10, 659-663, 2011.
466. D. Mazumdar, S. Bagui, J. Dutta, S. Ghosh, M.M.Sangamnerker, Anju Shama, SB Sahoo, NP Sinha and SC Srivastava, Yield improvement at JSPL Raigarh through reduction of tundish skull, Metal News, Indian Institute of Metals, Vol 14, 7-12, 2011.
467. Dipak Mazumdar, O.P.Singh, Joy Dutta, Shaktimoy Ghosh, D.Satish and S.Chakraborty, Reduction of tundish skull and yield improvement in steel plants through physical modeling of steelmaking tundish system, Transaction of Indian Institute of Metals, Vol 64, 593-605, 2011.
468. Dipak Mazumdar, Industry–research-academia synergy: An overview of industry aided collaborative research in steelmaking at IIT Kanpur, Metal News, Indian Institute of Metals, Vol 1, 2012.
469. Anurag Nandwana and Dipak Mazumdar, Modeling and high temperature studies of continuous casting of wider section (1500~2500mm) steel slabs, ATCOM 2011, Ranchi, 2011.
470. Dipak Mazumdar, The role of modeling in steelmaking, Procd. IREFCON2012, 75-82, 2012.
471. Shukla, A.K., Nayan, Niraj, Narayana, Murty, S.V.S., Sharma, S.C., Mondal, K., Sinha P.P, On the Possibility of Occurrence of Anisotropy in Processing of Cu-CNT Composites by Powder Metallurgical Techniques, In: Mater Sci Forum, Vol 710, 285-290. 2012.

472. Gupta, G., Kumar, M., Chattopadhyay, C., Mondal K, Corrosion and oxidation behavior of Zr58Cu22Fe4Co4Al12 metallic glass, In: IIM Transactions (Online first), 2011.
473. Sharma, S., Sangal, S., Mondal, K, Development of new high strength carbide free bainitic steels, In: Metallurgical and Materials Transactions A, Vol 42, 3921-3933, 2011.
474. Mohit Sharma, S.K.Vajpai and R. K. Dube, Synthesis and properties of Cu-Al-Ni shape memory alloy strips prepared via hot densification rolling of powder performs, Powder Metallurgy, Vol 54, 620-627, 2011.
475. S.K. Vajpai, R,K, Dube and S. Sangal, Processing and characterization of Cu-Al-Ni shape memory strips prepared from pre-alloyed powder by hot densification rolling of powder performs, Metallurgical and Materials Transactions, Vol 42A, 3178-3189, 2011.
476. S. K. Vajpai, R. K. Dube, and S. Sangal, Microstructure and properties of fine-grained Cu-Al-Ni shape memory alloy strips prepared via hot densification rolling of powder performs, Materials Science and Engineering A, Vol 529, 378-387, 2011.
477. R. K. Dube, S. K. Vajpai, and A. Kanwat, Synthesis and characterization of bulk Cu-W nano-composite by powder metallurgy route. Tungsten, Refractory and Hardmaterials VIII (Proc. of the International Conference on Tungsten, Refractory and Hardmaterials VIII, May 18-21, 2011, San Francisco), MPIF, Princeton, New Jersey, USA, 07/32-07/39, 2011.
478. R. K. Dube, S. K. Vajpai, S. K. Kumawat and A. Kanwat, Preparation and properties of specialty strips by hot densification rolling of metal powder performs, Int. J. of Materials and Mechanics Engg, Vol 1, 51-54, 2012.
479. S. K. Vajpai, R. K. Dube, P. Chatterjee, and S. Sangal, A novel powder metallurgy processing approach to prepare fine grained Cu-Al- Ni shape memory alloy strips from elemental powders, Metallurgical and Materials Transactions, Vol 10.1007, S 11661- 012-1081, 2012.
480. Shobit Omar, Waqas Bin Najib, Weiwu Chen and Nikolaos Bonanos, Electrical Conductivity of 10 mol.% Sc2O3 - 1 mol.% M2O3 - ZrO2 Ceramics, Journal of the American Ceramics Society, 1-8, 2012.
481. S. Abolghasem, S. Basu, S. Shekhar, J. Cai, M.R. Shankar, Mapping Subgrain Sizes Resulting from Severe Simple Shear Deformation, Acta Met, Vol 60, 376-386, 2012.
482. Bikas C. Maji, M. Krishnan, Gouthama, R. K. Ray, Role of Si in improving the shape recovery of FeMnSiCrNi shape memory alloys, Metallurgical and Materials Transactions, Vol 42A, 2011-2153, 2011.
483. T. Ashokkumar, A. Rajadurai, Gouthama, A study of densification of 40Wt% Ni-Fe nanopowder prepared by mechanical alloying and sintered by SPS apparatus, Inter. J. Materials Engg, Vol 2, 3, 2011.
484. B.N. Sahoo, D.P. Mishra and Gouthama, Effects of Fuels Types on the Flame Synthesized Silica Nanoparticles by Transmission Electron Microscopy Characterization, Journal of Advanced Microscopy Research, Vol 6, 1-6, 2011.

Mathematics and Statistics

485. R. Dalmeya, I. Sharma, C. S. Upadhyay and A. Anand. Contact of a rigid cylindrical punch with an adhesive elastic layer, Journal of Adhesion, 88 (1), 1-31, 2012.
486. I. Mishra, D. Bahuguna and S. Abbas Existence of almost automorphic solutions of neutral functional differential equation, Nonlinear Dyn. Syst. Theory 11, no. 2, 165–172, 2011.
487. D. Bahuguna and J. Dabas, Existence and uniqueness of solutions of strongly damped wave equations with integral boundary conditions, Nonlinear Dyn. Syst. Theory 11 no. 1, 65–82, 2011.
488. R. Haloi, D. Bahuguna, D. N. Pandey, Existence and Uniqueness of Solutions for Quasi-Linear Differential Equations with Deviating Arguments, Electronic Journal of Differential Equations, Vol. 2012 No. 13, pp. 1–10, 2012.
489. M. Banerjee, Spatial pattern formation in ratio-dependent model: higher order stability analysis, Math. Med. Biol. IMA Jr., 28, 111 - 128, 2011.
490. S. Abbas, M. Banerjee and S. Momani.Dynamical analysis of a fractional-order modified logistic model, Comp. Math. Appl., 62, 1098 - 1104, 2011.
491. M. Banerjee and E. Venturino.A phytoplankton - toxic-phytoplankton – zooplankton model, Ecol. Compl., 8, 239 - 248, 2011.
492. R. K. Upadhyay, M. Banerjee, R.D. Parshad and S. N. Raw.Deterministic chaos versus stochastic oscillation in a prey-predator-top predator model, Math. Model. Anal., 16, 343 - 364, 2011.
493. S. Abbas, M. Sen and M. Banerjee.Almost periodic solution of a non-autonomous model of phytoplankton allelopathy, Nonlin. Dyn., 67, 203 - 214, 2012.
494. P. S. Mandal and M. Banerjee., Stochastic persistence and stationary distribution in a Holling-Tanner type preypredator model, Physica A, 391, 1216 - 1233, 2012.
495. A. Morozov, M.Sen and M. Banerjee,Top-down control in a patchy environment: revisiting the stabilizing role of fooddependent predator dispersal, Theor. Pop. Biol., 81, 9 - 19, 2012.
496. P. J. Pal, T. Saha, M. Sen and M. Banerjee, A delayed predator-prey model with strong Allee effect in prey population growth, Nonlin. Dyna., 68, 23 - 42, 2012.
497. M. Banerjee and S. Banerjee, Turing instabilities and spatio-temporal chaos in ratio-dependent Holling-Tanner model, Math. Biosci., 236, 64 - 74, 2012.
498. S. Banerjee and M. Banerjee, Noise induced oscillations in time delayed semiconductor laser system, Opt. Comm, 285, 2402 - 2409, 2012.
499. R. P. Gupta, M. Banerjee and Peeyush Chandra.The dynamics of two-species allelopathic competition with optimal harvesting, Journal Biological Dynamics, Vol. 6, No. 2, March, 674–694, 2012.
500. M.A. Khan and Mohua Banerjee, Logics for information systems and their dynamic extensions, ACM Transactions on Computational Logic, 12 (4), art. no. 29, 2011.
501. M.A. Khan and Mohua Banerjee, A logic for multiple-source approximation systems with distributed knowledge base. Journal of Philosophical Logic, 40 (5), 663-692, 2011.

502. A.K. Misra, Peeyush Chandra and V. Raghavendra, Modeling the depletion of dissolved oxygen in a lake due to algal bloom: Effect of time delay – Advances in Water Research, Volume 34, Issue 10, Pages 1232-1238, 2011.
503. S. L. Chavan, Essential Normality of Operators Close to Isometries, Integral Equations and Operator Theory, 73, 49-55, 2012.
504. A. Dar, Examples of amphicheiral knots of braid index 3, Proceedings of the National Academy of Sciences, India, Vol. 81, Section A, Part 3 (July-September), 221-222, 2011.
505. S. Dempe and J. Dutta, Is bilevel programming a special case of a mathematical program with complementarity constraints?, Mathematical Programming, Series A, Vol 131, No 1.-2, 37-48, 2012.
506. J. Dutta and K. C. Yalçın, A new scalarization and numerical method for constructing the weak Pareto front of multi-objective optimization problems, Optimization, 60 no. 8-9, 1091– 1104, 2011.
507. M. Durea, J. Dutta and Chr Tammer, Stability properties of KKT points in vector optimization, Optimization, 60 no. 7, 823–838, Optimization, 2011.
508. D. Aussel and J. Dutta, On gap functions for multivalued Stampacchia variational inequalities, J. Optim. Theory Appl. 149 no. 3, 513–527, 2011.
509. S. Dutta and P. Shunmugaraj, Modulus of strong proximinality and continuity of metric projections, Set valued and Variational Analysis, 19 no. 2, 271–281, 2011.
510. M. Gupta and L.R. Acharya, Approximation numbers of matrix transformations and inclusion maps, Tamkang Journal Of Mathematics, 42 (2), 193-203, 2011.
511. M. K. Kadalbajoo, L. Tripathi and A. Kumar, A cubic B-spline collocation method for a numerical solution of the generalized Black–Scholes equation, Mathematical and Computer Modelling, Volume 55, Issues 3–4, 1483-1505, 2012.
512. M. K. Kadalbajoo and A. Jha, Analysis of fitted spline in compression for convection diffusion problems with two small parameters, Neural, Parallel, and Scientific Computations, Volume 89, Issue 6, 307-322, 2012.
513. M. K. Kadalbajoo and A. Jha, Exponentially fitted cubic spline for two-parameter singularly perturbed boundary value problems, International Journal of Computer Mathematics, 19, 836-850, 2011.
514. M. K. Kadalbajoo and A. Gupta, An Overview on the Eigenvalue Computation for Matrices, Neural, Parallel & Scientific Computations, Volume 19, No. 1 & 2, 129-164, 2011.
515. D. Kundu.Statistical Signal Processing, International Encyclopedia of Statistical Science, Springer, New York, Part 19, 1466 - 1468, 2011.
516. B. Pradhan and D. Kundu, Bayes estimation and prediction of the two-parameter gamma distribution, Journal of Statistical Computation and Simulation, vol. 81, no. 9, 1187 - 1198, 2011.
517. A. K. Dey and D. Kundu, Discriminating between the Weibull and Log-normal distributions for type-II censored data, Statistics, vol. 46, no. 2, 197 - 214, 2012.
518. D.K. Al-Mutairi, M.E. Ghitany and D. Kundu, A new bivariate distribution with weighted exponential marginals and its multivariate generalization, Statistical Papers, vol. 52, 921-936, 2011.
519. N. Balakrishnan, R.C. Gupta, D. Kundu, V. Leiva and A. Sanhueza, On some mixture models based on the Birnbaum - Saunders distribution and associated inference, Journal of Statistical Planning and Inference, vol. 141, 2175 -2190, 2011.

520. D. Kundu and R.D. Gupta Absolute continuous bivariate generalized exponential distribution, Advances in *Statistical Analysis, vol. 95, 169 - 185, 2011.
521. B. Sarcoglu, I. Kinaci and D. Kundu, On estimation of R = P(Y < X) for exponential distribution under progressive type-II censoring, Journal of Statistical Computation and Simulation, vol. 82, no. 5, 729 -744, 2012.
522. D. Kundu, Z. D. Bai, S. Nandi and L. Bai, Super efficient frequency estimation, Journal of Statistical Planning and Inference, vol. 141, 2576 - 2588, 2011.
523. R.C. Gupta and D. Kundu, Weighted Inverse Gaussian - a Versatile Lifetime Model, Journal of Applied Statistics, vol. 38, 2695 - 2708, 2011.
524. D. Kundu and R.D. Gupta, An extension of the generalized exponential distribution, Statistical Methodology, vol. 8, 485 - 496, 2011.
525. D. Kundu and M.Z. Raqab, Bayesian inference and prediction of order statistics for Type-II censored Weibull distribution, Journal of Statistical Planning and Inference, vol. 142, 41-47, 2012.
526. M. Franco, D. Kundu and J-M Vivo, Multivariate extension of modified Sarhan - Balakrishnan bivariate distribution, Journal of Statistical Planning and Inference, vol. 141, 3400 - 3412, 2011.
527. A.Ganguly, S. Mitra, D. Samanta and D. Kundu, Exact inference for the two-parameter exponential distribution under Type-II hybrid censoring, Journal of Statistical Planning and Inference, vol. 142, 613 - 625, 2012.
528. A. Lahiri, D. Kundu and A. Mitra, Efficient algorithm for estimating the parameters of chirp signal, Journal of Multivariate Analysis, vol. 108, 15-27, 2012.
529. A. K. Dey and D. Kundu, Discriminating between bivariate generalized exponential and bivariate Weibull distributions, Chilean Journal of Statistics, vol. 3, no. 1, 93 - 110, 2012.
530. A. K. Lal, K. L. Patra, B. K. Sahoo, Algebraic connectivity of connected graphs with fixed number of pendant vertices.Graphs, Combin, 27, no. 2, 215-229, 2011.
531. A. K. Lal, S. Mohanty and N. Nilakantan, Combinatorial PDEs on Cayley and coset graphs, Discrete Mathematics, 311, 22, pp.2587-2592.
532. N. Misra and A.K. Misra, A note on active redundancy allocations in k-out-of-n systems, Statist. Probab. Lett.81 no. 10, 1518–1523, 2011.
533. N. Misra, A.K. Misra and I.D. Dhariyal, Active redundancy allocations in series systems, Probab. Engrg. Inform. Sci. 25, no. 2, 219–235, 2011.
534. S. Mitra, A. Mitra and D. Kundu, Genetic Algorithm and M-estimator based robust sequential estimation of parameters of nonlinear sinusoidal signals, Communications in Nonlinear Sciences and Numerical Simulations, Vol.16, Issue 7, 2796-2809, 2011.
535. S. Mitra, V.Maheswari and A. Mitra, A wavelet filtering based estimation of output gap, Applied Mathematics and Computations, Vol. 218, Issue 7, 3710-3722, 2011.
536. S. Mitra and A. Mitra, A genetic algorithms based technique for computing non-linear least squares estimates of parameters of sum of exponential model, Expert Systems with Applications, Vol. 39, Issue 7, 6370-6379, 2012.
537. S. Mitra and Erum, Early warning prediction system for high inflation: an elitist neuro-genetic network model for the Indian economy, Neural Computing and Applications, March 2012.
538. P. Mohanty and S. Shrivastava, Bilinear Littlewood - Paley for circle and transference. Publ. Mat. 55, no. 2,501–519, 2011.

539. P. Mohanty and S. Shrivastava, Vector valued bilinear maximal operator and method of rotations, J. Math. Anal.Appl. 382, no. 1, 334–338, 2011.
540. R. Mahadevan and T. Muthukumar, Homogenization of Some Cheap Control Problems, SIAM Journal on Mathematical Analysis, Vol. 43, No.5, 2211-2229, 2011.
541. S. Kesavan and T. Muthukumar, Homogenization of an Optimal Control Problem with State-constraints, Differential Equations and Dynamical Systems, Vol. 19, No.4, 361-374, 2011.
542. N. Nilakantan and V. Raghavendra, Global Stability given Local Stability via Curvature of Some Nonautonomous Differential Equations, Non Linear Dynamics and Systems Theory, Vol 12, No.1, 105-109, 2012.
543. R. Santhanam, The units of equivariant ring spectra, Algebraic and Geometric Topology, Vol.11, no. 3, 1361-1403, 2011.
544. C. Chu, O. Lorchield and R. Santhanam, Sheaves and K-theory for F_1 schemes, Advances in Mathematics, Vol. 229, Issue 4, 2239-2286, 2012.
545. S. K. Ray and R. P. Sarkar, Note on a Result of Kerman and Weit, Journal of Fourier Analysis and Applications, published online, 2011.
546. Shalabh, H. Toutenburg and A. Fieger, Using Diagnostic Measures to Detect Non-MCAR Processes in Linear Regression Models With Missing Covariates" Journal of Statistical Research, Vol. 44, No. 2, pp.233-242 (Invited paper in honor of Professor Bradley Efron), 2010, apppeared 2011.
547. Shalabh, G. Garg and N. Misra, Estimation of Regression Coefficients in a Restricted Measurement Error Model using Instrumental Variables, Communications in Statistics (Theory & Methods), Vol. 40, pp.3614-3629, 2011.
548. Shalabh and C. Heumann, Simultaneous Prediction of Actual and Average Values of Study variable Using Stein-rule Estimators" in Some Recent Developments in Statistical Theory and Application, (Eds. K. Kumar and A. Chaturvedi), pp. 68-81, Brown Walker Press, U.S.A., 2012.
549. S. Kulathinal, Shalabh and B. Joseph, Analysis of Pooled Time Series and Spatial Data with an Application to Water Level Data, Journal of Applied Statistical Science, Vol. 18, No. 3, pp 419-430, 2012.

Mechanical Engineering

550. Kaladhar, S., Panigrahi, P. K., and Munshi P, Color schlieren deflectometry study of jet mixing: Effect of buoyancy and perforation, Heat and Mass Transfer, Vol. 48, Issue I, 541-554, 2012.
551. A Gupta, D J Steigmann, and J Stolken, Aspects of phenomenological theory of elastic-plastic deformation, Journal of Elasticity, Vol. 104, 249-266, 2011.
552. D J Steigmann and A Gupta, Mechanically equivalent elastic-plastic deformations and the problem of plastic spin, Theoretical and Applied Mechanics, Vol. 38, Issue 4, 397-417, 2011.
553. Jitendra N. Gangwar, Tarun Gupta, Avinash Kumar Agarwal, Composition and comparative toxicity of particulate matter emitted from diesel and biodiesel fueled CRDI engine, Atmospheric Environment, Vol. Volume 46, 472-481, January 2012.
554. Rakesh Kumar Maurya, Avinash Kumar Agarwal, Statistical Analysis of the Cyclic Variation of Heat Release Parameters in HCCI Combustion of Methanol and Gasoline, Statistical Analysis of the Cyclic Variation of Heat Release Parameters in

HCCI Combustion of Methanol and Gasoline, Vol. Volume 89, Issue 1, 228-236, January 2012.

555. Rakesh Kumar Maurya, Avinash Kumar Agarwal, Effect of Start of Injection on the Particulate Emitted by Methanol Fuelled HCCI Engine, SAE International Journal of Fuels and Lubricants, Vol. Volume 4, Issue 1, 204-222, December 2011.
556. Dhananjay Kumar Srivastava, Avinash Kumar Agarwal, Tarun Gupta, Effect of Engine Load on Size and Number Distribution of Particulate Matter Emitted from a Direct Injection Compression Ignition Engine, Aerosol and Air Quality Research, Vol. 11, Issue 2, 204-222, December 2011.
557. Dhananjay Kumar Srivastava, Avinash Kumar Agarwal, Tarun Gupta, Effect of Engine Load on Size and Number Distribution of Particulate Matter Emitted from a Direct Injection Compression Ignition Engine, Aerosol and Air Quality Research, Vol. 11, Issue 7, 915920, December 2011.
558. Avinash Kumar Agarwal, Sandeep Kumar Goyal, Dhananjay Kumar Srivastava, Time Resolved Numerical Modeling of Oil Jet Cooling of a Medium Duty Diesel Engine Piston, International Communications in Heat and Mass Transfer, Vol. 38, 1080-1085, October 2011.
559. Deepak Agarwal, Shrawan Kumar Singh, Avinash Kumar Agarwal, Effect of Exhaust Gas Recirculation (EGR) on Performance, Emissions, Deposits and Durability of a constant Speed Compression Ignition Engine, Applied Energy, Vol. 88, 2900-2907, August 2011.
560. Deepak Khurana, Avinash Kumar Agarwal, Oxidation Stability, Engine Performance and Emissions Investigations of Karanja, Neem and Jatropha Biodiesel and Blends, SAE International Journal of Fuels and Lubricants, Vol. SAE 2011-01-0617, 76-83, June 2011.
561. Rakesh Kumar Maurya, Avinash Kumar Agarwal, Experimental Study of Combustion and Emission Characteristics of Ethanol Fuelled Port Injected Homogeneous Charge Compression Ignition (HCCI) Combustion Engine, Applied Energy, Vol. 88, 1169-1180, April 2011.
562. Rakesh Kumar Maurya, Avinash Kumar Agarwal, Experimental investigation on the effect of intake air temperature and air-fuel ratio on cycle-to-cycle variations of HCCI combustion and performance parameters, Applied Energy, Vol. 88, 1153-1163, April 2011.
563. Manas Das, V.K.Jain, P. S. Ghoshdastidar, Investigations into Out-of-Roundness of the Internal Surfaces of Stainless Steel Tubes Finished by R-MRAFF Process, Journal of Materials and Manufacturing Processes, Vol. 26, 1073-1084, 2011.
564. I.Chakraborty, G.Biswas, P. S. Ghoshdastidar, Bubble Generation in Quiescent and Co-flowing Liquids, International Journal of Heat and Mass Transfer, Vol. 54, 4673-4688, 2011.
565. Koustubh Sinhal, P. S. Ghoshdastidar, Bhaskar Dasgupta, Computer Simulation of Drying of Food Products with Superheated Steam in a Rotary Kiln, ASME Journal of Thermal Science and Engineering Applications, Vol. 4, 011009-1- 13, 2012.
566. Trushar Gohil, R. McGregor, D. Szczerba, K. Burckhardt, K. Muralidhar, and G. Szekely, Simulation of Oscillatory Flow in an Aortic Bifurcation using FVM and FEM: A Comparative Study, International Journal of Numerical Methods in Fluid, Vol. 66(8), 1037-1067, 2012.

567. Basant Singh Sikarwar, Sameer Khandekar, Smita Agrawal, Sumeet Kumar and K. Muralidhar,, Dropwise Condensation Studies on Multiple Scales, Advances in Heat Transfer, Vol. 33, 301-341, 2012.
568. Trushar Gohil, A. K. Saha, and K. Muralidhar, Direct numerical simulation of a naturally evolving free circular je, ASME J. Fluids Engineering, Vol. 133, 111203-1 to 111203-11, 2011.
569. Sunil Verma and K. Muralidhar, Determination of forced convection parameters by interferometric imaging of the concentration field during growth of KDP crystals, Optics and Lasers in Engineering, Vol. 49(7), 915-923, 2011.
570. Basant Sikarwar, N. K. Battoo, S. Khandekar, and K. Muralidhar, Dropwise Condensation underneath Chemically Textured Surfaces: Simulation and Experiments, ASME Journal of Heat Transfe, Vol. 133, 021501-1 to 21501-15, 2011.
571. Arnab Ghosh, Tarak K. Patra, Rajeev Kr. Singh, Jayant K. Singh, Shantanu Bhattacharya, Surface electrophoresis of ds-DNA across orthogonal surfaces, Applied Physics Letters, Vol. 98, Issue 16, 164102 - 164102-3, 2011.
572. Paul S, Pal, P, Wahi P, Verma, M K., Dynamics of zero-Prandtl number convection near onset, Chaos, Vol. 21, Issue 5, Index 10.1063, 023118 (1-14), 2011.
573. Paul S, Wahi P, Verma, M K., Bifurcations and chaos in large-Prandtl number Rayleigh Benard convection, International Journal of Non-Linear Mechanics, Vol. 46, Issue 5, Index. 10.1016, 772-781, 2011.
574. Kalmar-Nagy T, Wahi P, Haldar A., Dynamics of a hysteretic relay oscillator with periodic forcing, SIAM Journal on Applied Dynamical Systems, Vol. 10, Issue 2, Index 10.1137, 403-422, 2011.
575. Saha A, Wahi P., Delayed feedback for controlling the nature of bifurcations in friction-induced vibrations, Journal of Sound and Vibration, Vol. 330, Issue 25, Index 10.1016, 6070-6087, 2011.
576. Saha A, Pandey S S, Bhattacharya B, Wahi P., Analysis and control of friction-induced oscillations in a continuous system, Journal of Vibration and Control, Vol. 18, Issue 3, Index 10.1177, 467-480, 2012.
577. Kabiraj L, Sujith RI, Wahi P., Bifurcations of self-excited ducted laminar premixed flames, ASME Journal of, Vol. 134, Issue 3, Index. 10.1115, 036301 (1-8), 2012.
578. Gaurav Bartarya,S.K. Choudhury, A methodology to estimate the forces on the tool, Int. J. Machining and Machinability of Materials, Vol. 11, Issue 3, 280-296, 2012.
579. Gaurav Bartarya, S.K. Choudhury, A regression model for force and surface roughness estimation during hard turning, Advanced Materials Research, Vol. 299-300, Index. doi: 10.4028/www.scientific.net/AMR299-300.1167, 1167- 1170, 2011.
580. U.N.S. Rohith, N.V. Reddy and P.M. Dixit, An analytical approach for the prediction of forming limit curves under bilinear paths, International Journal of Mechanical Sciences, Vol. 53, Issue 1, 365-373, 2011.
581. S.S. Gautam, Raman Babu and P.M. Dixit, Ductile fracture simulation in the Taylor rod impact test using continuum damage mechanics, International Journal of Damage Mechanics, Vol. 20, Issue 3, 348-369, 2011.
582. R.K. Saxena and P.M. Dixit, Numerical analysis of damage in deep drawing process, Finite Elements in Analysis and Design, Vol. 47, Issue 9, 1104-1117, 2011.

583. A. Agarwal, N.V. Reddy and P.M. Dixit, Prediction of wrinkling and determination of minimum blankholding pressure in multistage deep drawing, Journal of Manufacturing Science and Engineering, Transactions of ASME, Vol. 133, Issue 6, 1104-1117, 2011.
584. S.S. Gautam and P.M. Dixit, Numerical simulation of ductile fracture in thin-walled tube impacted against a rigid surface, International Journal of Damage Mechanics, Vol. 21, Issue 3, 341-371, 2012.
585. Gohil, T. B., Saha, A. K., and Muralidhar, K., Numerical Study of Instability Mechanisms in a Circular Jet at Low Reynolds Numbers, Computers and Fluids, Vol. 44, 1-18, 2012.
586. Ramgadia, A. G., and Saha, A. K., Fully developed flow and heat transfer characteristics in a wavy passage: Effect of amplitude of waviness and Reynolds number, Int J. Heat Mass Transfer, Vol. 55, 2494-2509, 2012.
587. Saha, A. K., and Malik, T, Mixed Convective Flow and Heat Transfer through a Horizontal Channel with Surface Mounted Obstacles, Journal of Enhanced Heat Transfer, Vol. 19, Issue 4, 213-329, 2012.
588. Saha, A. K., and Yaragani, C. B, Three-Dimensional Numerical Study of Jet-in-Crossflow Characteristics at Low Reynolds Number, Heat and Mass Transfer, Vol. 48, 391-411, 2012.
589. Arul Kumar, M., Mahesh, S. and Parameswaran, V., A Stack Model of Rate-independent Polycrystals, International Journal of Plasticity, Vol. 27, 962-981, 2011.
590. Vivek Kumar Mehta and Bhaskar Dasgupta, A constrained optimization algorithm based on the simplex search method, Engineering Optimization, Vol. 44, Issue 5, 537-550, 2012.

Physics

591. Anupam, P.L. Paulose; S. Ramakrishnan, Z. Hossain, Doping Dependent Evolution of Magnetism and Superconductivity in Eu1-xKxFe2As2 (x = 0-1) and temperature dependence of the lower critical field Hc1, Journal of Physics: Condensed Matter, Vol. 23, 455702 (8 pp.), 2011.
592. Anupam, V.K. Anand; Z. Hossain, D.T. Adroja, C. Geibel, Signatures of spin-glass behaviour in PrIr2B2 and heavy fermion behaviour in PrIr2B2C, Journal of Physics: Condensed Matter, Vol. 23, 376001 (10 pp.), 2011.
593. H.S. Jeevan, D.T. Adroja, A.D. Hillier, Z. Hossain, C. Ritter, C. Geibel, Muon spin relaxation and neutron diffraction investigations of quadrupolar and magnetically ordered states of YbRu2Ge2, Physical Review B, Vol. 84, 184405 (6 pp.), 2011.
594. Pavan K. Aluri and Pankaj Jain, Parity asymmetry in the CMBR temperature power spectrum, MNRAS, Vol. 419, 3378, 2012.
595. Pavan K. Aluri and Pankaj Jain, Large scale anisotropy due to pre-inflationary phase of cosmic evolution, Mod. Phys. Lett. A, Vol. 27, 1250014, 2012.
596. Nishant Agarwal, Pavan K. Aluri, Pankaj Jain, Udit Khanna and Prabhakar Tiwari, A complete 3D numerical study of the effects of pseudoscalar-photon mixing on quasar polarizations, Eur. Phys.J., Vol. C72, 1928, 2012.
597. Pankaj Jain, Purnendu Karmakar, Subhadip Mitra, Sukanta Panda and Naveen K. Singh, Testing unimodular gravity, JCAP, Vol. 1205, 020, 2012.

598. Naveen K. Singh, Pankaj Jain, Subhadip Mitra, Sukanta Panda, Quantum treatment of the Weyl vector meson, Phys. Rev. D., Vol. 84, 105037, 2011.
599. Pankaj Jain, Purnendu Karmakar, Subhadip Mitra, Sukanta Panda and Naveen K Singh, Cosmological perturbation analysis in a scale invariant model of gravity, Classical and Quantum Gravity, Vol. 28, 215010, 2011.
600. Pavan K. Aluri, Pramoda K. Samal, Pankaj Jain, John P. Ralston, Effect of foregrounds on the cosmic microwave background radiation multipole alignment, MNRAS, Vol. 414, 1032, 2011.
601. Mitali Banerjee, Avinash Singh, A K Majumdar, and A K Nigam, Signature Effects of Spin Clustering and Distribution of Spin Couplings on Magnetization Behaviour of Ni-Fe-Mo and Ni-Fe-W Alloys, J. Phys.: Condens. Matter, Vol. 23, 306004, 2011.
602. Nimisha Raghuvanshi and Avinash Singh, Role of Hund's Coupling on Stability of the SDW State in Iron Pnictides, J. Phys.: Condens. Matter, Vol. 23, 312201, 2011.
603. Bhaskar Kamble and Avinash Singh, An Effective Quantum Parameter for Strongly Correlated Metallic Ferromagnets, J. Phys.: Condens. Matter, Vol. 24, 086004, 2012.
604. Avinash Singh and Dheeraj Kumar Singh, Onset and Melting of Local Orbital Order, Phys.: Condens. Matter, Vol. 24, 086003, 2012.
605. Rajyavardhan Ray and Avinash Singh, Exact Eigenstates Analysis of Finite Frequency Conductivity in Graphene, arXiv, Index. 1105, 2354, 2011.
606. Nimisha Raghuvanshi, Sayandip Ghosh, Rajyavardhan Ray, Dheeraj Kumar Singh, and Avinash Singh, Magnetic Excitations in Iron Pnictides, arXiv, Index. 1106, 4421, 2011.
607. A. K. Sharma, D. Chowdhury, Distribution of dwell times of a ribosome: effects of infidelity, kinetic proofreading and ribosome crowding, Physical Biology, Vol. 8, 026005, 2011.
608. A. Garai, D. Chowdhury, Stochastic kinetics of a single headed motor protein: dwell time distribution of KIF1A, EPL (Europhysics Letters), Vol. 93, 58004, 2011.
609. A.K. Sharma, D. Chowdhury, Stochastic theory of protein synthesis and polysome: Ribosome profile on a single mRNA transcript, Journal of Theoretical Biology, Vol. 289, 36, 2012.
610. A. Garai, J. Mani, D. Chowdhury, Footprint traversal by adenosine-triphosphate-dependent chromatin remodeler motor, Physical Review E, Vol. 85, 041902, 2012.
611. I. Dey and S. Bhattacharjee, Anisotropy induced wave birefringence in bounded supercritical plasma confined in a multicusp magnetic field, Applied Physics Letters, Vol. 98, Issue 15, 151501, 2011.
612. S. Bhattacharjee, T. Lafleur, C. Charles, and R. Boswell, Investigation of effect of exitation frequency on electron energy distribution functions in low pressure radio frequency bounded plasmas, Physics of Plasmas, Vol. 18, Issue 7, 072102, 2011.
613. A. Chowdhury and S. Bhattacharjee, Localized subsurface modification of materials using micro-low energy multiple ion beamlets, AIP Advances, Vol. 1, Issue 4, 042150, 2011.
614. Jose V. Mathew and S. Bhattacharjee,, Multi-element focused ion beams using compact microwave plasma ion source, Indian Journal of Physics (Springer), Vol. 85, Issue 12, 1863, 2011.
615. D. Sahu, S. Bhattacharjee, Mainak Bandyopadhyay and Arun K. Chakraborty,, Generation of cold electrons in the downstream region of a microwave plasma

source with near boundary resonances for production of negative ions, Indian Journal of Physics (Springer), Vol. 85, Issue 12, 1871, 2011.

616. S. Paul, A. Chowdhury and S. Bhattacharjee, Effect of beam limiting aperture and collector potential on multielement focused ion beams, Review of Scientific Instruments, Vol. 83, Issue 2, 02B714, 2012.
617. D. Sahu and S. Bhattacharjee, M. J. Singh, M. Bandyopadhyay, and A. Chakraborty, Optimization of negative ion current in a compact microwave driven upper hybrid resonance multicusp plasma source, Review of Scientific Instruments, Vol. 83, Issue 2, 02A706, 2012.
618. S. Pandey, S. Bhattacharjee and D. Sahu, Observation of electron plasma waves inside large amplitude electromagnetic pulses in a temporally growing plasma, Physics of Plasmas, Vol. 19, 012118, 2012.
619. Sunita Kedia, R.Vijaya, A.K.Ray and Sucharita Sinha, Spectral narrowing and lasing threshold in self-assembled active photonic crystal, Optics Communications, Vol. 284, 2056-2060, 2011.
620. Sunita Kedia and R.Vijaya, Photoluminescence of Zinc Oxide inverse photonic crystal., Int. J.Nanosci., Vol. 10, 171- 175, 2011.
621. Diksha Makwani and R.Vijaya, Frequency-dependent polarizability of small silicon clusters, Int. J. Nanosci., Vol. 10, 367-371, 2011.
622. Sunita Kedia and R.Vijaya, Photonic crystal waveguides by direct writing of e-beam on self-assembled photonic crystals, Bull Mat Sci., Vol. 34, 383-388, 2011.
623. Diksha Makwani, Sunita Kedia and R.Vijaya, Waveguide patterning on thin film and self-assembled photonic crystals, SPIE Proc., Vol. 8173, 81730F1-81730F10, 2011.
624. Aditi Ghosh and R.Vijaya, Continuous wave broadband generation using specialty fibers in fiber laser cavity, Appl. Opt., Vol. 50, E76-E79, 2011.
625. Sunita Kedia, R.Vijaya, A.K.Ray and Sucharita Sinha, Emission studies in double-layered and triple-layered photonic crystal microcavities, Appl. Opt., Vol. 1391, 27-30, 2011.
626. Diksha Makwani and R.Vijaya, Fabrication of SU-8 ridge waveguides by optical lithography and their characterization, Int. J.Nanosci., Vol. 10, 771-775, 2011.
627. Diksha Makwani and R.Vijaya, Investigation of Structural, Electronic and Optical Properties of Gan+1, GanAl and GanAs (n=1-8) Clusters by Density Functional Theory, AIP Proc., Vol. 1393, 65-66, 2011.

RESEARCH PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS (AS A FULL PAPER)

Aerospace Engineering

1. Kumar, Rakesh, and Ghosh, A.K., Parameter Estimation using Maximum Likelihood Method from Flight Data at High Angles of Attack, International Conference on Aerospace, Propulsion and Energy Sciences (ICAPES-11), Venice, Italy, Nov. (28-30), 2011.
2. Vishnu Prasad, R., Swaroop, B., and Venkatesan, C., Characterisation of Actuators, Sensors and Wireless System for Autonomous Tethered Hover of a Mini-Helicopter, International Conference on Intelligent Unmanned Systems, Chiba, Japan, November 2011.
3. D. Saravanan, C.Lakshmana Dora, T. Murugan, S. Sankaran, Satyanarayana TNV and Debopam Das, Experimental investigation of flow and noise characteristics of impinging twin jets, simulating starting flow from a rocket booster on a launch pad, National Conference on Space Transportation Systems: Opportunities and Challenges (STS 2011), Thiruvananthapuram, December, 2011.
4. Debopam Das, Manish Jain, Experimental Investigation of flow past Natural Draft Cooling Tower, 9th International Symposium On Particle Image Velocimetry – Piv11, Tsukuba, Japan, July 21-23, 2011.
5. Joydeep and Das,, Development of a flapping wing MAV based on an efficient design of a wing with twist, The International Conference on Intelligent Unmanned Systems, Chiba, Japan, November, 2011.
6. Joydeep Bhowmik, Saurav K Ghosh and Debopam Das, Measurements and Analysis of Aerodynamic Forceson an Indigenously Developed Ornithopter, Twenty Fifth National Convention Of Aerospace Engineers, Ranchi, India, November, 2011.
7. P. K. Ezhil Kumar and D. P. Mishra**,** Effect of Injection Strategies on Flame Length in a 2D Trapped Vortex Combustor, Proceedings of 11th Asian Symposium on Visualization, Niigata, Japan, 5-9 June 2011.
8. Jejurkar SY, Mishra DP. Second law analysis of a premixed flame based annular microcombustor. 5th European Combustion Meeting 28 June–1 July 2011, Cardiff University, Cardiff, UK.
9. Jejurkar SY, Mishra DP. On the structure of lean premixed H2–air flames in an annular microcombustor. 7th International Seminar on Flame Structure 11–15 July 2011, Novosibirsk, Russia.
10. P. K. Ezhil Kumar and D. P. Mishra, Effect of Injection Strategies on Flame Length in a 2D Trapped Vortex Combustor, Proceedings of 11th Asian Symposium on Visualization, Niigata, India, 5-9 June 2011.
11. Jejurkar SY, Mishra DP. Second law analysis of a premixed flame based annular microcombustor. 5th European Combustion Meeting 28 June–1 July 2011, Ranchi
12. Mahesh S. and D. P. Mishra, Characterization of Turbulent LPG Inverse Diffusion Flame in Recessed Back step and Coaxial Burners, Flucome, National Taiwan University, Taiwan, 24-27 May 2011.

13. D. P. Mishra, Perspective on Creative Engineering Education, International conference on learning for Global Education Reform, Gwalior, India, 18-20 Nov 2011.
14. P K Ezhil Kumar and D P Mishra, Experimental Investigation of Combustion Noise in a 2D Trapped Vortex Combustor, Proceedings of 22nd National Conference on IC Engine and Combustion, NIT Calicut, India, pp. 421- 423, 2011.
15. D. P. Mishra, Thermochemical Conversion of Biomass and its Applications, National conference on Renewable and New Energy, Dhenkanal, India 22 –23 December 2011.
16. D. P. Mishra, and R Khatry, A new model: Energy consumption pattern on cost of biomass electricity, National conference on Renewable and New Energy, Dhenkanal, India 22 –23 December 2011.

Chemical Engineering

17. T. Das and G. Deo, Synthesis, characterization, and effect of support on supported cobalt catalyst: In-situ CO2 hydrogenation as a model reaction study, IIChE Annual Meeting, Chemcon-2011, 432-434, Bangalore, December, 2011.
18. A.K. Gupta and G. Deo, Effect of co-solvent and FFA on transestrification using heterogeneous base catalyst for Biodiesel production, IIChE Annual Meeting, Chemcon-2011, 326-327, Bangalore, December, 2011.
19. D. Pandey and G. Deo, CO2 hydrogenation over unsupported and alumina supported Ni-Fe catalysts, IIChE Annual Meeting, Chemcon-2011, 106-107, Bangalore, December, 2011.
20. A. Oraon, D. Pandey and G. Deo, Hydrogenation of CO2 over supported bimetallic Ni-Fe catalysts, IIChE Annual Meeting, Chemcon-2011, 22-23, Bangalore, December, 2011.
21. Ashutosh Tiwari, Prabhat Munshi, Ashok Khanna, Role of Artificial Turbine in RELAP/SCDAP MOD 4.0, Transactions of the American Chemical Society, 1052-1053, Florida, June 26-30, 2011.
22. Indu Kumari, A.K.Trivedi, Ashok Khanna, Prabhat Munshi, P.Satya Murthy, Transient Analysis of cooling systems of ADS, Transactions of the American Chemical Society, 1069-1070, Florida, June 26-30, 2011.

Civil Engineering

23. Rai, D.C., and Dhanapal, S., Seismic Evaluation of 17-18th Century Lucknow (India) Monuments A Case Study of Rumi Darwaza, 11th North American Masonry Conference, Minneapolis, USA, June, 2011.
24. Rai, D.C., Agnihotri, P., and Singhal, V., Out-of-Plane Strength of Damaged Unreinforced Masonry Walls, 11th North American Masonry Conference, Minneapolis, USA, June, 2011.
25. Nanda, S., and Patra, N.R, Shaft resistance of piles in normally consolidating marine clay subjected to compressive and uplift load, Geo-Frontiers 2011: Advances in Geotechnical Engineering, 263-272, Dallas, USA, March 2011.

26. Joshi, A.C., and Patra, N.R, Tensile response of pile groups under compression part 1: Experimental investigations, Geo-Frontiers 2011: Advances in Geotechnical Engineering, 232-242, Dallas, USA, March 2011.
27. Joshi, A.C., and Patra, N.R, Tensile response of pile groups under compression part 2: Analysis, Geo-Frontiers 2011: Advances in Geotechnical Engineering, 243-252, Dallas, USA, March 2011.
28. Das, A, Reliability considerations in asphalt pavement design, International Symposium on Engineering Under Uncertainty: Safety Assessment and Management (ISEUSAM- 2012), Bengal Engineering and Science University, January, 2012.
29. Khan, I., and Das, A., Mix design for cement grouted bituminous mix, 7th International Conference on Road and Airfield Pavement Technology, 1150-1158, Bangkok, August, 2011.
30. Dhasmana, H., and Das, A., Study of moisture sensitivity of some aggregates in asphalt mix, 7th International Conference on Road and Airfield Pavement Technology, 768-778, Bangkok, August, 2011.
31. Rai, P.K., and Tripathi, S., Quantifying uncertainty in calibration equation of a soil mois- ture capacitance probe, Hydro- 2011, 190-196, Surat, December, 2011.
32. Pulugurtha, S., Vasudevan, V., Nambisan, S., Dangeti, M., Evaluating the Effectiveness of Infrastructure Based Countermeasures on Pedestrian Safety, Transportation Research Board 91st Annual Meeting, 1-17, Washington, DC, USA, January, 2012.
33. Pulugurtha, S., Vasudevan, V., Nambisan, S., Dangeti, M., Enhancing Pedestrian Safety Using Traffic Signs, 1st Conference of Transportation Research Group of India, Banglore, India, December, 2011.

Computer Science and Engineering

34. Surya Prakash and Phalguni Gupta, "An E_cient Technique for Ear Detection in 3D: Invariant to Rotation and Scale", 5th IAPR/IEEE International Conference on Biometrics (ICB 2012), New Delhi, India, March 29 - April 1, 2012.
35. Anurag Kumar, Pranay Dighe, Sourish Chaudhuri, Bhiksha Raj and Rita Singh, "Audio Event Detection from Acoustic Unit Occurence Patterns", 37th IEEE International Conference on Acoustics, Speech, and Signal Process- ing (ICASSP 2012), Kyoto, Japan, March 25-30, 2012.
36. Sandeep Dasgupta and Amey Karkare, "Precise Shape Analysis using Field Sensitivity", 27th ACM Symposium On Applied Computing (SAC 2012), Riva del Garda (Trento), Italy, March 25-29, 2012.
37. Chittibabu Namballa, Rahul Erai and Krithika Venkataramani, "Decoding Cognitive States from Brain fMRIs: The "Most Di_erentiating Voxels" Way", 4th Asian Conference on Intelligent Information and Database Systems (ACIIDS-2012), Kaohsiung, Taiwan, March 19-21, 2012.
38. Dimitrios Lymberopoulos, Oriana Riva, Karin Strauss, Akshay Mittal and Alexandros Ntoulas, "Instant Web Browsing for Mobile Devices", 17th International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS 2012), London, UK, March 3-7, 2012.

39. Saurabh Joshi, Shuvendu Lahiri and Akash Lal, "Underspeci_ed harness and interleaved bugs", 39th ACM SIGPLAN- SIGACT Symposium on Principles of Programming Languages (POPL 2012), Philadelphia, USA, January 25-27, 2012.
40. Surender Baswana, Utkarsh Lath, and Anuradha Mehta, "Near optimal distance oracle for planar digraphs avoiding any failed node or link", ACM-SIAM Symposium on Discrete Algorithms (SODA 2012), Kyoto, Japan, January 17-19, 2012.
41. Ashish Gupta, Akshay Mittal and Arnab Bhattacharya, "Minimally Infrequent Itemset Mining using Pattern- Growth Paradigm and Residual Trees", 17th International Conference on Management of Data (COMAD 2011), Bangalore, December 19-21, 2011.
42. Akshay Kumar and R. K. Ghosh, "Adaptive Probing: A Monitoring-Based Probing Approach for Fault Localization in Networks", Student Research Symposium of International IEEE conference on High Performance Computing (HiPC 2011), Bengaluru, December 18-21, 2011.
43. Purushottam Kar and Prateek Jain, "Similarity-based Learning via Data driven Embeddings", 25th Annual Con- ference on Neural Information Processing Systems (NIPS 2011), Granada, Spain, December 12-17, 2011.
44. Balwinder Sodhi and T.V. Prabhakar, "A Cloud Architecture Using Smart Nodes", 6th IEEE Asia-Paci_c Services Computing Conference (APSCC 2011), Jeju Island, Korea, December 12-15, 2011.
45. Ajitha Shenoy K B, Somenath Biswas and Piyush P Kurur, "Metropolis Algorithm For Solving Shortest Lattice Vector Problem (SVP)", IEEE 11th International Conference on Hybrid Intelligent Systems (HIS 2011), Malacca, Malaysia, December 5-8, 2011.
46. Aditya Nigam and Phalguni Gupta, "Knuckleprint Recognition using Feature Tracking", 6th Chinese Conference on Biometric Recognition (CCBR 2011), Beijing, China, December 3-4, 2011.
47. G S Badrinath, Aditya Nigam and Phalguni Gupta, "An E_cient Finger-knuckle-print based Recognition System Fusing SIFT and SURF Matching Scores", 13th International Conference on Information and Communications Security (ICICS 2011), Beijing, China, November 23-26, 2011.
48. Varun Mishra and Sanjeev Kumar Aggarwal, "ParTool: A Feedback-Directed Parallelizer", 9th Advanced Parallel Processing Technology Symposium (APPT 2011), Shanghai, China, September 26-27, 2011.
49. Barnali Basak, Sandeep Dasgupta and Amey Karkare, "Heap Dependence Analysis for Sequential Programs", International Conference on Parallel Computing (ParCo 2011), Ghent, Belgium, August 30 - September 2, 2011.
50. Balwinder Sodhi and T.V. Prabhakar, "A design pattern to decouple data from markup", 12th International Con- ference on Electronic Commerce and Web Technologies (EC-Web 2011), Toulouse, France, August 29 – September 2 2011.
51. Arnab Bhattacharya, B Palvali Teja and Sourav Dutta, "Caching Stars in the Sky: A Semantic Caching Approach to Accelerate Skyline Queries", 22nd International Conference on Database and Expert Systems Applications (DEXA 2011), Toulouse, France, August 29 - September 2, 2011.
52. Kamlesh Tiwari, Devendra Kumar Arya and Phalguni Gupta, "Palmprint based Recognition System using Local Structure Tensor and Force Field Transformation",

7th International Conference on Intelligent Computing (ICIC 2011), Zhengzhou, China, August 11-14, 2011.

53. Shashank Mehta and Deepanjan Kesh, "A Saturation Algorithm for Homogeneous Binomial Ideals ", 5th Annual International Conference on Combinatorial Optimization and Applications (COCOA 2011), Zhangjiajie, China, August 4-6, 2011.
54. Sagarmoy Dutta and Piyush Kurur, "Quantum Cyclic Code of length dividing pt +1", IEEE International Sympo- sium on Information Theory (ISIT 2011), St. Petersburg, Russia, July 31st - August 5th, 2011.
55. Balwinder Sodhi and T.V. Prabhakar, "Assessing suitability of cloud oriented platforms for application develop- ment", 9th Working IEEE/IFIP Conference on Software Architecture (WICSA 2011), Boulder, USA, June 20-24, 2011.
56. Umarani Jayaraman, Amit Kumar Gupta, Surya Prakash, Phalguni Gupta, "An Enhanced Geometric Hashing", 10th IEEE International Conference on Communications (ICC 2011), Kyoto, Japan, June 5-9, 2011.
57. Ruturaj Dhekane and Brion Vibber, "Talash: Friend Finding in Federated Social Networks", Workshop on Linked Data on the Web (colocated with WWW 2011), Hyderabad, March 29th, 2011.
58. Abhinav Mishra and Arnab Bhattacharya, "Finding the bias and prestige of nodes in networks based on trust scores", International World Wide Web Conference (WWW 2011), Hyderabad, 28th March - 1st April 2011.
59. Rahul Goyal, Anand Mishra and Krithika Venkataramani, "A Novel Robust Fingerprint Identication System based on Hierarchical Indexing", 3rd International Conference on Signal Acquisition and Processing (ICSAP 2011), Singapore, February 26-28, 2011.
60. Nirmesh Malviya, Samuel Madden, Arnab Bhattacharya, "A Continuous Query System for Dynamic Route Planning", International Conference on Data Engineering (ICDE), Hannover, Germany, April 11-16, 2011.

Electrical Engineering

61. A. Kumar and S. Chakrabarti, ANN-based hybrid state estimation and enhanced visualization of power systems, Innovative Smart Grid Technologies (ISGT)-India 2011, Kerala, India, Dec., 2011.
62. B. Mallick and S. Chakrabarti, Optimal Placement of Phasor Measurement Units for Multi-Area Observability, Innovative Smart Grid Technologies (ISGT)-India 2011, Kerala, India, Dec., 2011.
63. S. K. Mallik, S. Chakrabarti, and S. N. Singh, Improving the convergence characteristic of hybrid state estimation using pseudo measurement, 17th Power system computation conference, Sweden, August, 2011.
64. B. Amanulla, S. Chakrabarti, and S. N. Singh, Reconfiguration of distribution systems using probabilistic reliability models, IEEE PES General Meeting, Detroit, USA, Jul. 2011.
65. R. Majumder, S. Chakrabarti, G. Ledwich, and A. Ghosh, Control of battery storage to improve voltage profile in autonomous microgrid, IEEE PES General Meeting, Detroit, USA, Jul. 2011.

66. R. Majumder, G. Bag, and S. Chakrabarti, Performance of electronic interfaced DERs integrated with communication network, IEEE PES General Meeting, Detroit, USA, July 2011.
67. A.K. Dixit and M.J. Akhtar, An Inverse Scattering Procedure to Design Microwave Filters, IEEE Asia-Pacific Microwave Conference 2011 (APMC 2011), 1118-1121, Melbourne, Australia, December, 2011.
68. A.K. Dixit and M.J. Akhtar, Design of nonuniform transmission lines using electromagnetic inverse scattering, International Symposium on Antennas and Propagation (ISAP 2011), Jeju, Korea, October, 2011.
69. T Gupta, S Madhuri, M J Akhtar and K V Srivastava, Development of the virtual lab module for understanding the concepts of modes and field patterns in electromagnetics and microwave engineering, 8th International Conference on Remote Engineering and Virtual Instrumentation, REV2011, 112 – 120, Brasov, Romania, June, 2011.
70. G. Agrawal, R. Sharma, K V Srivastava and M J Akhtar, Understanding the concept of time domain behavior of transmission line for dc/ac source excitation using interactive LABview, 8th International Conference on Remote Engineering and Virtual Instrumentation, REV2011, 106 – 111, Brasov, Romania, June 2011.
71. Uma Mahesh and AK Chaturvedi, Closed Form BER Expressions for BPSK OFDM Systems with Fractional Timing Offset and Carrier Frequency Offset, 18th National Conference on Communications, IIT Kharagpur, February 2012.
72. Shreyans Parakh, Aditya K. Jagannatham, VCG Auction Based Optimal Allocation for Scalable Video Communication in 4G WiMAX, Eighteenth National Conference on Communications (NCC 2012), 155-160, Indian Institute of Technology Kharagpur, Kharagpur, February,2 012.
73. Aman Jaiswal, Aditya K. Jagannatham, Multi-Sensor Spatio-Temporal Vector Prediction History Tree (V-PHT) Model for Error Correction in Wireless Sensor Networks, Eighteenth National Conference on Communications (NCC 2012), 224-229, Indian Institute of Technology Kharagpur, Kharagpur, February, 2012.
74. S. Sharma, Aditya K. Jagannatham, Optimal Classifier Based Spectrum Sensing in Cognitive Radio Wireless Systems, First International Conference on Wireless Technologies for Humanitarian Relief (ACWR2011), 157-162, Amrita School of Engineering, Amritapuri, Kerala, December, 2011.
75. A. Katiyar, Aditya K. Jagannatham, Bayesian Data and Channel Joint Maximum-Likelihood Based Error Correction in Wireless Sensor Networks, First International Conference on Wireless Technologies for Humanitarian Relief (ACWR2011), 141-146, Amrita School of Engineering, Amritapuri, Kerala, December, 2011.
76. K. Ritikesh, Aditya K. Jagannatham, Utility Based Video Scheduling For Quality Maximization In 4G WiMax Wireless Networks, First International Conference on Wireless Technologies for Humanitarian Relief (ACWR2011), 209-215, Amrita School of Engineering, Amritapuri, Kerala, December, 2011.
77. Nitin Khanna, Aditya K. Jagannatham, Rate Partitioning for Optimal Quantization Parameter Selection in H.264 (SVC) Based 4G Broadcast/Multicast Wireless Video Communication, Australasian Telecommunication Networks and Applications Conference, (ATNAC 2011), 98-105, Melbourne. Australia, November, 2011.
78. Shreyans Parakh, Aditya K. Jagannatham, Optimal Subcarrier Allocation for H.264 based Scalable Video Transmission in 4G OFDMA Systems, Australasian

Telecommunication Networks and Applications Conference, (ATNAC 2011), 61-68, Melbourne. Australia, November, 2011.

79. Sohil Mahajan, Aditya K. Jagannatham, Hierarchical DWT Based Optimal Diversity Power Allocation for Video Transmission in MIMO Wireless Systems with Quantized Feedback, Australasian Telecommunication Networks and Applications Conference, (ATNAC 2011), 54-61, Melbourne. Australia, November, 2011.
80. Sohil Mahajan, Aditya K. Jagannatham, Hierarchical DWT Based Optimal Diversity Power Allocation for Video Transmission in 4G OFDMA Wireless Systems, IEEE Conference on Imaging Systems and Techniques (IST 2011), 279-283, Penang, Malaysia, May, 2011.
81. Varish Diddi, Kumar Vaibhav Srivastava and Animesh Biswas, Design of Low Power LNA for GPS Application, 2011 International Conference on Circuits, System and Simulation (ICCSS 2011), 39-43, Bangkok, Thailand, May 28-29, 2011.
82. R. K. Chaudhary, G. K. Singh, K. V. Srivastava, A. Biswas, Coaxial Fed Half-Split Multilayer Cylindrical Dielectric Resonator Antenna for Wideband Applications, European Microwave Conference 2011, 1015 – 1018, Manchester, UK, Oct 9 - Oct 14, 2011.
83. V. N. Mishra, R. K. Chaudhary, K. V. Srivastava, A. Biswas, Compact Two Pole Bandpass Filter Implemented Using Via-free Composite Right/Left Handed Transmission Line with Radial Stubs, European Microwave Conference 2011, 571 – 574, Manchester, UK, Oct 9 - Oct 14, 2011.
84. G. K. Singh, Raghvendra Kumar Chaudhary, K. V. Srivastava, Compact Epsilon Negative ZOR-Antenna, IEEE Applied Electromagnetics conference (AEMC) and Indian Antenna Week (IAW), Kolkata, India, Dec. 18 - 22, 2011.
85. Raghvendra Kumar Chaudhary, H. B. Baskey, K. V. Srivastava, A. Biswas, Wideband Two-layer Rectangular Dielectric Resonator Antenna with (Zr0.8Sn0.2)TiO4-Epoxy Composite System, IEEE Applied Electromagnetics conference (AEMC) and Indian Antenna Week (IAW), Kolkata, India, Dec. 18 - 22, 2011.
86. Raghvendra Kumar Chaudhary, Somak Bhattacharyya, K. V. Srivastava and Animesh Biswas, Design of a Wide-Band Dual Segment Half-split Cylindrical Dielectric Resonator Antenna, 5th Antenna Test & Measurement Society (ATMS) Conference, Mumbai, India, 01 - 03 Feb., 2012.
87. S. Bhattacharya, H. Baradiya, Raghvendra Kumar Chaudhary and K. V. Srivastava, An Electric Field Driven LC Resonator Structure as Ultra Thin Metamaterial Absorber, 5th Antenna Test & Measurement Society (ATMS) Conference, Mumbai, India, 01 - 03 Feb., 2012.
88. Somak Bhattacharyya, and Kumar Vaibhav Srivastava, Ultra Thin Metamaterial Absorbers Using Electric Field Driven LC(ELC) Resonator Structure, Progress in Electromagnetics Research Symposium, PIER 2012, 314-317, Kuala Lumpur, Malaysia, 27-30 March 2012.
89. Vepuri Niranjan, Alok Kumar Saxena and Kumar Vaibhav Srivastava, CPW-fed Slot Patch Antenna for 5.2/5.8 GHz WLAN Application, Progress in Electromagnetics Research Symposium, PIER 2012, 1350-1352, Kuala Lumpur, Malaysia, 27-30 March 2012.

90. Saurabh Upadhyay, Ravindranath Adda, Santanu Mishra, and Avinash Joshi, Derivation and Characterization of Switched-Boost Inverter, 14th European Conference on Power Electronics and Applications - EPE 2011, 1-10, Birmingham, Aug. 2011.
91. Rajeev Singh and Santanu Mishra, A Modified Average Current-Mode Controller for Converter-Based Optimal Battery Charging, IEEE- Vehicle Power and Propulsion Conference (VPPC), 1-6, Chicago, IL, Sep-2011.
92. Rajeev Singh and Santanu Mishra, A Novel Feedback-Clamped Magnetically Coupled Bi-Directional Optimal Battery Charging System, IEEE-ECCE 2011, 1202-1209, Phoenix, Sept. 2011.
93. Santanu Mishra, Ravindranath Adda, and Avinash Joshi, Switched-boost Inverter based on Inverse Watkins-Johnson Topology, IEEE-ECCE 2011, 4208-4211, Phoenix, Sept. 2011.
94. Ravindranath Adda, Santanu Mishra and Avinash Joshi, A PWM Control Strategy for Switched-Boost Inverter, IEEE-ECCE 2011, 991-996, Phoenix, Sept. 2011.
95. Rajeev Singh and Santanu Mishra, A Feedback-Clamped Average Current Mode Controller Based Universal and Adaptive Optimal Battery Charging System, I.I.Sc. Centenary Conference, 2011-Electrical Engineering (CCEE), 101-106, IISc, India, Dec.2011.
96. Kapil Jha and Santanu Mishra, Large-signal Linearization of a Boost Converter using The Dynamic Linearizing Modulator, I.I.Sc. Centenary Conference, 2011-Electrical Engineering (CCEE), 107-112, IISc, India, Dec.2011.
97. Rajeev Kumar Singh and Santanu Mishra, A Versatile Control Modulator for Optimal Bi-directional Battery Charging, IEEE Power Electronics, Machines and Drives Conference (PEMD 2012), University of Bristol, UK, 29 March 2012.
98. Rajeev Kumar Singh, Makarand Mijar, Ankur Mishra, and Santanu Mishra, Digital Synthetic Ripple Modulator for Point-of-Load Converters, IEEE Power Electronics, Machines and Drives Conference (PEMD 2012), University of Bristol, UK, 29 March 2012.
99. Kapil Jha and Santanu Mishra, Dynamic Analysis of a Linearizing Modulator for a Boost Converter, IEEE Power Electronics, Machines and Drives Conference (PEMD 2012), University of Bristol, UK, 29 March 2012.
100. Rajeev Kumar Singh, Nitin Singh Chauhan, and Santanu Mishra, A Novel Average Current-Mode Controller Based Optimal Battery Charger for Automotive Applications, IEEE International Conference on Devices, Circuits and Systems (ICDCS 2012), Coimbatore, India, 15-16 March 2012.
101. Sattey Prakash, Madhu Rawat, Charan Singh, TH Goswami, DK Setua, RS Anand, Synthesis, Characterizat-ion and Photovoltaic effect in organic solar cell fabricated with Phenyl-C61-Butyric acid Methyl ester [PCBM] as an electron acceptor layer, Proceedings of Seminar on Micro-Solar Energy Generation & Utilization, IIT Kanpur, Seminar Proceedings- 2011, P. 42-45, IIT Kanpur, 3-4 Sep 2011.
102. Ram Narayan Chauhan, C. Singh, RS Anand, Jitendra Kumar, Effect of working Gas Pressure on the Properties of R.F. sputtered Al-doped zinc oxide thin films for photovoltaic application, Proceedings of Seminar on Micro-Solar Energy Generation & Utilization, IIT Kanpur, Seminar Proceedings- 2011, P. 50-52, IIT Kanpur, 3-4 Sep 2011.

103. Nidhi Tiwari, RS Anand, Effect of back surface field, recombination rate and layer thickness in the silicon solar cell, Proceedings of Seminar on Micro-Solar Energy Generation & Utilization, IIT Kanpur, Seminar Proceedings- 2011, P. 53-56, IIT Kanpur, 3-4 Sep 2011.
104. Ram Narayan Chauhan, C. Singh, R.S. Anand and Jitendra Kumar, Effect of sputtering gas environments on the properties of aluminum– doped zinc oxide thin films for photovoltaic application, Optics 11 held at NIT Calicut, AIP Conf. Proc. 1391, P. 235-237, NIT Calicut, May, 2011.
105. Madhu Rawat, Sattey Prakash, C. Singh and R. S. Anand, Synthesis and Study of Chemical and Photo-physical Properties of Quinolinate Aluminum and Zinc Complexes in Organic Light Emitting Diodes (OLEDs), Optics 11 held at NIT Calicut, AIP Conf. Proc. 1391, 187-189, NIT Calicut, May, 2011.
106. Sattey Prakash, R.S. Anand & S. Sundar Manoharan, Influence of Exciplex formation on the electroluminescent properties of dimeric Zn (II) bis-2-(2′-hydroxyphenyl) benzoxazole complex and monomeric Zn (II) 2-(1′-hydroxynaphthyl) benzothiazole complex, Optics 11 held at NIT Calicut, AIP Conf. Proc. 1391, 190-193, NIT Calicut, May, 2011.
107. Supriyo Das and Nandini Gupta, Study of Space Charge Dynamics in Polymers using Electroluminescence and Conduction Current Measurement, 14th International Symposium on Electrets, pp. 11-12, Montpellier, France, August 2011.
108. Aman Jaiswal, Aditya K. Jagannatham, Multi-Sensor Spatio-Temporal Vector Prediction History Tree (V-PHT) Model for Error Correction in Wireless Sensor Networks, Proceedings of the Eighteenth National Conference on Communications (NCC 2012), Indian Institute of Technology Kharagpur, Kharagpur, Feb. 2012.
109. M Phanikumar, L Kumar and RM Hegde, An Unsupervised Approach to Multiple Speaker Tracking for Robust Multimedia Retrieval, 2011 IEEE Pacific-Rim Conference on Multimedia, PCM 2011, Sydney, Australia, Dec-2011.
110. Prem Singh and K Vasudevan, Near Optimum Detection of TCM Signals in Coloured Noise, Proc. of the IEEE 5th Intl. Conf. on Internet Multimedia Systems Architecture and Application, Bangalore, 12-13 Dec. 2011.
111. Rajesh M Hegde and B S Manoj, Distributed Speech Processing over Wireless Mesh Networks, Fourth International Conference on the Applications of Digital Information and Web Technologies ICADIWT 2011, University of Wisconsin Stevens Point, Wisconsin, USA, August 2011.
112. Chaudhary, P., Sensarma, P., Front-End Buck Rectifier with Reduced Filter Size and Single-Loop Control, Centenary Conference-EE, IISc, IISc, 15-17 Dec, 2011.
113. Dasgupta, A., Sensarma, P., Matrix Converter as a dynamic voltage restorer for symmetrical voltage sags, National Power Electronics Conference, NPEC 2011, Dec 19-22, 2011.
114. Prasanna Kumar Misra and S. Qureshi, Speed Enhancement of npn SiGe HBT on Thin Film SOI and Thin BOX by Using Substrate Bias in (0V-3V) Range, IEEE TENCON, 2011, 797-801, Bali, Indonesia, Nov. 21-24, 2011.
115. Ajay Shekhar Pandey, Devender Singh, S.K. Sinha and SN Singh, Wavelet Decomposition based FINN Model for Short Term Load Forecasting, The 2nd AIT-PEA International Conference & Utility Exhibition on Power and Energy Systems:

Issues and Prospects for Asia (ICUE 2011), Pattaya, Bangkok, September 28-30 2011.

116. Sachin K Jain, D Saxena, and SN Singh, Adaptive Wavelet Neural Network Based Harmonic Estimation of Single-Phase, The 2nd AIT-PEA International Conference & Utility Exhibition on Power and Energy Systems: Issues and Prospects for Asia (ICUE 2011), Pattaya, Bangkok, September 28-30 2011.
117. AK Jain, SC Srivastava, SN Singh and L Srivastava, Demand Responsive Bidding Strategy of a Buyer in Uniform Price Electricity Market, IEEE PES ISGT 2011, Kovlam, India, December 1-3, 2011.
118. Sachin K Jain and SN Singh, Impact of Signal Attributes on Autocorrelation Matrix Dimension for Smart Grid Solutions, IEEE PES ISGT 2011, Kovlam, India, December 1-3, 2011.
119. J Mitra, N Cai, MY Chow, S Kamalasadan W Li, W Qiao, SN Singh, AK Srivastava, SK Srivastava, GK Venayagamoorthy and Z Zhang, Intelligent Methods for Smart Microgrids, 2011 (Panel Paper), IEEE PES General Meeting, Detroit, Michigan, USA, July 26-29, 2011.
120. Naveen Jain, SN Singh and SC Srivastava, Planning and Impact Evaluation of Distributed Generators in Indian Context using Multi- Objective Particle Swarm Optimization, IEEE PES General Meeting, Detroit, Michigan, USA, July 26-29, 2011.
121. B. Sharma, A. Mukherjee and K. S. Venkatesh, Fourier shape-frequency words for Actions, In proceedings of International Conference on Image Information Processing, Jaypee University of Information Technology, Waknaghat, Shimla, Himachal Pradesh, INDIA, November 3 - 5, 2011.
122. G. Prithwijit, A. Mukherjee and K. S. Venkatesh, Formulation, Detection and Application of Occlusion States (Oct 7) in the Context of Multiple Object Tracking, In proceedings of 8th IEEE International Conference on Advanced Video and Signal-Based Surveillance (AVSS), Klagenfurt University, Aug-Sep, 2011.
123. G. Prithwijit, A. Mukherjee and K. S. Venkatesh, Activity Discovery using Compressed Suffix Trees, In proceedings of 16th International Conference on Image Analysis and Processing ICIAP, Univ. of Bologna, Ravenna, 13-16 Sep.2011.
124. A. M. Sharma, A. Mukherjee and K. S. Venkatesh, Human Pose Estimation in Surveillance Videos using Temporal Continuity on Static Pose, In proceedings of 2011 International Conference on Image Information Processing, Jaypee University of Information Technology, Waknaghat, Shimla, Himachal Pradesh, INDIA, November 3 - 5, 2011.
125. Patil G. C. & Qureshi S., Asymmetric Drain Underlap Schottky Barrier SOI MOSFET for Low-Power High Performance Nanoscale CMOS Circuits, IEEE Symposium on VLSI, 43-48, Chennai, India, June, 2011.
126. Patil G. C. & Qureshi S, Underlap Channel Nanoscale Dopant-Segregated Schottky Barrier SOI MOSFET for Low-Power Mixed Signal Circuits, Proc. NSTI Nanotech, 42-45, Boston USA, June, 2011.

Humanities and Social Sciences

127. A. K. Sharma, Female Feticide in North India: Extent, Causes, and Suggestions, Annual International Conference of Cognitive and Behavioural Psychology, 141-146, Singapore, February.
128. Somesh K. Mathur and Archana Srivastava, Rising Wage Inequality in India: A Translog Cost Function Analysis, 12th International Symposium on Econometrics Operations Research and Statistics, 1-26, Turkey, July, 2011.

Industrial Management & Engineering

129. Jayanta Chatterjee & Satyaki Roy, Driving innovation - Rural digital services, New Building Blocks – Intangible assets, Working group 4 eReport Page 1-14, Georgetown University, Washington DC, USA, May 15 to 17, 2011.
130. Jayanta Chatterjee, India Innovation Discourse – Current Measures & Future Aspirations, Developing STI Indicators, Electronic Repository, Article 18, National Academy of Sciences, Washington, July 10-12, 2011.
131. Veena Bansal, Ashok K Mittal, User Guided patent Database mining to build Technology roadmap, MOST2011, Bol Island BRAC Croatia, June 2011.
132. Arun P Sinha, Ankit Nigam, K V Gopakumar, and Siddharth Garg, Trading in Animosity: Insights into Bilateral Trade by Countries in Bilateral Conflict, IABE-2011 Barcelona- Summer Conference, June 3-5, 2011, 149 – 155, Barcelona, June 2011.
133. Anoop Singh and Sundeep Chowdary, Modelling Economic Efficiency of Renewable Energy Policies: A Multi-State Model for India, World Renewable Energy Conference, Bali, Oct. 2011.
134. Anoop Singh and Dilip Kumar Pandey, Analysing Efficiency of Electric Distribution Utilities in India: a Data Envelopment Analysis, IAEE International Conference, Stockholm, June 2011.

Materials Science and Engineering

135. S. Mukherjee, R. Gupta and A. Garg, Temperature Dependent Investigations on Single Crystal Gallium Ferrite Using X-ray Diffraction and Raman Microscopy, American Physical Society meeting, BAPS.2011.MAR.K1.00289, 2011.
136. V. Kumar, R. Shekhar, Govind, Kantesh Balani, Effect of hot rolling on microstructure and texture evolution of Mg-Li based alloy, Materials Science Forum, 347-350, 2011.
137. V. Kumar, R. Balasubramaniam, R. Shekhar, Kantesh Balani, Microstructure and texture evolution during hot rolling of Mg-9Li-7Al-1Sn alloy for aerospace application, Materials Science Forum, 85-88, 2012.
138. Dipak Mazumdar, An overview of the national scenario vis a vis the role of IIT Kanpur, ICS-2012, Dresden, Germany In Press, 2012.
139. S. Shekhar, S. Abolghashem, S. Basu, J. Cai, M. Ravi Shankar, Interactive Effects of Strain, Strain-rate and Temperature on Microstructure Evolution in High Rate Severe Plastic Deformation, ICOTOM 2012, 139-142, Mumbai, India, 2012.

140. S. Giribaskar, K. S. Suresh, Gouthama and Satyam Suwas, Evolution of Microstructure and Crystallographic Texture in AA2014 Aluminium Alloy during Equal Channel Angular Extrusion, ICOTOM2012, 97-100, Mumbai, India, 2012.
141. A.P. Murugesan, S. Giribaskar and Gouthama, Metallographic Studies on Deformation Microstructures of ECAE Processed AA2014 Aluminium Alloy, ICOTOM2012, 109-112, Mumbai, India, 2012.
142. Wahdat Ullaha and Gouthama, Ultrafine Grained Microstructure in Al-Cu-Si Alloy Obtained by Accumulative Roll Bonding, ICOTOM 2012, 157-160, Mumbai, India, 2012.
143. J. Bhagyaraj, Gouthama, K. Venkata Ramaiah, C. N. Saikrishna and S. K. Bhaumik, TEM Studies on the Microstructural Changes during Thermomechanical Cycling of NiTi Shape Memory Alloy Wire, ICOTOM 2012, 904-907, Mumbai, India, 2012.
144. Gouthama and Bollineni Yugesh, A Cross-sectional TEM Study of Abrasive Water Jet Cut Surface, Materials Science Forum, 991-994, Mumbai, India, 2012.
145. S. Giribaskar, Gouthama and R. Prasad, Ultra-Fine Grained Al-SiC Metal Matrix Composite by Rotary Swaging Process, ICOTOM 2012, 320-323, Mumbai, India, 2012.
146. Vipin Jain, Wei Yuan, R. S. Mishra, Gouthama, and Anil K. Gupta, Directional anisotropy in the mechanical behavior of friction stir processed and aged AZ91 alloy, Materials Science Forum, 64-67, Mumbai, India, 2012.
147. P. Sivagnanapalani, Gouthama, and M Sujata, Elemental Distribution Characteristics Across γ-TiAl:TiAlV Diffusion Bond Interface, Materials Science Forum, 718-721, Mumbai, India, 2012.
148. S. Mahanty, Gouthama and Tapendu Mandal, Effect of Environment on the Surface Modification by Pulse Laser Irradiation of Al-Si/SiCP MMCs, Materials Science Forum, 947-950, 2012.
149. S. Giribaskar, Gouthama and R. Prasad, Dynamic Recrystallization in Al-Li based Alloy during Equal Channel Angular Extrusion, ICOTOM 2012, 286-291, Mumbai, India, 2012.

Mathematics and Statistics

150. C. Turc, A. Anand, O. Bruno and J. Chaubell, Efficient solution of three-dimensional problems of acoustic and electromagnetic scattering by open surfaces, Proceedings of the 10th International Conference on Mathematical and Numerical Aspects of Waves, Vancouver, Canada, 655-657, 2011.
151. S. P. Chakraborty and M. Banerjee.Periodic optimal efficacy in a combination treatment of HIV, Proceedings of the Second International Conference on Advances in Control and Optimization of Dynamical Systems, 2012.
152. M.A. Khan and M. Banerjee, Information systems and rough set approximations: an algebraic approach. In Lecture Notes in Computer Science 6744, Proc. 4th Int. Conf. on Pattern Recognition and Machine Intelligence (PReMI '11), Moscow, Russia, Eds. Kuznetsov, S.O. et al. (Springer-Verlag), 744-749, June 2011.
153. M.V. Radhika, Peeyush Chandra, P.K. Srivastava Mathematical Modeling of opiate drug users - Proceeding of International Conference on Mathematical Modelling and Applications to Industrial Problems, NIT Calicut, Page: 467-473 (ISBN-789350590249), (MMIP2011).

Mechanical Engineering

154. Chakraborty S., Panigrahi, P. K. and Muralidhar, K., Effect of frequency and Reynolds number in abdominal aortic models, The Asian Symposium on Computational Heat Transfer and Fluid Flow, Kyoto, Japan,, 1-10, Kyoto, Japan, September 22-26, 2011.
155. Akhilendra Pratap Singh, Avinash Kumar Agarwal, An Experimental Investigation of Combustion, Emissions and Performance of a Diesel Fuelled HCCI Engine, SAE INDIA International Mobility Conference-2012, SAE Paper number 2012-28-0005, SAE Paper number 2012-28-0005, January 2012.
156. Jitendra Gangwar, Tarun Gupta, Avinash Kumar Agarwal, Comparative Study of PM Mass and Chemical Composition from Diesel and Biodiesel Fuelled CRDI SUV Engine, SAE INDIA International Mobility Conference-2012, SAE Paper number 2012-28-0012, New Delhi, India, January 2012.
157. Avinash Kumar Agarwal, Vipul Chaudhury, Pravesh Chandra Shukla, Macroscopic Spray Parameters of Karanja Oil and Blends: A Comparative Study, SAE INDIA International Mobility Conference-2012, SAE Paper number 2012-28-0028, New Delhi, India, January 2012.
158. Deepak Khurana, Avinash Kumar Agarwal, Oxidation Stability, Engine Performance and Emissions Investigations of Karanja, Neem and Jatropha Biodiesel and Blends, SAE World Congress 2011, 2011-01-0617, Detroit, USA, April 2011.
159. Tarun Gupta, Neelabh Dixit, Avinash Kumar Agarwal, The Secondary Organic Carbon (SOC) Formation from a CRDI Automotive Diesel Engine Exhaust, SAE World Congress 2011, 2011-01-1183, Detroit, USA, April 2011.
160. T.T. Kivevele, Avinash K. Agarwal, Tarun Gupta and M.M. Mbarawa, Oxidation Stability of Biodiesel Produced from Non-Edible Oils of African Origin, SAE World Congress 2011, 2011-01-1202, Detroit, USA, April 2011.
161. Trushar Gohil, A.K. Saha, and K. Muralidhar, Modal decomposition of free and forced circular jets at low and high Reynolds numbers, Annual March Meeting of the American Physical Society, T9(2), Dallas, 21-25 March 2011.
162. S.K. Biswal, P. Mohapatra, and K. Muralidhar, Hydrodynamic behavior of combining flows in an open channel, 7th IAHR symposium on River, Coastal and Estuarine Morphodynamics: RCEM2011, 869-878, Tsinghua University Press, Beijing, September 2011.
163. Kabiraj L, Sujith RI, Wahi P., Experimental studies of bifurcations leading to chaos in a laboratory scale thermoacoustic system, Proceedings of ASME Turbo Expo, GT2011-46149, Vancouver, Canada, June, 2011.
164. A. Agarwal, N.V. Reddy and P.M. Dixit, Determination of minimum blankholding pressure for predicting wrinkle-free products in multistage deep drawing, ASME International Manufacturing Science and Engineering Conference (MSEC) 2011, 443-452, Corvallis, OR, U.S.A, June 13-17, 2011.

Physics

165. Sudeep Bhattacharjee, Experimental investigation of space-charge-limited flows in the quantum regime, International conference on materials science and technology (ICMST - 2012), 45, St. Thomas College, Pala, Kerala, June 10-14, 2012.
166. A. Chowdhury and S. Bhattacharjee, Defect induced controlled modification of localized subsurface electrical properties using multiple focused ion beamlets: Experiments and Simulation, India Australia International Workshop on Nanotechnology In Materials and Energy Application (IAWNT 2011), 120, Jadavpur University, Kolkata, India, December 29-31, (2011).
167. S. Paul, A. Jayakiran and S. Bhattacharjee, Physics of Capillary Guiding of Focused Ion Beams, 26th National Symposium on Plasma Science and Technology (PLASMA 2011), 18, Birla Institute of Technology (BIT), Patna, India, December 20-23, 2011.
168. D. Sahu and S. Bhattacharjee, A Comparative Study of Negative Ion Parameters in Pulsed and Continuous Wave Models in a Microwave Driven Upper Hybrid Resonance Plasma Source, 26th National Symposium on Plasma Science and Technology (PLASMA 2011), 29, BIT, Patna, India, December 20-23, 2011.
169. S. Pandey and S. Bhattacharjee, D. Sahu, Observation of Electron Plasma Wave s inside Large Amplitude Electromagnetic Pulses in a Temporally Growing Plasma, 26th National Symposium on Plasma Science and Technology (PLASMA 2011), 37, BIT, Patna, India, December 20-23, 2011.
170. S. Bhattacharjee and Indranuj Dey, Wave phenomena in bounded plasmas confined in multicusp magnetic fields, 26th National Symposium on Plasma Science and Technology (PLASMA 2011), 57, BIT, Patna, India, December 20-23, 2011.
171. S. Bhattacharjee, S. Paul, A. Chowdhury and Jose V. Mathew, New frontiers in nanoscience and technology using multi element focused ion beams (MEFIB) from compact microwave driven plasmas, 14th International conference on Ion Sources (ICIS 2011), 28, Giardini Naxos, ITALY, September 12 - 16, 2011.
172. Debaprasad Sahu, Sudeep Bhattacharjee, Mahendrajit Singh, Mainak Bandyopadhyay, Arun Chakraborty., Optimization of negative ion current and density in a compact microwave driven upper hybrid resonance multicuspplasma source, 14th International conference on Ion Sources (ICIS 2011), 128, Giardini Naxos, ITALY, September 12 - 16, 2011.
173. Sudeep Bhattacharjee, Nanoscale Physics and applications using multielement focused ion beams, BIT's 1st Annual World Congress of Nano-S & T - 2011, 217, Dalian, CHINA, October 23-26, 2011.

PAPERS PRESENTED IN SEMINARS/CONFERENCE/WORKSHOPS/SYMPOSIA

Biological Sciences and Bioengineering

1. R. K. Verma, Distinguishing features of aquaglyceroporin in Plasmodium Falciparum: Comparative molecular dynamics simulations of three aquaporins, Biophysical Society 56th Annual Meeting, San Diego, U. S. A., Feb. 2012.
2. Ashok Kumar, Tissue Engineering and its Applications, Biotech 2012: Current Advances in Biotechnology and Medicine, Institute of liver and Billiary Sciences, New Delhi, 24 - 25th February, 2012.
3. Ashok Kumar, New Design of Biomaterials for Biomedical Applications, Future Technologies for Health Care, IIITA Allahabad (India), 18-20th, Sept, 2012.
4. Ashok Kumar, Biomedical Applications Tissue Engineering and Regenerative Medicine, JAPAN-India (JST-DST), Workshop on Biomedical Research, Waseda University, Tokyo, Japan, 28 - 29th February, 2012.
5. Ashok Kumar, Cryogel Polymeric Bioreactors: Advancement in Therapeutic Protein Production, Bioprocess Industry-Academia Interaction, VIT, Vellore, 24-27th, July, 2011.
6. Ashok Kumar, Smart Biomaterials for Biomedical Applications, International Conference on Tissue Engineering & Regenerative (ICTERM2011), NIIT, Rourkila, Orissa, India, Sept. 27th- Oct 2nd, 2011.
7. Ashwani Kumar Thakur, Gunasekhar Burra, Suppression of human huntingtin protein aggregation by N-terminal sequences of huntingtin protein of lower organisms, Annual Meeting of The Indian Biophysical Society, CAS in Crystallography and Biophysics, University of Madras, Chennai, January 2012.
8. Priti Agarwal, R. Mainpal, K. Subramaniam, Translational control of cyclin B by PUF-8 and GLD-1 is essential for germ cell development, 18th International C. elegan Meeting, University of California, Los Angeles, California, USA, June 22-26, 2011.
9. S. Vaid, M. Ariz and K. Subramaniam, Regulation of RAS/MAPK signaling by PUF-8 and GAP-3 is essential for meiotic progression, 18th International C. elegan Meeting, University of California, Los Angeles, California, USA., June 22-26, 2011.
10. Neha Arya, Recapitulating tumor microenvironment in biomaterial based 3D in-vitro tumor models, Society for Biomaterials, Annual Meeting and Exposition, 2011, Orlando, Florida, USA, April 2011.
11. Neha Arya, Development of a sequential delivery system for the treatment of lung cancer, 38th Annual Meeting and Exposition of the Controlled Release Society, National Harbor, Maryland, USA, July 2011.
12. Neha Arya, Carbon nanostructures: next generation of cancer therapeutics?, 38th Annual Meeting and Exposition of the Controlled Release Society, National Harbor, Maryland, USA, July 2011

Chemical Engineering

13. Santosh K Gupta, Multi-objective genetic algorithm with bio-mimetic adaptations, SERC Course: Non-linear programming and soft computing techniques for Chemical Engineering, NIT Durgapur, 12-16 Dec 2011.
14. Prashant K. Bhattacharya, A study with enzymatic membrane reactor (EMR) for conversion of lactose in to galactooligosaccharides (GOS), Third International Conference on Chemical Engineering: ICChE-2011, BUET, Dhaka, 29-30 December, 2011.
15. Shiv Singh, Preparation and characterization of Ag-impregnated carbon micron and nanofibers for the removal of microbes in water, 4TH International Congress of Environmental Research, Surat, 15-17 December 2011.
16. Bhaskar Bhaduri, Cu - impregnated activated carbon microfibers and carbon nanofibers for the production of oxygen from steam, 4TH International Congress of Environmental Research, Surat, 15-17 December 2011.
17. B. Mekala, Preparation of surfactant enhanced metal dispersed carbon nanofibers for the adsorption of persistent gaseous organic pollutants, COLL 2011, Amsterdam, Netherlands, June 24-25, 2011.
18. G. Deo, CO2 reforming of CH4 to produce syngas over metal-supported catalysts, 2nd Indo German Workshop on Advances in Reaction and Separation Processes, Bad Herrenalb, Germany, February, 2012.
19. G. Deo, Promotion of unsupported Nickel catalyst using Iron for CO2 hydrogenation reaction, 2nd Indo German Workshop on Advances in Reaction and Separation Processes, Bad Herrenalb, Germany, February, 2012.
20. G. Deo, Effect of magnesia on Al2O3 and SiO2 as mixed oxides supported cobalt catalysts: An in situ CO2 hydrogenation reaction Study, 2nd Indo German Workshop on Advances in Reaction and Separation Processes, Bad Herrenalb, Germany, February, 2012.
21. G. Deo, Effect of iron on supported and unsupported Nickel and cobalt catalysts, 2nd Indo German Workshop on Advances in Reaction and Separation Processes, Bad Herrenalb, Germany, February, 2012.
22. T. Das, Synthesis, characterization, and effect of support on supported cobalt catalyst: In-situ CO2 hydrogenation as a model reaction study, IIChE Annual Meeting, Chemcon-2011, Bangalore, December, 2011.
23. A.K. Gupta, Effect of co-solvent and FFA on transestrification using heterogeneous base catalyst for biodiesel production, IIChE Annual Meeting, Chemcon-2011, Bangalore, December, 2011.
24. D. Pandey, CO2 hydrogenation over unsupported and alumina supported Ni-Fe catalysts, IIChE Annual Meeting, Chemcon-2011, Bangalore, December, 2011.
25. D. Pandey, Hydrogenation of CO2 over supported Bimetallic Ni-Fe Catalysts, IIChE Annual Meeting, Chemcon-2011, Bangalore, December, 2011.
26. D. Pandey, CO2 Methanation Over Supported Bimetallic Ni-Fe Catalysts: Effect of Support and Total Metal Loading, 2011 AIChE Annual Meeting, Minneapolis, USA, October, 2011.
27. A. K. Gupta, Biodiesel Production by Transestrification Using Heterogeneous Base Catalyst and Effect of Co-Solvent, 2011 AIChE Annual Meeting, Minneapolis, USA, October, 2011.

28. S. Sengupta, CO2 reforming of CH4 to produce Synthesis Gas Over Modified and Unmodified Ni/Al2O3 catalysts, Chemference 2011, IISc., Bangalore, September 2011.
29. S. Sengupta, CO2 reforming of CH4 to produce Synthesis Gas Over Modified and Unmodified Ni/Al2O3 catalysts, 11th International Conference on Carbon Dioxide Utilization, Dijon, France, June 2011.
30. Joshi Y.M., Time Temperature Superposition in Soft Glassy Materials, 83nd Annual meeting of Society of Rheology, Cleveland, Ohio, October 2011.
31. Joshi Y.M., Time temperature superposition in glassy materials, Conference on Dynamics of Phase Transformations, JNCASR Bangalore, November 2011.
32. Khan S, Estimation of free energy of water droplet during transition between Wenzel to Cassie state: A molecular dynamic study, AICHE, Minnesota USA, Oct, 2011.
33. Singh JK, Structure and dynamics of polymers over multiple surfaces, AICHE, Minnesota USA, Oct, 2011.
34. Singh JK, Tuning surface phase transition of associating fluids, Thermodynamics, Athens, Greece, Sept, 2011.
35. Singh JK, Structure and transport of charged polymer over flat and orthogonal surfaces, Thermodynamics, Athens, Greece, Sept, 2011.
36. Singh JK, Phase transition of water in graphite and mica pore S, ESAT, St. Petersburg, Russia, June, 2011.
37. N. Kumar, Measurement of interface states in electrolyte-insulator-semiconductor structures with textured dielectrics, XVI International Workshop on the Physics of semiconductor Devices (IWPSD-2011, IIT Kanpur, December 19-22, 2011.
38. R. Mukherjee, Electrochemical synthesis, immobilisation and transmission line modelling of aniline and N-Phenylglycine co-polymer for heavy metal detection in water, XVI International Workshop on the Physics of semiconductor Devices (IWPSD-2011), IIT Kanpur, December 19-22, 2011.
39. R. Chepyala, Fluid flow characteristics in functionalized silicon based microfluidic immunosensor, XVI International Workshop on the Physics of semiconductor Devices (IWPSD-2011), IIT Kanpur, December 19-22, 2011.
40. R. Mukherjee, Electrochemical synthesis, immobilisation and transmission line modelling of aniline and N-Phenylglycine co-polymer for heavy metal detection in water, CHEMCON-2011, Bangalore, December 27 - 29, 2011.
41. R. Chepyala, Flow characteristics in chemically modified silicon microfluidic channels for sensor applications, CHEMCON-2011, Bangalore, December 27 - 29, 2011.
42. N. Kumar, Studies on the sensitivity enhancement of electrolyte-insulator-semiconductor devices using nano-textured dielectrics, International Symposium on the Physics and Technology of Sensors (ISPTS-1), Pune, March 8-10, 2012.
43. Garg, S., Reverse engineering the small-world gene networks, AIChE Annual Meeting, 2011, Minneapolis, USA, October, 2011.
44. Garg, S., siRNA based gene therapy in alzheimer disease, AIChE Annual Meeting, 2011, Minneapolis, USA, October, 2011.
45. Garg, S., Complete mineralization of sulphonated azo dyes using bacterial consortia, AIChE Annual Meeting, 2011, Minneapolis, USA, October, 2011.

46. A. Sharma, Scientific commonsense & creativity: some case studies in new process and product development, ChEmference, IISc Bangalore, September 23-24, 2011.
47. A. Sharma, Self-organized fabrication of nanolens and lens-arrays, Meeting on Chemistry and Physics of Advanced Materials, Kolkata, October 28-30, 2011.
48. A. Sharma, Self-oraganized nanofabrication, Indo-US Workshop on Nanoparticle Assembly, Delhi, December 12-14, 2011.
49. A. Sharma, Self-organized fabrication of nanolens and lens-arrays, ICONSAT 2012, Hyderabad, January 20-24, 2012.
50. N. Kaistha, Design and control of a reactive distillation process for naphtha hydrodesulphurization, AIChE, Minneapolis (USA), 16-21 Oct 2011.
51. N. Kaistha, Plantwide control for economically optimal operation of an ethyl benzene, AIChE, Minneapolis (USA), 16- 21 Oct 2011.
52. N. Kaistha, Hybrid Duplex and Molecular Gate PSA, AIChE, Minneapolis (USA), 16-21 Oct 2011.
53. Shyam Kumar, CFD simulations to validate the gas holdup in two phase bubble columns, Technological Advancements in Chemical and environmental Engineering (TACEE-12), BITS Pilani, 23-25th March 2012.
54. R.Timung, Heavy metal ionc extraction using ionic liquids, Technological Advancements in Chemical and environmental Engineering (TACEE-12), BITS Pilani, 23-25th March 2012.
55. Shyam Kumar, Effect of operating parameters in two and three phase co-current bubble columns, CHEMCON-2011, Bengaluru, 27-29th December, 2011.
56. Yamini Sudha. S, dioxide absorption studies in ionic liquids, CHEMCON-2011, Bengaluru, 27-29th December, 2011.
57. Pradeep Kumar, Uranium transport across supported liquid membrane using TBP, CHEMCON-2011, Bengaluru, 27- 29th December, 2011.
58. S. Yamini Sudha, Validation and prediction of Solubility Parameters of Ionic Liquids for CO2 capture, International Conference on Ionic Liquids in Separation and Purification Technology ILSEPT 2011, Spain, September 4-7, 2011.
59. J. Kumar, Preferential Oxidation of Carbon Monoxide in Micro-channel Reactor, CHEMCON-2011, Bangalore, Dec 27-29, 2011.
60. P. Laxmi Prasad Rao, Compact Microfuel Processor for Hydrogen Production from Ethanol, CHEMCON-2011, Bangalore, Dec 27-29, 2011.
61. D. Kunzru, Process Intensification of Disproportionation of Toluene using Microstructured Reactors, 12th International Conference on Microreaction Technology, Lyon, France, Feb 20-22, 2012.

Civil Engineering

62. Das, A., Reliability considerations in asphalt pavement design, International Symposium on Engineering Under Uncertainty: Safety Assessment and Management (ISEUSAM- 2012), Bengal Engineering and Science University, howrah, January, 2012.
63. Khan, I., Mix design for cement grouted bituminous mix, 7th International Conference on Road and Airfield Pavement Technology, Bangkok, August, 2011.

64. Dhasmana, H., Study of moisture sensitivity of some aggregates in asphalt mix, 7th International Conference on Road and Airfield Pavement Technology, Bangkok, August, 2011.
65. Rai, P.K., Quantifying uncertainty in calibration equation of a soil moisture capacitance probe, Hydro-2011, Surat, December, 2011.
66. Tripathi, S., Effects of cadastral boundaries in agricultural land on runoff generation, AGU Fall Meeting 2011, San Francisco, December, 2011.
67. Tripathi, S., On the time-evolution of pressure-flow scour, AGU Fall Meeting 2011, San Francisco, December, 2011.

Electrical Engineering

68. A. Kumar, S. Chakrabarti, ANN-based hybrid state estimation and enhanced visualization of power systems, Innovative Smart Grid Technologies (ISGT)-India 2011, Kerala, India, Dec., 2011.
69. S. Chakrabarti, B. Mallick, Optimal Placement of Phasor Measurement Units for Multi-Area Observability, Innovative Smart Grid Technologies (ISGT)-India 2011, Kerala, India, Dec., 2011.
70. S. K. Mallik, S. Chakrabarti, and S. N. Singh, Improving the convergence characteristic of hybrid state estimation using pseudo measurement, 17th Power system computation conference, Sweden, August, 2011.
71. S. Chakrabarti, B. Amanulla, S. N. Singh, Reconfiguration of distribution systems using probabilistic reliability models, IEEE PES General Meeting, Detroit, USA, Jul. 2011.
72. S. Chakrabarti, R. Majumder, G. Ledwich, and A. Ghosh, Control of battery storage to improve voltage profile in autonomous microgrid, IEEE PES General Meeting, Detroit, USA, Jul. 2011.
73. S. Chakrabarti, R. Majumder, G. Bag, Performance of electronic interfaced DERs integrated with communication network, IEEE PES General Meeting, Detroit, USA, July 2011.
74. Aditya K. Jagannatham, Shreyans Parakh, VCG Auction Based Optimal Allocation for Scalable Video Communication in 4G WiMAX, Eighteenth National Conference on Communications (NCC 2012), Indian Institute of Technology Kharagpur, February, 2012.
75. Aditya K. Jagannatham, Aman Jaiswal, Multi-Sensor Spatio-Temporal Vector Prediction History Tree (V-PHT) Model for Error Correction in Wireless Sensor Networks, Eighteenth National Conference on Communications (NCC 2012), Indian Institute of Technology Kharagpur, February, 2012.
76. Aditya K. Jagannatham, Siddharth Sharma, Optimal Classifier Based Spectrum Sensing in Cognitive Radio Wireless Systems, First International Conference on Wireless Technologies for Humanitarian Relief (ACWR2011), Amrita School of Engineering, Amritapuri, Kerala, December, 2011.
77. Aditya K. Jagannatham, Ashish Katiyar, Bayesian Data and Channel Joint Maximum-Likelihood Based Error Correction in Wireless Sensor Networks, First International Conference on Wireless Technologies for Humanitarian Relief (ACWR2011), Amrita School of Engineering, Amritapuri, Kerala, December, 2011.

78. Kumar Ritikeshm, Aditya K. Jagannatham, Utility Based Video Scheduling For Quality Maximization In 4G WiMax Wireless Networks, First International Conference on Wireless Technologies for Humanitarian Relief (ACWR2011), Amrita School of Engineering, Amritapuri, Kerala, December, 2011.
79. Aditya K. Jagannatham, Nitin Khanna, Rate Partitioning for Optimal Quantization Parameter Selection in H.264 (SVC) Based 4G Broadcast/Multicast Wireless Video Communication, Australasian Telecommunication Networks and Applications Conference, ATNAC 2011, Melbourne, Australia, November, 2011.
80. Shreyans Parakh, Aditya K. Jagannatham, Optimal Subcarrier Allocation for H.264 based Scalable Video Transmission in 4G OFDMA Systems, Australasian Telecommunication Networks and Applications Conference, ATNAC 2011, Melbourne, Australia, November, 2011.
81. Aditya K. Jagannatham, Sohil Mahajan, Hierarchical DWT Based Optimal Diversity Power Allocation for Video Transmission in MIMO Wireless Systems with Quantized Feedback, Australasian Telecommunication Networks and Applications Conference, ATNAC 2011, Melbourne, Australia, November, 2011.
82. Sohil Mahajan, Aditya K. Jagannatham, Hierarchical DWT Based Optimal Diversity Power Allocation for Video Transmission in 4G OFDMA Wireless Systems, The IEEE Conference on Imaging Systems and Techniques (IST 2011), Penang, Malaysia, May 2011.
83. Varish Diddi, Kumar Vaibhav Srivastava and Animesh Biswas, Design of Low Power LNA for GPS Application, 2011 International Conference on Circuits, System and Simulation (ICCSS 2011), Bangkok, Thailand, May 28-29, 2011.
84. R. K. Chaudhary, G. K. Singh, K. V. Srivastava, A. Biswas, Coaxial Fed Half-Split Multilayer Cylindrical Dielectric Resonator Antenna for Wideband Applications, European Microwave Conference 2011, Manchester, UK, Oct 9 - Oct 14, 2011.
85. R. K. Chaudhary, V. N. Mishra ,K. V. Srivastava, A. Biswas, Compact Two Pole Bandpass Filter Implemented Using Via-free Composite Right/Left Handed Transmission Line with Radial Stubs, European Microwave Conference 2011, Manchester, UK, Oct 9 - Oct 14, 2011.
86. Kumar Vaibhav Srivastava, G. K. Singh, R. K. Chaudhary, Compact Epsilon Negative ZOR-Antenna, IEEE Applied Electromagnetics conference (AEMC) and Indian Antenna Week (IAW), Kolkata, India, Dec. 18 - 22, 2011.
87. Raghvendra Kumar Chaudhary, H. B. Baskey, K. V. Srivastava, A. Biswas, Wideband Two-layer Rectangular Dielectric Resonator Antenna with (Zr0.8Sn0.2)TiO4-Epoxy Composite System, IEEE Applied Electromagnetics conference (AEMC) and Indian Antenna Week (IAW), Kolkata, India, Dec. 18 - 22, 2011.
88. Raghvendra Kumar Chaudhary, Somak Bhattacharyya, K. V. Srivastava and Animesh Biswas, Design of a Wide-Band Dual Segment Half-split Cylindrical Dielectric Resonator Antenna, 5th Antenna Test & Measurement Society (ATMS) Conference, Mumbai, India, 01 - 03 Feb., 2012.
89. S. Bhattacharya, H. Baradiya, Raghvendra Kumar Chaudhary and K. V. Srivastava, An Electric Field Driven LC Resonator Structure as Ultra Thin Metamaterial Absorber, 5th Antenna Test & Measurement Society (ATMS) Conference, Mumbai, India, 01 - 03 Feb., 2012.

90. Somak Bhattacharyya, Kumar Vaibhav Srivastava, Ultra Thin Metamaterial Absorbers Using Electric Field Driven LC(ELC) Resonator Structure, Progress in Electromagnetics Research Symposium, PIER 2012, Kuala Lumpur, Malaysia, 27-30 March 2012.
91. Vepuri Niranjan, Alok Kumar Saxena and Kumar Vaibhav Srivastava, CPW-fed Slot Patch Antenna for 5.2/5.8 GHz WLAN Application, Progress in Electromagnetics Research Symposium, PIER 2012, Kuala Lumpur, Malaysia, 27-30 March 2012.
92. Nandini Gupta, Supriyo Das, Study of Space Charge Dynamics in Polymers using Electroluminescence and Conduction Current Measurement, 14th International Symposium on Electrets, Montpellier, France, August 2011.
93. R. R. Patel, B Kishore Kumar, and Nandini Gupta, Measurement of Polarization and Depolarization current on Epoxy Composites with Nanometric Titania and Zinc Oxide fillers, International Centenary Conference-EE, Indian Institute of Science, Bangalore, India, 15-17 December, 2011.
94. U. Das, S. Sonkar, Fabrication of Waveguide Grating, Presentation No. OP-O. 04, IWPSD 2011, IIT Kanpur, Kanpur, UP, India, December 19-22, 2011.
95. U. Das, T. Bhowmick, 40 GHz Integrated MQW Intermixed Waveguide Photodiodes, Poster No. OP-P.25, IWPSD 2011, IIT Kanpur, Kanpur, UP, India, December 19-22, 2011.
96. U. Das, D. Jain and C. Sandeep, Growth of SiC Nano-Crystals on H-Terminated Si(100)30 Substrate Surface Steps, Poster No. OP-P.27, IWPSD 2011, IIT Kanpur, Kanpur, UP, India, December 19-22, 2011.
97. Patil G. C., Qureshi S, Engineering buried oxide in dopant-segregated Schottky barrier SOI MOSFET for Low-Variability CMOS Circuits, IEEE Electron Devices and Solid State Circuits (EDSSC), Tianjin, China, Nov., 2011.
98. Patil G. C., Qureshi S, Si3N4:HfO2 dual-k spacer dopant-segregated Schottky barrier SOI MOSFET for Low-power applications, IEEE Electron Devices and Solid State Circuits (EDSSC), Tianjin, China, Nov., 2011.
99. Prasanna Kumar Misra, Qureshi S, Impact of Ge profile on the performance of PNP SiGe HBT on thin film SOI, IWPSD India, Kanpur, December, 2011.

Humanities and Social Sciences

100. Somesh K. Mathur, Does Trade Cause Inequality: An Empirical Analysis of Developing Countries, Indian Econometric Society Conference, Pondicherry, January, 2012.
101. Somesh K Mathur, Estimation of Poverty Measures from Lorenz Curves, Indian Econometric Conference, Pondicherry, January, 2012.
102. P. M. Prasad, Sustainable E-Flows in the River Ganga: A Livelihood Perspective, 17th Annual International Sustainable Development Research Conference, Columbia University, New York, May, 2011.
103. P. M. Prasad, Zoning Policy in Indian Mega Cities: An Overview, TUM Alumni Expert Seminar on "Megacities-Urban Development with focus on transportation and Water", Sao Paulo, Brazil, February, 2012.
104. Suchitra Mathur, Indian Science Fiction: Trends and Possibilities, World-Building: The Logic of Science Fiction and Fantasy, University of Oslo, June, 2011.

105. Suchitra Mathur, Bollywood's 'Brave Old World': The Retro Rage in Contemporary Hindi Cinema, Annual IACLALS International Conference, Ranchi, June, 2012.
106. G. Neelakantan, Legacy through Loss: The Politics of Memory in Saul Bellow's The Bellarosa Connection, International Conference on Holocaust Literature: Memories and Losses, Mysore University, September, 2011.
107. T. Ravichandran, Disordered Reality, Diseased Cities and Desperate Detectives in Thomas Pynchon's the Crying of Lot 49 and Inherent Voice, East West Cultural Passage International Conference on Contact Zones in the Global World, Sibiu, Romania, May, 2011.
108. T. Ravichandran, Flight from South Asia to America: Towards Reconstructing a Multicultural Identity or Reclaiming a Mummified Reality, 25th Annual MELUS & USACLALS Joint Conference on Multi-Ethnic American and Postcolonial World Literatures, Florida Atlantic University, Florida, Apri, 2011.
109. Nirmalya Guha, Prakasatman, Anandabodha and an Indian Semantic System, National Seminar on Philosophy of Language, Rabhindrabharti University, Kolkata, February, 2012.
110. B. Bhushan, Revisiting mental health in the light of brain-behaviour research, The Brian Matters-Implications of Brian Research for Mental Health, UGC National Workshop, Hyderabad, August, 2011.
111. B. Bhushan, Culturally prevailing spiritual practices and modern methods of behavioural investigations: Reflections from India, International Conference on Consciousness, Mind and Body: Eastern and Western Perspectives, Brazil, August, 2011.
112. B. Bhushan, Studying perceptual differences between designer and non-designer: A visual identity design problem, 6th International Conference on design principles and practices, University of California, Los Angeles, January, 2012.
113. B. Bhushan, The 2004 tsunami: Lessons for mental health professionals, Eco-social justice: Issues, challenges, and ways forward, Austalia, November, 2011.
114. Lilavati Krishnan, Regret in Indian Samples: The Role of Majority/Minority Information, Action/Inaction, and Margin of Loss, International Association of Cross-Cultural Psychology, Regional Conference, Istanbul, Turkey, June, 2011.
115. Lilavati Krishnan, Seniority as an Allocation Rule in Reward Allocation: An Indian Study, Symposium: Justice concerns and social relations: Some emerging issues, 9th Biennial Conference of the Asian Association of Social Psychology, Kunming, China, July, 2011.
116. Lilavati Krishnan, Humanities and Social Sciences in Institutes of Technology - Some views regarding the HSS curriculum, International Conference on the Role of Humanities and Social Sciences in Hilistic Development of FutureTechnocrats, Jaypee University of Information Technology, Solan, Himachal Pradesh, September, 2011.
117. Lilavati Krishnan, Role of Rationale and Ethnics in Social Science Research, Workshop on Rationale, Methodology and Ethics in Home Economics and Social Sciences, Indore, February, 2012.
118. A. K. Sharma, Level and Causes of Infrant Mortality in a Peri-urban Setting: A Comparative Study of Women with and without infant deaths, National Seminar on Development and Population Stablization in EAG states of India, University of Rajasthan, April, 2011.

119. A. K. Sharma, Training Needs Assessment (TNA) of Elected Representatives of Panchayati Raj Institutions (PRI) in India, Two Day Workshop on Training Needs Assessment (TNA), Haryana Institute of Rural Development, Karnal, July, 2011.
120. A. K. Sharma, Developing Web-based and Video-based Courses under NPTEL, National Workshop on the Use & Deployment of Web & Video Courses, IIT Delhi, July, 2011.
121. A. K. Sharma, Socio-cultural Aspects of Palliative Care: A Study of Palliative Care Delivery in Kerala, 19th International Conference of Indian Association of Palliative Care, Kolkata, February, 2012.
122. A. K. Sharma, Population and Environment, National Seminar on Climate Change: Science and Society, IIT Kanpur, March, 2012.
123. A. K. Sharma, Development in the Light of Works of Banwasi Sewa Ashram: An NGO in Sonbhadra, Brainstorming Workshop on Socionity, IIIT Hyderabad, November, 2011.
124. A. K. Sharma, Defining Minorities in India, Seminar on Understanding Minorities in India and Canada, BHU, Varanasi, February, 2012.
125. A. Chakrabarti, Sociology of Sectarianism and the Question of Religious Plurality: Towards a Conceptual Framework, National Seminar on Culture of Religion and Trans-cultural Religion, Christ Church College, Kanpur, February, 2012.
126. A. Chakrabarti, Sacred Traditions, Sectarian Identity and the Question of secularism in Contemporary India, Rethinking Religion in India: European Representations and Indian Responses, University of Pardubice, Czech Republic, October, 2011.
127. A. Chakrabarti, Religious Movements, the Question of Sanskritization/Islamization and Religious Identity, Annual Conference of the Indian Sociological Society, JNU, New Delhi, December, 2011.
128. Binay Kumar Pattnaik, ICT Revolution and Knowledge Workers of India: Explorations in Sociology of Work, International Conference on Democratic Participation in Employment and Societal Regulation, Ecole Normal Superior de Cachan, Paris, June, 2011.

Industrial & Management Engineering

129. Sunil Agrawal, Raghu Nandan Sengupta, Kripa Shanker and Narayan Kumar, Characterization of Upstream Demand Processes in a Supply Chain: A Simulation Approach, World Academy of Science, Engineering and Technology 60, Bangkok, 2011.
130. Raghu Nandan Sengupta, Siddharth Sahoo, Reliability Based Portfolio Optimization for Extreme Value Asset Returns under Asymmetric Loss Functions, 9th International Conference on Computational Management Science, Imperial College London, UK, April 2011.
131. A.K.Mittal, Smita Pandey, N K Sharma, Reflections on Measuring quality of education and visionary leadership, VLFM Learning convention, Mumbai, Feb 2012.
132. A K Mittal, Smita Pandey, N K Sharma, Information search behaviour of Individual Investors for Equity share purchase decision ; an exploratory investigation, IABE, Barcelona, June 2011.

133. A K Mittal, Smita Pandey, N K Sharma, Quality of Education –measurement issues, ORSI, Calcutta, Jan 2012.
134. A K Mittal, Smita Pandey, N K Sharma, Quality of Education in context of learning Operations Research, IABE, Las vegas, Oct 2011.
135. Veena Bansal, A K Mittal, Mining patent database to build technology roadmap, Proceedings of International Conference on Management of Technology- Step to Sustainable Production, Croatia, June, 2011.
136. Anoop Singh, Market-Based Financing for Clean Energy Projects: An Assessment of Renewable Energy Certificates and Energy Saving Certificates, Asia Clean Energy Forum, Manila, June 2011.
137. Anoop Singh, Maureen L. Cropper, Alexander Limonov, Kabir Malik, Estimating the Impact of Restructuring on Electricity Generation Efficiency: The Case of the Indian Thermal Power Sector, Association of Environmental and Resource Economists Annual Conference, Seattle, 2011.
138. Anoop Singh, Saurabh Sharma and M S Kalra, Economics of Nuclear Power: Modeling and Scenario Analysis for LWR Technology In India, GLOBAL 2011 International Conference on Advanced Nuclear Fuel Cycle and Related Nuclear System, Nagoya, Japan, Sept. 2011.
139. Anoop Singh, Economics of Regulation for Power Sector, 4th Capacity Building Program for staff of Electricity Regulatory Commissions from August 23-28, 2010, IIT Kanpur, July 2011.
140. Anoop Singh, Frontiers of Power Sector Regulation: International Experience, 4th Capacity Building Program for staff of Electricity Regulatory Commissions from August 23-28, 2010, IIT Kanpur, July 2011.

Materials Science and Engineering

141. A. Garg, S. Mukherjee, R. Gupta, Temperature Dependent Investigations on Single Crystal Gallium Ferrite Using X-ray Diffraction and Raman Microscopy APS March Meeting, American Physical Society, Boston, 2011.
142. A. Garg, Amritendu Roy, Sushil Auluck, Rajendra Prasad, Effect of Cation Disorder on Electronic Structures and Optical Properties of Magnetoelectric Gallium Ferrite: A First-principles Study, Oral Presentation in American Physical Society Meeting, American Physical Society, Boston, 2011.
143. A. Garg, Somdutta Mukherjee, Rajeev Gupta, Low temperature spin glass transition in Gallium ferrite single crystals, Poster Presentation in American Physical Society Meeting, Boston, 2011.
144. A. Garg, Harsh Trivedi, Deepa Singh, Rajeev Gupta, Enhanced ferromagnetism in co-doped BiFeO3 ceramics, Poster Presentation in American Physical Society Meeting, Boston, 2011.
145. A. Garg, Yogesh Sharma, Somdutta Mukherjee, Rajeev Gupta, Magnetoelastic coupling in doped multiferroic YCrO3, Poster Presentation in American Physical Society Meeting, Boston, 2011.
146. A. Garg, Somdutta Mukherjee, Rajeev Gupta, Temperature Dependent Investigations on Single Crystal Gallium Ferrite using X-ray Diffraction and Raman Microscopy, American Physical Society Meeting, Dallas, March 2011.

147. A. Garg, Somdutta Mukherjee, Vishal Ranjan, Rajeev Gupta, Structural and Magnetic studies on polycrystalline Ga2-xFexO3, International Conference on Materials for Advanced Technologies, Singapore, June 2011.
148. A. Roy, Ashish Garg, Rajendra Prasad & Sushil Auluck, Structural, Electrical & Magnetic Properties of Multiferroic SrTiO3/BiFeO3 Superlattice, International Conference on Materials for Advanced Technologies, Singapore, June 2011.
149. Kantesh Balani, V. Kumar, R. Shekhar, Govind, Effect of hot rolling on microstructure and texture evolution of Mg-Li based alloy, Materials Science Forum, 2011.
150. Kantesh Balani, V. Kumar, R. Balasubramaniam, R. Shekhar, Microstructure and texture evolution during hot rolling of Mg-9Li-7Al-1Sn alloy for aerospace application, Materials Science Forum, 2012.
151. Kantesh Balani, A. K. Dubey and B. Basu, Enhanced cellular response on Hydroxyapatite-BaTiO3 composite: Material for bone application, International Science Congress (ISC-2011) Meeting, MRSCPS, Indore, MP, Dec. 24-25, 2011.
152. Kantesh Balani, S. Ariharan, A. Keshri, A. Agarwal, Role of Yttria Stabilized Zirconia on Fracture Toughness of Plasma Sprayed Aluminum Oxide Composite Coatings, 2012 TMS Annual Meeting & Exhibition, Orlando, FL, USA, Mar. 11-15, 2012.
153. Kantesh Balani, A. Gupta, S Sharma, doped 8 mol% yttria stabilized zirconia nanoccrystalline electrolyte material for enhancement in ionic conductivity and low-temperature operation for Solid Oxide Fuel Cells, ICAMMP-2011 (Internationl Conference on Advances in Materials and Materials Processing), IIT Kharagpur, Dec. 9-11, 2011.
154. Kantesh Balani, A. Gupta, S. Omar, Ceria doped 8 mol% yttria stabilized zirconia nanocomposite electrolyte for enhanced ionic conductivity and low-temperature operation of Solid Oxide Fuel Cells, 65th Annual Technical Meeting (ATM) of the Indian Institute of Metals (IIM), Hyderabad, India, Nov. 15-16, 2011.
155. Kantesh Balani, Md. A. F. Afzal, P. Kesarwani, K. M. Reddy, S. Kalmodia, B. Basu, Functionally graded hydroxyapatite-alumina-zirconia, MS&T 2011, Columbus Ohio, USA, Oct. 14-18, 2011.
156. Kantesh Balani, V. Kumar, R. Shekhar, Govind, Effect of hot rolling on microstructure and texture evolution of Mg-Li alloy, 5th Light Metals Technology Conference, Luneburg, Germany, 19-22 July, 2011.
157. Md. A. F. Afzal, Kantesh Balani, P. Kesarwani, K. M. Reddy, S. Kalmodia, B. Basu, Functionally Stepped Hydroxyapatite-Alumina-Zirconia: Potential Bone-Implant, Bio2011, Kolkata, India, Jul. 21-23, 2011.
158. Dipak Mazumdar, Academia, Research and Industry Synergy: an overview of the national scenario vis a vis the role of IIT Kanpur Invited Paper, Procd., ICS-2012, Dresden, Germany In Press, 2012.
159. S. Shekhar, S. Abolghashem, S. Basu, J. Cai, M. Ravi Shankar, Interactive Effects of Strain, Strain-rate and Temperature on Microstructure Evolution in High Rate Severe Plastic Deformation, ICOTOM 2012, Mumbai, India, 2012.
160. Gouthama, S. Giribaskar, K. S. Suresh, and Satyam Suwas, Evolution of Microstructure and Crystallographic Texture in AA2014 Aluminium Alloy during Equal Channel Angular Extrusion, ICOTOM 2012, Mumbai, India, 2012.

161. Gouthama, A.P. Murugesan, S. Giribaskar, Metallographic Studies on Deformation Microstructures of ECAE Processed AA2014 Aluminium Alloy, ICOTOM 2012, Mumbai, India, 2012.
162. Gouthama, Wahdat Ullaha, Ultrafine Grained Microstructure in Al-Cu-Si Alloy Obtained by Accumulative Roll Bonding Process, Materials Science Forum, 2012.
163. Gouthama, J. Bhagyaraj, Venkata Ramaiah, C. N. Saikrishna and S. K. Bhaumik, TEM Studies on the Microstructural Changes during Thermomechanical Cycling of NiTi Shape Memory Alloy Wire, Materials Science Forum, 2012.
164. Gouthama, Bollineni Yugesh, A Cross-sectional TEM Study of Abrasive Water Jet Cut Surface, Materials Science Forum, 2012.
165. Gouthama, S. Giribaskar and R. Prasad, Ultra-Fine Grained Al-SiC Metal Matrix Composite by Rotary Swaging Process, Materials Science Forum, 2012.
166. Gouthama, Vipin Jain, Wei Yuan, R. S. Mishra and Anil K. Gupta, Directional anisotropy in the mechanical behavior of friction stir processed and aged AZ91 alloy, ICOTOM 2012, Mumbai, India, 2012.
167. Gouthama, Sivagnanapalani, and M Sujata, Elemental Distribution Characteristics Across γ-TiAl:TiAlV Diffusion Bond Interface, Materials Science Forum, 2012.
168. Gouthama, S. Mahanty and Tapendu Mandal, Effect of Environment on the Surface Modification by Pulse Laser Irradiation of Al-Si/SiCP MMCs Materials Science, Materials Science Forum, 2012.
169. Gouthama, Giribaskar, and R. Prasad, Dynamic Recrystallization in Al-Li based Alloy during Equal Channel Angular Extrusion S.Materials Science, ICOTOM 2012, Mumbai, India, 2012.
170. Monica Katiyar, Arjun Singh, Saumen Mandal, Vandana Singh, Ashish Garg, Ink jet printed PEDOT:PSS for organic devices, XVIth International workshop on the physics of Semiconductor Devices (IWPSD -2011), IIT Kanpur, December 19-22, 2011.
171. Monica Katiyar, Gangadhar Purohit, Manish Shankar, Deepak, S. Dhamodaran, Fabrication of nano-gap electrodes using a focused ion beam for measuring electrical properties of molecular scale transistors, XVIth International workshop on the physics of Semiconductor Devices (IWPSD -2011), IIT Kanpur, December 19-22, 2011.
172. Monica Katiyar, Asit Prakash, White polymer light emitting diode using blend of fluorescent polymers, XVIth International workshop on the physics of Semiconductor Devices (IWPSD -2011), IIT Kanpur, December 19-22, 2011.
173. Monica Katiyar, Shivam Rastogi, Kurunthu Dharmalingam, and Ashish Garg, Understanding Degradation Mechanism of Bulk Heterojunction Organic Photovoltaic Devices, XVIth International workshop on the physics of Semiconductor Devices (IWPSD -2011), IIT Kanpur, December 19-22, 2011.
174. K. Mondal, S. Sharma, S. Sangal, High Strength Carbide-free Bainitic Steels, ICAMMP 2011, IIT Kharagpur, 9-11th December 2011.
175. K. Mondal, S. Sarkar, C. Chattopadhyay, A. Barman, A. P. Moon, S. Sangal, Simulated isothermal transformation kinetics from non-isothermal transformation data, ICAMMP 2011, IIT Kharagpur, 9-11th December 2011.
176. K. Mondal, C. Chattopadhyay, S. Sangal, On the Preferred Growth Direction of Primary Dendrite, ISMANAM 2011, Gijon Spain, 2011.

177. K. Mondal, Crystallization of Metallic Glass, Indian Science Congress, January 3-7, 2012.

Mechanical Engineering

178. D. K. Singh, Optimum Threshold for Digital Holographic Particle Field Characterization, Digital Holography and Three Dimensional Imaging Conference, OSA, University of Tokyo, Japan, May 9-11 (2011).
179. Anurag Gupta, Evolution of incompatibility during growth, Society of Natural Philosophy meeting, East Lansing, MI, USA, October, 2011.
180. Akhilendra Pratap Singh, An Experimental Investigation of Combustion, Emissions and Performance of a Diesel Fuelled HCCI Engine, SAE INDIA International Mobility Conference-2012, New Delhi, India, January 2012.
181. Jitendra Gangwar, Comparative Study of PM Mass and Chemical Composition from Diesel and Biodiesel Fuelled CRDI SUV Engine, SAE INDIA International Mobility Conference-2012, New Delhi, India, January 2012.
182. Pravesh Chandra Shukla, Macroscopic Spray Parameters of Karanja Oil and Blends: A Comparative Study, SAE INDIA International Mobility Conference-2012, New Delhi, India, January 2012.
183. Avinash Kumar Agarwal, Oxidation Stability, Engine Performance and Emissions Investigations of Karanja, Neem and Jatropha Biodiesel and Blends, SAE World Congress 2011, Detroit, USA, April 2011.
184. Avinash Kumar Agarwal, The Secondary Organic Carbon (SOC) Formation from a CRDI Automotive Diesel Engine Exhaust, SAE World Congress 2011, Detroit, USA, April 2011.
185. Avinash Kumar Agarwal, Experimental Investigation on Intake Air Temperature and Air-Fuel Ratio Dependence of Random and Deterministic Cyclic Variability in a Homogeneous Charge Compression Ignition Engine, SAE World Congress 2011, Detroit, USA, April 2011.
186. Avinash K. Agarwal, Oxidation Stability of Biodiesel Produced from Non-Edible Oils of African Origin, SAE World Congress 2011, Detroit, USA, April 2011.
187. P. S. Ghoshdastidar, Simulation of Mixed Convection Air Cooling of Protruding Heat Sources Mounted on One Side of a Vertical Channel, ASME 2011 International Mechanical Engineering Congress and Exposition, Denver, Colorado, USA, November 11-17, 2011.
188. P.S.Ghoshdastidar, Coupled Map Lattice Simulation of Heat Flux Controlled Atmospheric Saturated Pool Boiling of Water and Nanofluids on a Flat Plate, 21st National & 10th ISHMT-ASME Heat and Mass Transfer Conference, IIT Madras, December 27-30, 2011.
189. Shantanu Bhattacharya, Plasma Modification of Polymer Surfaces and Their Utility in Building Biomedical Microdevices, 8th International Symposium on Polymer Surface Modification, Danbury, Connecticut, Danbury, Connecticut, USA, June, 2011.
190. S.K. Choudhury, A Regression Model for Force and Surface Roughness, CIRP HPC-2012, Zurich, Switzerland, June, 2012.

191. Arun K Saha, Control of vortex shedding past a square cylinder using splitter plate at low Reynolds number, 38th National and 4th International Conference on Fluid Mechanics and Fluid Power, Bhopal, December 2011.
192. Sourayon Chanda, Numerical Simulation of Natural Convection in a Pin-Fin Heat Exchanger, 38th National and 4th International Conference on Fluid Mechanics and Fluid Power, Bhopal, December 2011.
193. P. Venkitanarayanan, Fracture in Layered Plates having Property Mismatch across the Crack Front, SEM Annual Conference and Exposition on Experimental and Applied Mechanics, Uncasville, CT, USA, USA, JUNE, 2011.
194. C. K. Desai, Measurement of Cohesive Parameters of Crazes in Polystyrene Film, SEM Annual Conference and Exposition on Experimental and Applied Mechanics, Uncasville, CT, USA, USA, JUNE, 2011.

Physics

195. Abhishek Chowdhury, Defect induced controlled modification of localized subsurface electrical properties using multiple focused ion beamlets: Experiments and Simulation, India Australia International Workshop on Nanotechnology In Materials and Energy Application (IAWNT 2011), Jadavpur University, Kolkata, December 29-31, 2011.
196. Samit Paul, Physics of Capillary Guiding of Focused Ion Beams, 26th National Symposium on Plasma Science and Technology (PLASMA 2011), Birla Institute of Technology (BIT), Patna, December 20-23, 2011.
197. Debaprasad Sahu, A Comparative Study of Negative Ion Parameters in Pulsed and Continuous Wave Models in a Microwave Driven Upper Hybrid Resonance Plasma Source, 26th National Symposium on Plasma Science and Technology (PLASMA 2011), Birla Institute of Technology (BIT), Patna, December 20-23, 2011.
198. Shail Pandey, Observation of Electron Plasma Wave s inside Large Amplitude Electromagnetic Pulses in a Temporally Growing Plasma, 26th National Symposium on Plasma Science and Technology (PLASMA 2011), Birla Institute of Technology (BIT), Patna, December 20-23, 2011.
199. S. Bhattacharjee, New frontiers in nanoscience and technology using multi element focused ion beams (MEFIB) from compact microwave driven plasmas, 14th International conference on Ion Sources (ICIS 2011), Giardini Naxos, ITALY, September 12 - 16, 2011.
200. Debaprasad Sahu, Optimization of negative ion current and density in a compact microwave driven upper hybrid resonance multicusp plasma source, 14th International conference on Ion Sources (ICIS 2011), Giardini Naxos, ITALY, September 12 - 16, 2011.
201. Sudeep Bhattacharjee, Micro and Nano Focused Ion Beams for New Physics and Applications, Orientation Workshop on Radiation Science and Applications, Christ Church College, Kanpur, February 10-11, 2012.
202. Sudeep Bhattacharjee, Nanoscale Physics and Applications Using Multi Element Focused Ion Beams, 1st Annual World Congress in Nano Science and Technology, Dalian, CHINA, October 23-26, 2011.

INVITED TALKS DELIVERED

Aerospace Engineering

1. Debopam Das, Flow Visualization and Particle Image Velocimetry, NIT Calicut, Lectures in workshop, Calicut.
2. D. P. Mishra, Micro-combustion, Department of Mechanical Engineering, IIT, Gandhinagar.
3. D. P. Mishra, advances in Combustion, NCVET 2012, Ahmadabad.

Biological Science and Bioengineering

4. R. Sankararamakrishnan, Flexible peptide ligands in target recognition: Molecular dynamics simulations of GPCR peptide hormones and BH3 peptides, Indo-UK Workshop on Trends in Protein Biophysics: From In silico Molecules to In vivo and vitro Proteins, University of Warwick, U. K. May 2011.
5. R. Sankararamakrishnan, Bioinformatics in Education & Research: Challenges for the next decade, Seminar on Recent Trends in Biosciences and Bioengineering to Celebrate National Education Day, CSJM University, Kanpur, Nov. 2011.
6. R. Sankararamakrishnan, Plasticity of hydrophobic grooves in anti-apoptotic Bcl-2 proteins, International Interdisciplinary Science Conference 2011 On Bioinformatics: An interface between Computer Science & Biology, Jamia Millia Islamia, New Delhi. Nov. 2011.
7. R. Sankararamakrishnan, Stability and dynamics of non-covalent interactions in protein structures, International Conference on Mathematical Biology, Indian Institute of Science, Bangalore. July 2011.
8. R. Sankararamakrishnan, Predicting the Function of Biomolecules: Available Bioinformatics Tools & Their Applications, National Workshop on Bioinformatics Tools and Their Applications. National Bioinformatics Infrastructure Facility of DBT, D. G. College, Kanpur, Nov. 2011.
9. R. Sankararamakrishnan, Computer Simulation Studies of Bcl-2 Family of Proteins: HPC Application in Cancer Drug Discovery, Symposium on HPC Applications. IIT-Kanpur, Mar. 2012.
10. Amitabha Bandyopadhyay, Precise restriction of BMP signaling is essential for articular cartilage formation, Indian Society of Developmental Biology, Meeting presentation, Jaipur.
11. Amitabha Bandyopadhyay, BMP signaling in bone and articular cartilage development, TIFR, Pune, Developmental Biology Talk Series, Pune.
12. Amitabha Bandyopadhyay, Precise restriction of BMP signaling is essential for articular cartilage formation, SCIMST, Trivandrum, Trivandrum.
13. Ashok Kumar, Supermacroporous Cryogels for Biomedical and Biotechnological Applications, Biosep company & COBIK Center, Collaboration, Ljubljana, Slovenia, 21st December 2011.
14. Ashok Kumar, Bio-Mimetic Materials for Biomedical Research, Institute of Microbial Technology (IMTECH), Chandigarh, Chandigarh, 14th March, 2012.

15. Ashok Kumar, Tissue Engineering: Where Medicine and Engineering Merge, Postgraduate Institute of Medical Science and Research (PGI), Chandigarh, Chandigarh, 15th March, 2012.
16. Ashok Kumar, Bioengineering: An Emerging Area of Education & Research, Indian Institute of Technology Ropar, India, Ropar, Chandigarh, 14th, March, 2012.
17. Ashok Kumar, New Design of Biomaterials for Biomedical Applications, Jammu University, Jammu, 18th Feb., 2012.
18. Jonaki Sen, Topographic maps: connecting the retina to the brain, Indian Society of Developmental Biologists, Annual meeting, Jaipur, India.
19. Jonaki Sen, Connecting the retina to the brain, Chhatrapati Shahu Ji Maharaj University, Kanpur, Kanpur, India.
20. K. Subramaniam, Nuclear export of mRNAs: an unexpected novel function for the germ cell protein PUF-8, Annual Meeting of the Society of Biological Chemists (India), Central Institute for Aromatic and Medicinal Plants, Lucknow.
21. K. Subramaniam, Caenorhabditis elegans as a model nematode for studies on plant-parasitic nematodes, Annual Meeting of the Nematological Society of India, Thiruvananthapuram.
22. K. Subramaniam, Free-living to the rescue of parasite biology: the usefulness of Caenorhabditis elegans for studies on parasitic nematodes, Fifth Symposium on Molecular Medicine, Special Centre for Molecular Medicine, Jawaharlal Nehru University, New Delhi.
23. S. Ganesh, Cause and consequence of polyglucosan bodies in Lafora neurodegeneratrive disorder, Symposium on Population Genetics and Chromatin Dynamics, Banaras Hindu University, Varanasi (January 22-23, 2012).
24. S. Ganesh, Cause and consequence of polyglucosan bodies in Lafora neurodegeneratrive disorder, Symposium on Frontiers in Neuroscience & Genetics, Indian Institute of Chemical Biology, Kolkata (December 23, 2011).
25. D. S. Katti, Surface modification of poly (lactide-co-glycolide) microfibers for improved protein interactions, Government org., IMMT Bhubaneswar.
26. D. S. Katti, Recapitulating tumor microenvironment in biomaterial based 3D in-vitro tumor models, Government org., Hyderabad.
27. D. S. Katti, Carbon nanostructures: next generation of cancer therapeutics/Co-therapeutics, Government org., Amrita University, Kochi.
28. Balaji Prakash, Catalytic mechanisms in GlmU deciphered by structural studies, OSDD; CSIR New Delhi, New Delhi.
29. Balaji Prakash, Structure-functional relationships in a novel set of GTP binding proteins, BITs pliani Hyderabad, Hyderabad.
30. Balaji Prakash, Structural basis governing GTP hydrolysis mechanisms, Guha Research Conference, Jodhpur.
31. Balaji Prakash, A novel Magnesium mediated product release mechanism revealed by structural studies on GlmU, Govt. Holkar Science College, Indore.
32. Balaji Prakash, A novel Magnesium mediated product release mechanism revealed by structural studies on GlmU, University of Delhi, New Delhi.
33. Balaji Prakash, Structure-functional relationships in a novel set of GTP binding proteins, JNCSAR, Bangalore.

Chemical Engineering

34. Santosh K Gupta, Polymerization Reaction Engineering: a Personal Journey, University of Akron, Polymer Engineering Dept., Akron OH, USA, University of Akron, Polymer Engineering Dept., Akron OH, USA.
35. Santosh K Gupta, Multi-objective Optimization (MOO) using Biomimetic Adaptations of Genetic Algorithm (GA), University of Western Ontario, London, ON, Canada, University of Western Ontario, London, ON, Canada.
36. A. Ghatak, Easy Puncturing of Soft Gels with Multi-tip Needles, Nano-indentation conference, Leibnitz Institute for New Materials, Saarbrucken, Germany.
37. A. Ghatak, Adaptive adhesion via subsurface network of fluid-filled micro-channel, Gordon Research Conference on Adhesion Science, USA.
38. A. Ghatak, Two stories on fracture and adhesion with soft gels, School of Engineering and Applied Sciences, Harvard University, School of Engineering and Applied Sciences, Harvard University.
39. PK Bhattacharya, Pervaporation, Potential Membrane Technology for Typical Liquid Mixtures Separations, THERMIC, Dr. Ambedkar Institute of Technology for Handicapped U.P., Kanpur.
40. PK Bhattacharya, Pervaporation, Potential Membrane Technology for Typical Liquid Mixtures Separations, Pt. Madan Mohan Malviya at Chemical Engineering Department, BHU, Pt. Madan Mohan Malviya at Chemical Engineering Department, BHU.
41. PK Bhattacharya, Organic-aqueous/organic-organic liquid mixtures separations through pervaporation: emerging membrane based technologies, International Conference on Membranes: Environmental and Biological Applications, Centre for Environment Education and Technology (CEET), Kottayam, Kerala.
42. Nishith Verma, Lattice Boltzmann modeling of liquid-vapor two phase flow, Department of Physics, University of Saarbrucken, Germany, University of Saarbrucken, Germany.
43. G. Deo, Effect of Iron on Supported and Unsupported Nickel and Cobalt Catalysts, 2nd Indo German Workshop on Advances in Reaction and Separation Processes, Bad Herrenalb, Germany.
44. Joshi Y. M., Effective time theory and prediction of long time rheological behavior in soft glassy materials, Department of Polymer Engineering, University of Akron, Akron, US.
45. Joshi Y. M., Effective time theory and prediction of long time rheological behavior in soft glassy materials, Southern Clay Products, Louiseville, US.
46. Joshi Y. M., Structure and rheology of aqueous Laponite suspension, Southern Clay Porducts, Louiseville, US.
47. Singh JK, Surface phase transition of patchy particles, Indo-US, New Delhi.
48. Singh JK, Molecular simulations for engineering applications, HPC Users' Meet, Kanpur.
49. Singh JK, Computational Nanoscience and Engineering Applications, GM India, Bangalore.
50. Siddhartha Panda, Electrolyte Insulator Semiconductor based Microfluidic Biosensor for Early Disease Detection, Department of Electrical Engineering, IIT Bombay, IIT Bombay.

51. Siddhartha Panda, Organic Semiconductor Based Chemical Sensors, Workshop on Emerging Trends in Carbon Nanotubes, IIT Kanpur.
52. Siddhartha Panda, Silicon Microfabrication, Deep Trench Plasma Etch, Workshop on Micro and Nano Fabrication, Kanpur.
53. Siddhartha Panda, Nanocoatings in Microchannels, Effects on Fluid Flow, National Conference on Nanoscience and Nanotechnology, Aligarh Muslim University.
54. R. Pala, Design of photoelectrochemical systems using non-native nanostructures, BARC, Mumbai.
55. R. Pala, Design of photoelectrochemical systems using non-native nanostructures, IIT-M, Chennai.
56. P. A. Apte, Fundamentals of thermodynamics, Department of Chemical Engineering, VNIT Nagpur, Nagpur.
57. R. Pala, Design of photoelectrochemical systems using non-native nanostructures, CECRI, Karaikudi.
58. Ashutosh Sharma, Self-organized Meso-Fabrication and Functionalities in Highly Confined Soft Materials, Tata Institute of Fundamental Research (Mumbai), Mumbai.
59. Ashutosh Sharma, Self-organized Meso-Fabrication and Functionalities in Highly Confined Soft Materials, National Physical Laboratory, New Delhi, New Delhi.
60. D. Kunzru, Monolith Reactors for Heterogeneous Reactions, Dept. of Chemical Engineering, Institute of Chemical Technology, Mumbai.

Chemistry

61. J. K. Bera, Zing Conference in Coordination Chemistry, Mexico.
62. J. K. Bera, 5th EuCheMS NLigands Conference, Spain.
63. J. K. Bera, XIX European Conference on Organometallic Chemistry, France.
64. J. K. Bera, CRSI Bronze medal lecture, Trivandrum.
65. J. K. Bera, 3rd Indo-German Symposium in Chemistry, IIT Bombay.
66. J. K. Bera, Indo-Europe symposium: Frontiers of Chemistry, NISER, Bhubaneswar.
67. J. K. Bera, CRSI-RSC Joint Symposium, Bhubaneswar.
68. A. Chandra, Vibrational spectral diffusion and molecular motion in supercritical water and aqueous solutions, La Grande Motte (University of Montepillier), France.
69. A. Chandra, Molecular simulations of liquids and interfaces: An HPC activity at IITK, IISER, Bhopal.
70. A. Chandra, Time dependent vibrational spectroscopy of supercritical water and aqueous solutions, NISER Bhubaneswar.
71. A. Chandra, Dynamical structure of water, Presidency University, Kolkata.
72. A. Chandra, Chemical dynamics in aqueous media: Hydrogen bond fluctuations and vibrational spectral diffusion, Bhabha Atomic Research Centre, Mumbai.
73. A. Chandra, Chemical dynamics in aqueous media, Jadavpur University, Kolkata.
74. A. Chandra, HPC at IIT Kanpur, IIT Kanpur.
75. A. Chandra, Time dependent vibrational spectroscopy of normal and supercritical water, University of Burdwan, West Bengal.
76. A. Chandra, 32nd International Conference on Solution Chemistry, La Grande Motte, Montpellier, France.

77. A. Chandra, Indo-European Symposium on Frontiers of Chemistry, NISER, Bhubaneswar.
78. A. Chandra, Celebration of International Year of Chemistry – 2011, Presidency University, Kolkata.
79. A. Chandra, Trombay Symposium on Radiation and Photochemistry, BARC, Mumbai.
80. A. Chandra, National Seminar on Recent Advances in Chemistry, Jadavpur University, Kolkata.
81. A. Chandra, National Seminar on Recent Advances in Chemical Sciences, University of Burdwan.
82. A. Chandra, New Frontiers: Shifting Trends in the Global Research Landscape and their Impact on Researchers' Career Patterns, New Delhi.
83. V. Chandrasekhar, Single Molecule Magnets: Recent Advances, SRM University, Chennai.
84. V. Chandrasekhar, Phosphorus–Supported Ligands: Versatile Coordination Platforms for the Assembly of Molecular Materials, 13th CRSI National Symposium in Chemistry, Bhubaneshwar.
85. V. Chandrasekhar, Single-Molecule Magnets: Synthetic Strategies, Functional materials Conference, Sweden.
86. V. Chandrasekhar, Chemistry and Polymers – A Story of the Metathesis Reaction Advances in Chemical Sciences and its impact on our lives, Jadavpur University, Kolkata.
87. V. Chandrasekhar, Phosphorus–Supported Ligands: Versatile Coordination Platforms for the Assembly of Molecular Materials, JNCASR, Bangalore.
88. V. Chandrasekhar, Phosphorus–Supported Ligands: Versatile Coordination Platforms for the Assembly of Molecular Materials, Granada, Spain.
89. V. Chandrasekhar, Phosphorescent Dinuclear Cyclometalated Ir(III) Complexes, Goa.
90. V. Chandrasekhar, Phosphorescent Dinuclear Cyclometalated Ir(III) Complexes, Kolkata.
91. V. Chandrasekhar, Phosphorus–Supported Ligands: Versatile Coordination Platforms for the Assembly of Molecular Materials, Midnapore College, West Bengal.
92. V. Chandrasekhar, Molecules and Materials: Bridging the Gap, IIT, Bombay.
93. V. Chandrasekhar, Ammonia-Borane: An Old Molecule with a New Application, IIT Kanpur.
94. D. Goswami, Co-Chair, OSA, India.
95. J.N. Moorthy, Exploitation of Sterics in the Oxidation Chemistry with IBX and Organocatalysis with Proline, Garhwal University, Srinagar, Uttarakand.
96. J.N. Moorthy, Rational Molecular Design: Control of Photoreactivity, Molecular Self-Assembly and Functional Properties, Indian Institute of Science, Bangalore.
97. J.N. Moorthy, Rational Molecular Design for Amorphous Organic Light Emitting Diodes (OLEDs) and Ordered Functional Mimics of Inorganic Zeolites, CMERI, Durgapur, West Bengal.
98. J.N. Moorthy, Rational Molecular Design for Organocatalysis and Organic Functional Materials, Gurunanak Dev University, Amritsar.

99. J.N. Moorthy, De Novo Approaches to Organic Functional Materials Based on Sterically-Engineered Molecular Systems, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore.
100. J.N. Moorthy, Photochromism: Photochemical Synthesis and Photochemistry of Novel Chromenes, Indo-US Conference on Green Chmistry for Sustainable Future, Dehradun.
101. M.L.N. Rao, Indo-US workshop on Green Chemistry for environments and sustainable development, Dehradun.
102. M.L.N. Rao, 12th Tetrahedron Symposium, Sitges, SPAIN.
103. S.P. Rath, Invited talk in the Department of Inorganic Chemistry, IACS, Kolkata.
104. S.P. Rath, Invited Talk in the National Symposium on Advanced Functional Materials under UGC-CAS Program held on the Department of Chemistry, BHU, Varanasi.
105. S.P. Rath, Invited Talk in Celebration Chemistry@IITK, IIT Kanpur.
106. S.P. Rath, Invited Talk in the workshop on Advances in Bioinorganic and Nano-Chemistry, D.A-V. Post graduate College, Kanpur.
107. S.P. Rath, Invited talk in the Department of Chemistry, IIT Roorkee.
108. S.P. Rath, Invited talk in the Department of Chemistry, IIT Kharagpur.
109. K. Srihari, Semi classical Theory of Dynamical Tunneling, Max-Planck Institute for Physics of Complex Systems, Dresden, Germany.

Civil Engineering

110. M. Sharma, Formation of Atmospheric Organic and Ammonia-Based Inorganic Secondary Aerosols in Fine Mode, India-US Air Quality and Climate Research Workshop, Hyderabad.
111. S. N. Tripathi, Understanding the Heterogeneity in Aerosol Characteristics over the Indo-Gangetic Basin An Observational Portrayal, India-US Air Quality and Climate Research Workshop, Hyderabad.
112. R. Sinha, Himalayan River Systems: Challenges of Fresh Water Supply and Eco-system Management in a Changing Climate Scenario, National Conference on Science of Climate Change and Earth's Sustainability: Issues and Challenges, Lucknow.
113. R. Sinha, Evidence for a Lost River in North-Western India Using an Integrated Approach, National Seminar on Modern and Palaeo Sediments: Implication to Climate, Water Resources and Environmental Changes, New Delhi.
114. R. Sinha, Buried Paleo-Ghaggar Channel Belt Inferred through Resistivity Soundings around Kalibangan Harappan Site, North-Western Rajasthan, India, International Quaternary Association Congress, Bern, Switzerland.
115. M. Sharma, Formation of Atmospheric Organic and Ammonia-Based Inorganic Secondary Aerosols in Fine Mode: An Ambient Air and Environmental Chamber Study, Indo-German Conference on Chemical Processes in the Troposphere, New Delhi.
116. M. Sharma, Weather and Air Quality Modeling Simulations and Their Evaluation: Need and Directions, National Seminar on Interdisciplinary Application of Weather and Climate Computational Perspective, Pune.

117. S. N. Tripathi, Better Predictability with Regional Weather Models: WRF-Chem, National Seminar on Interdisciplinary Application of Weather and Climate Computational Perspective, Pune.
118. Bharat Lohani, Laser Scanning Technologies for Meeting the Challenges of Civil Engineering Projects, ICCE 2012 National Conference, Innovative Challenges in Civil Engineering, Bhatinda.
119. Rajesh Sathiyamoorthy, The Role of Geosynthetics in Waste Containment Systems, National Seminar on Modern Trends and Innovations in Civil Engineering, Jabalpur.
120. M. Sharma, Secondary Inorganic and Organic Aerosols: Making Sense in Indian Atmosphere, Workshop on Atmospheric Chemistry in South Asia: Progress and Emerging Issues, Mohali.
121. M. Sharma, Air Quality Modeling Simulations and Their Evaluation: Needs and Directions, National Seminar on Climate Change and Sustainable Management of Water Resources (CCWR-2012), Visakhapatnam.
122. S. N. Tripathi, Climate Impacts of Aerosols, National Seminar on Climate Change: Science and Society, Kanpur.
123. R. Sinha, River Dynamics in a Large Himalayan River: The Case of the Kosi, India and Nepal, Institute de Globe de Physique, Paris.
124. A. Das, How to build good roads?, Department of Civil Engineering, NIT Durgapur, Durgapur.
125. A. Das, Concrete pavements for low volume roads, A Short Term Training Programme for Engineers of Rural Engineering Service, HBTI, Kanpur.
126. A. Das, Cement concrete pavements, A Short Term Training Programme for Engineers of Rural Engineering Service, HBTI, Kanpur.
127. A. Das, NPTEL course on Advanced Transportation Engineering, National workshop on deployment and use of NPTEL courses, Kanpur.
128. A. Das, How to build good roads?, Fachgebiet StraÎ²enwesen, Technical University of Darmstadt, TU-Darmstadt, Germany.
129. A. Das, Pavement Engineering Research at IIT Kanpur, Fachgebiet StraÎ²enwesen, Technical University of Darmstadt, TU-Darmstadt, Germany.
130. D. Paul, A need to Estimate the Average Chemical Composition of Indian Continental Crust, National Workshop: Goals for Earth Sciences for the Current Decade (2011-2020), University of Hyderabad.
131. T. Gupta, A Panel Study on Personal Exposure to Ambient Air Pollution: Assessing Seasonal Effects, Climate Change: Science and Society, IIT Kanpur.

Electrical Engineering

132. S. Chakrabarti, Synchronized Measurement Technology for Electric Power Systems, Aligarh Muslim University, Symposium on 'Developments in Instrumentation & Control Engineering', Aligarh, India.
133. S. Chakrabarti, Mathematics for Circuit Analysis, PSG College of Technology, Coimbatore, Workshop on Mathematics for Electrical Sciences, Coimbatore, India.
134. S. Chakrabarti, Optimal power flow and State Estimation in Emerging Power Systems, IIT Kanpur, short-term course on 'Operation and management of emerging power system', Kanpur, India.

135. S. Chakrabarti, Synchronized measurement based wide area monitoring of electric power systems, NTNU, Norway, "ICT Empowered Grid" conference, Trondheim, Norway.
136. S. Chakrabarti, Synchrophasor assisted enhanced monitoring of electric power systems, NTNU, Norway, guest lecture, Trondheim, Norway.
137. AK Chaturvedi, Information Theoretic Perspective on Cognitive Radio Networks, Samsung India, IRN meeting on Advances in Communications, Bangalore.
138. AK Chaturvedi, Wireless Communications: An Information Theoretic Perspective, 18th National Conference on Communications, Conference Tutorial, IIT Kharagpur.
139. Aditya K. Jagannatham, QoS for Emerging Wireless Telecom Technologies, Telecom Regulatory Authority of India (TRAI), New Delhi.
140. Aditya K. Jagannatham, LTE/4G Advanced Radio Features, Bharat Sanchar Nigam Limited (BSNL), ALTTC Ghaziabad.
141. K. V. Srivastava, Composite Right/Left Handed Meta-Material Transmission Line and its application in microwave circuits, National Chung Cheng University in June 2011, Chia-Yi, Taiwan.
142. K. V. Srivastava, Meta-material Transmission Lines and its Application to Microwave Circuits, National Conference on Emerging Trends in Electrical and Electronics Engineering (ETEEE-2011) Nov. 2011, KNIT Sultanpur, U.P. India.

Industrial Management and Engineering

143. Varman Rahul, Corporations, land and people, Swaraj Vidyapith, August 27, 2011, Allahabad.
144. Varman, Rahul, Land and community: learning from Cuba, Swaraj Vidyapith, August 28, 2011, Allahabad.
145. Varman, Rahul, On the nature of corporations, Dept. of Mgmt., DEI Dayalbagh, Oct. 11, 2011, Agra.
146. Raghu Nandan Sengupta, Estimation for the multiple regression set up using balanced loss function, Indian School of Business, invited lecture, Hyderabad.
147. Anoop Singh, Regulation and Policy for Development of Renewable Energy Resources, National Conference on "Renewable Energy and Energy Management, Jhansi, Oct 2011.
148. Jayanta Chatterjee, Design for Social Innovation, USID, 9th Annual Conference, Innovation JAM, Auroville, Pondicherry.

Material Science and Engineering

149. Ashish Garg, India-UK Excitonic Solar Cell Meeting, JNCASR, Bangalore.
150. Ashish Garg, Multiferroic Materials, RMIT University, Melbourne, Australia.
151. B. Basu, Spark Plasma Sintering of HA-Ti composite: in Vitro biomineralization and cell culture at the 35th International Conference & Exposition on Advanced Ceramics & Composites (ICACC), held in Daytona Beach, Florida.
152. B. Basu, Electrically Stimulated Enhancement of Cell Proliferation on Ferroelectric-Hydroxyapatite Composites at the 35th International Conference & Exposition on Advanced Ceramics & Composites (ICACC), held in Daytona Beach, Florida.

153. B. Basu, Innovative multi-stage spark plasma sintering to obtain strong and tough ultrafine grained ceramics"; at the 35th International Conference & Exposition on Advanced Ceramics & Composites (ICACC), held in Daytona Beach, Florida.
154. B. Basu, Cytotoxicity and genotoxicity property of Hydroxyapatite-mullite eluates", at the International Symposium on the Safe use of Nanomaterials and Workshop on Nanomaterial Safety: Status, Procedures, Policy and Ethical Concerns, Lucknow.
155. B. Basu, Genotoxicity property of Hydroxyapatite-mullite eluates, at the Indo-Australian meet at IISc, Bangalore.
156. B. Basu, Bridging gap between Materials Science and Biology: An interdisciplinary approach to Design biomaterials; Department of Ceramic Engineering, Banaras Hindu University (BHU), Varanasi.
157. B. Basu, Innovative multi-stage spark plasma sintering to obtain strong and tough ultrafine grained ceramics; Department of Ceramic Engineering, Banaras Hindu University (BHU), Varanasi.
158. B. Basu, Bridging gap between Materials Science and Biology: An interdisciplinary approach to Design biomaterials, Department of Mechanical engineering, Mining and Machinery, Indian School of Mines, ISM, Dhanbad.
159. B. Basu, Indo-US Biomaterials Center; International Biomaterials Symposium Part 1, Society for Biomaterials Symposium Orlando, Florida.
160. B. Basu, Bridging gap between Materials Science and Biology: An interdisciplinary approach to Design biomaterials; Department of Mechanical engineering, Indian Institute of Science, IISc, Bangalore.
161. B. Basu, Bridging gap between Materials Science and Biology: An interdisciplinary approach to Design biomaterials; Department of Biomaterials Science and Tissue Engineering, University College London, UK.
162. B. Basu, Advances in Science, Engineering and Technology (ASET) Colloquium, "Bridging gap between Materials Science and Biology: An interdisciplinary approach to study biocompatibility of some novel biomaterials, Tata Institute of Fundamental Research (TIFR), Mumbai.
163. B. Basu, Bridging gap between Materials Science and Biology: An interdisciplinary approach to study biocompatibility of some novel biomaterials; International Conference on Biomaterials, Implant Devices and Tissue Engineering (BIDTE2012), Rajyalakshmi College of Engineering, Chennai.
164. B. Basu, Design of Biomaterials: where Materials Science meets Biology, Award lecture at MRSI meeting held in Thapar University, Patiala.
165. N. Mahato, D. Lahiri, A. Agarwal, Kantesh Balani, Microstructure and Mechanical Properties of Multistructured Peacock Feathers, presented in 2012 TMS Annual Meeting & Exhibition, Orlando, FL, USA.
166. D.Mazumdar, De-S in torpedo ladles, Bokaro steel Plant, Bokaro.
167. V. Verma, 49th National Metallurgists' Day and 65th Annual Technical Meeting of the Indian Institute of Metals, Hyderabad, India.
168. Shobit Omar, Waqas Bin Najib, Weiwu Chen and Nikolaos Bonanos, Ionic Conductivity Behavior in the Co-doped Sc2O3-ZrO2 Ceramics, Institute of Technology, Banaras Hindu University, Banaras.
169. S. Shekhar, Multifunctional Nanostructured Metals by High-rate Severe Plastic Deformation (HRSPD), General Motors Research Center, Bangalore.

170. S. Shekhar, Machining as a route for Severe Plastic Deformation, UGC-NRC-M Symposium on Mechanical Behavior of Materials, Indian Institute of Science, Bangalore.
171. Gouthama, Insight into the Micro-Mechanisms of Deformation through TEM Analysis of Dislocation Networks and Grain Boundary Characteristics, International Conference on Electron Nanoscopy & XXXII Annual Meeting of EMSI (EM50), Hyderabad.
172. Gouthama, Microscopy and Microanalysis of Nano-Materials, QIP winter school, IIT Kanpur.
173. Gouthama, studies on the microstructural changes during thermo-mechanical cycling of NiTi shape memory wire samples, National Seminar on 'Design and Development of materials for advanced techbnologies, Banaras Hindu University.
174. Gouthama, Electron Microscopy and Microanalysis Relevance to Micro- and Nano-Fabrication, AICTE workshop on MEMS and Nanofabrication, IIT, Kanpur.

Mathematics and Statistics

175. D. Bahuguna, Theory and Methods for Partial Differential Equations, 5 lectures at SSSIHL, February 16-18, 2012, Prashanthinilayam.
176. M. Banerjee Global Dynamics for Prey-Predator Model with Allee Effect, National Conference on Recent Advances in Mathematics, 2012, 02 - 04 Feb. 2012, Lucknow University.
177. M Banerjee, Spatio-temporal pattern formation in ecology - modern perspective, National Meet of Research Scholars in Mathematical Sciences – 2011,12 – 15 October, 2011, IIT Kharagpur.
178. M. Banerjee.,Cold spot, hot spot, labyrinthine and chaotic pattern in a Holling - Tanner prey-predator model, Mathematical and Theoretical Ecology, 2011 (MATE-2011), 19 - 21 Sept., 2011, University of Essex, Colchester, UK.
179. M. Banerjee, Deterministic vs. Stochastic Dynamics in an Interacting Population Model', in International Conference on Mathematical Biology, India, 04 - 07 July, 2011, held at I.I.Sc. Bangalore.
180. M. Banerjee, Deterministic chaos vs. stochastic oscillation in an eco-epidemic model, 8th European Conference on Mathematical and Theoretical Biology, at Uniwersytet Jagiellonski, Krakow, 28 June - 02 July, 2011, Poland.
181. M. Banerjee, Deterministic chaos and stochastic fluctuation in an epidemic model, Department of Mathematics, Bengal Engineering and Science University, May, 2011, West Bengal.
182. Mohua Banerjee, Reasoning with multiple-source systems, International Workshop on Fuzzy Sets, Rough Sets, Uncertainty Analysis and Applications, November, 2011, NIT Durgapur.
183. Mohua Banerjee, On Gödel, Seminar in the Dept. of HSS, October, 2011, IIT Kanpur.
184. Mohua Banerjee, Indiscernibility: a categorical study, Annual Workshop of the Calcutta Logic Circle (CLC), IBRAD, September 2011, Kolkata.
185. S. L. Chavan, Lectures on Linear Dynamics, 4-8 April, 2012, I.I.Sc. Bangalore.
186. S. Dutta, Lectures on operator algebras to graduate students, Workshop in Functional Analysis, CUSAT, (jointly organized by I. M. Sc.), December 5 - 12, 2011, Kochi.

187. S. Ghorai, Penetrative bioconvection in a suspension of isotropically scattering phototactic algae Organization, National conference on Mathematical Modelling and Computer Simulation and a Symposium on Understanding Nature and Society, 30June to 2 July, 2011, BGI Kanpur.
188. M. Gupta. Lectures on advanced topics in Functional Analysis, Department of Mathematics, Kashmir University, Srinagar, May 2011, Kashmir.
189. D. Kundu, On multivariate proportional hazard model, at I.S.I. Mar. 2012, Kolkata.
190. A. K. Lal, On problems related to algebraic connectivity of Graphs Organization, Concordia April 01, 2011, University, Montreal, Canada.
191. N. Misra, Optimal redundancy allocations in systems and comparison of component and system level redundancies, at New Developments in theory and Applications of Statistics: An international conference in honor of Professor Moti Lal Tiku, Department of Statistics, Middle East Technical University, Ankara, May 2-4, 2011, Turkey.
192. N. Misra, Estimation of Entropy of Multivariate Distributions, at National Conference on Advances and Applications in Statistics, Department of Statistics, Panjab University, February 20-21, 2012, Chandigarh.
193. N. Misra, Estimation of Entropy of Multivariate Distributions, XXXI Annual Convention of Indian Society for Probability & Statistics (ISPS) and International Conference on Statistics, at Department of Statistics, University of Science and Technology, December 19-22, 2011, Cochin.
194. N. Misra, Comparison of Reversed Hazard Rates of Two Parallel Systems Comprising of Independent Gamma Components, Workshop on Reliability Theory and Survival Analysis, at Indian Statistical Institute, November 23-25, 2011, Kolkata.
195. N.Misra, Optimal redundancy allocations in systems and comparison of component and system level redundancies, Department of Statistics, July 15, 2011 University of Calicut.
196. N. Misra, Stochastic Comparisons of Poisson and Binomial Distributions with their Mixtures, Department of Mathematics, Indian Institute of Technology, June 3, 2011, Kharagpur.
197. P.Mohanty, Completely bounded L^p multipliers, ICHA, Tianjin, May, 2011, China.
198. P. Mohanty, Vector valued Maximal bilinear operator, Sept 2011, Armenia.
199. P. Mohanty, Origin and development of Fourier Series, Hindu College, Delhi.
200. R. Santhanam, K-theory of F_1 schemes, June 2011, University of Bergen.
201. S. K. Ray, Fourier restriction theorem on Riemannian symmetric spaces of noncompact type, School of Mathematics, TIFR, Mumbai.
202. Shalabh, Talks on Regression Modelling, Forecasting, Model Selection, Goodness of Fit and Measurement Errors, Department of Economics, University of Hyderabad, 2011, Hyderabad.

Mechanical Engineering

203. Anurag Gupta, Evolution of incompatibility during growth, Department Seminar, UCSD, CA, USA.
204. K. Muralidhar, Free And Forced Jets: Experiments And Simulation, FBR Core Design: Current Status and Future Directions, IGCAR Kalpakkam.

205. Shantanu Bhattacharya, Microfluidics for clinical Daignostics and detection, Indo-Japan Seminar, IIT Delhi.
206. Shantanu Bhattacharya, Bionanotechnology, Microfluidics and BioMEMS for Clinical Diagnostics and identification, Workshop on Nanoscience and Nanotechnology, Department of Applied Physics, AMU, Aligarh, AMU, Aligarh.
207. Shantanu Bhattacharya, Microfluidics and BioMEMS research at IITKanpur, University of Texas at Arlington, Nano-Bio seminar, UT Arlington, Dallas, Tx.
208. Shantanu Bhattacharya, Boeing Autonomous vehicle presentation, Presentation made at Boeing Office Delhi to Review team from USA, Gyeongsangbuk-do, South Korea.
209. Shantanu Bhattacharya, BioMEMS research at IIT Kanpur, QIP program on Microfluidics at IIT Guwahati, IIT Guwahati.
210. Shantanu Bhattacharya, BioMEMS and Microfluidics, ISSS-2012, IISC Bangalore.
211. Shantanu Bhattacharya, BioMEMS and Microfluidics, MAMM-2012, CMERI, Durgapur.
212. Wahi P., Regenerative chatter in turning: a system with a time delay, NIT Durgapur, Durgapur.
213. Wahi P., Application of time-delayed feedback for controls: Application to friction induced vibrations, NIT Durgapur, Durgapur.
214. Arun K Saha, Numerical simulation of forced circular jets, HBTI, Kanpur, Kanpur.

Physics

215. Zakir Hossain, Superconductivity, magnetism and charge density wave in Pr-, Eu- and Yb-based Compounds, DCMP&MS TIFR Annual meeting 2011, TIFR, Mumbai.
216. Zakir Hossain, Interplay between superconductivity and magnetism in EuFe2As2, UGC-Sponsored National Seminar on Recent Trends in Physical Sciences at SSKM University, Dumka.
217. Avinash Singh, Magnetic Excitations in Iron Pnictides, International Conference on Physics of Novel and Emerging Materials (ICPNEM - 2011), IACS, Kolkata.
218. Sudeep Bhattacharjee, Micro and Nano Focused Ion Beams for New Physics and Applications, Christ Church College, Kanpur, Christ Church College, Kanpur, (February 10-11, 2012).
219. Sudeep Bhattacharjee, New frontiers in nanoscience and technology using multi element focused ion beams (MEFIB) from compact microwave driven plasmas, 14th International conference on Ion Sources (ICIS 2011), Giardini Naxos, ITALY (September 12 - 16, 2011).
220. Sudeep Bhattacharjee, Nanoscale Physics and Applications Using Multi Element Focused Ion Beams, BIT, Information Research Center of International Talent, SAFEA and China Council for the Promotion of International Trade Dalian Sub-Council, Dalian, CHINA,(October 23-26, 2011).
221. R.Vijaya, Stimulated and spontaneous emission from self-assembled photonic crystals, International conference (May 23-25, 2011), NIT Calicut.
222. R.Vijaya, Fiber lasers for Multi-wavelength, Broadband and Secure data transfer applications, Brain-storming session on Fiber lasers and related technologies (Sept. 5, 2011), RRCAT, Indore.

223. R.Vijaya, Photonic crystals and device design, Workshop on Recent trends in Nanophotonics (Sept 30-Oct.1, 2011), IIT Delhi.
224. R.Vijaya, Photonic band gap structures in the visible range for designing lasers, DAE-BRNS Theme Meeting on Emerging Trends in Applications of Lasers and Accelerators in Nanomaterials (Oct.20-21, 2011), BARC, Mumbai.
225. R.Vijaya, Nonlinear dynamics of Fiber lasers, XXXVI OSI Symposium on Frontiers in Optics and Photonics (Dec 3-5, 2011), IIT Delhi.
226. R.Vijaya, Spontaneous and stimulated emission from self-assembled photonic structures, Indo-US Bilateral workshop on Nanophotonics and Nanoplasmonics (Jan 9-12, 2012), IISc, Bangalore.
227. R.Vijaya, Photonic band gap structures and Device design, NITT SPIE-OSA Student Chapter (Feb. 17, 2012), NIT, Tiruchirappalli.
228. R.Vijaya, Fabrication of photonic crystals, QIP Workshop on micro- and nano-fabrication (Mar. 1, 2012), IIT Kanpur.

OTHER ACTIVITIES

PROFESSIONAL VISITS TO UNIVERSITIES/RESEARCH ORGANIZATIONS / INDUSTRIES

Aerospace Engineering

1. Venkatesan, C, Institute of Technology, Bandung, Feb. 2012.
2. D. P. Mishra, Combustion, Department Mechanical Engineering, IIT, Mumbai.

Biological Sciences and Bioengineering

3. R. Sankararamakrishnan, University of La Reunion, France, Ph. D. thesis Defense, 27th Sep 2011 to 1st Oct 2011.
4. Amitabha Bandyopadhyay, Odense University Hospital, Collaboration visit, Seven days.
5. D. S. Katti, Anna University Chennai, DST PAC meeting, Committee member, 27th-29th June.
6. D. S. Katti, IIST, Thiruvananthapuram, Ph.D. thesis Committee, Ph.D. thesis Committee Member, 1st-7th March, 2012.
7. Balaji Prakash, IISc Bangalore, Collaborative visit; Ph.D. thesis examination, 16th & 17th October 2011.
8. Balaji Prakash, NIT Bhopal, Ph.D. thesis examination, 13th & 14th January 2012.
9. Balaji Prakash, JNU New Delhi, Ph.D. thesis examination, 16th & 17th March 2012.

Chemical Engineering

10. Santosh K. Gupta, University of Western Ontario, London, ON, Canada, Visiting Faculty, Visiting Professor of Chemical Engineering, Summer 2011.
11. P. K. Bhattacharya, 3rd international conference on Chemical Engineering (ICChE-2011), Chairman of Technical Session on Biochemical engineering, Chairman of Technical Session on Biochemical engineering, December 29-30, 2011.
12. P. K. Bhattacharya, 3rd international conference on Chemical Engineering (ICChE-2011), Judge, December 29- 30, 2011.
13. Garg, S, Department of Chemical Engineering, NIT, Durgapur, To give lectures in a DST-SERC course on optimization, , November 2011.

Civil Engineering

14. A. Das, TU-Darmstadt, Germany, Faculty exchange scheme, DAAD-IIT faculty exchange scheme, May 15, 2011 to July 14, 2011.

Electrical Engineering

15. K. V. Srivastava, General Electric (GE), Global Research Centre, Bangalore, Visiting Consultant, May 16, 2011 - June 15, 2011.
16. K. V. Srivastava, National Chung Cheng University, Chia-Yi, Taiwan, Visiting Faculty, June 18-June 25, 2011.

Humanities and Social Sciences

17. P. M. Prasad, Ecole Centrale Nantes (ECN), France, teaching assignment, Visiting Faculty, December 1-15, 2011.
18. P. M. Prasad, Ecole Centrale Nantes (ECN), France, Interaction with colleagues on joint project proposals under Faculty Mobility EMECW India-Lot 13a Fellowship, Visiting Faculty, June 18, 2011 - July 17, 2011.
19. Binay Kumar Pattnaik, UGC Centre for Advanced Study in Sociology, to deliver lectures under CASS UG Lecture Series on (I) Globalization of Science and Technology in Developing Countries: A Sociological Perspective, and (II) Appropriate Technology Movement in India: A Sociological Perspective, Visiting Scholar, January 22-29, 2012.

Industrial Management and Engineering

20. Jayanta Chatterjee, IIT Kharagpur, Workshop, April 2011.
21. Jayanta Chatterjee, Aalto University, Finland, Jury, Product Design Programme, April 2011.
22. Jayanta Chatterjee, Georgetown University, Workshop, May 2011.
23. Jayanta Chatterjee, Jadavpur University, Workshop, June 2011.
24. Jayanta Chatterjee, National Academy of Sciences, USA, Conference, July 2011.
25. Jayanta Chatterjee, NISTADS/CSIR, Seminar, October 2011.
26. Jayanta Chatterjee, L&T, EAIC, Board Meeting, March 2012.

Mechanical Engineering

27. Shantanu Bhattacharya, World Class University Program at Yeungnam University, Daegu, Dae-dong, South Korea, Visiting Scientist, Visiting Scientist, May-2011.
28. Shantanu Bhattacharya, Maruti Suzuki India Limited, Gurgaon, Project Execution, visited in May, June and November 2011.

Mathematics ans Statistics

29. A. K. Lal., Concordia University, Montreal, Canada, Sep 2010 - May 2011.
30. R. Santhanam, University of Bergen, June 2011.
31. Shalabh, Institute of Statistics, Ludwig Maximillians University, Munich, Germany, 2011.
32. A. Anand, 26th Annual Conference, Ramanujan Mathematical Society, University of Allahabad, October 2-4, 2011.
33. Mohua Banerjee, International Workshop on Fuzzy Sets, Rough Sets, Uncertainty Analysis and Applications, NIT Durgapur, November 2011.
34. Mohua Banerjee, Annual Workshop of the Calcutta Logic Circle (CLC), IBRAD, Kolkata, September 2011.
35. Peeyush Chandra, Symposium on Partial differential Equations and Applications, Central Univ. Hyderabad, March 17, 2012.
36. Peeyush Chandra, International Conference on Mathematical & Theoretical Biology, Jan. 23-27, 2012, IISER, Pune.

37. Peeyush Chandra, UGC SAP Conference on Mathematical Modeling and Computer Simulation, ITBHU, March 23-24, 2012.
38. Peeyush Chandra, National Conference on Recent Advances in Mathematics, Lucknow University, Feb 2-4, 2012.
39. Peeyush Chandra, Mathematical & Statistical Techniques and their applications to Science andEngineering, B.B. Ambedkar University, Lucknow, Nov. 26-27, 2011.
40. Peeyush Chandra, National meet of Research Scholars in Mathematical Sciences, I.I.T. Kharagpur, Oct. 12-15, 2011.
41. Peeyush Chandra, Recent Trends in Fluid Mechanics & Optimization Techniques, Rajasthan University, Aug. 6-7, 2011, 15th Prof. P. D. Verma Memorial Lecture.
42. Peeyush Chandra, International Conference on Mathematical Biology, I. I. Sc. Bangalore, July 7, 2011, delivered invited talk and chaired a session.
43. Peeyush Chandra, 15th Annual Conference of Vijnana Parishad of India, DAV College Kanpur, Nov. 4 - 6, 2012.
44. S. L. Chavan, International Workshop on Operator Theory and its Applications, Universidad de Seville, Spain, Delivered a talk 'C*-Algebras Generated by Spherical Hyperexpansions', Jul 2011.
45. S. Dutta, Conference on Harmonic Analysis and Approximations, September 5 - 10, Armenia, Presented a talk 'Completely bounded multipliers on L_p'.
46. S. Ghorai, 26th Annual Meeting of the Ramanujan Mathematical Society, University of Allahabad, 2nd to 5th October, 2011, Invited talk on Spectral element methods for parabolic problems.
47. S. Ghorai, International Conference on Mathematical and Theoretical Biology, IISER Pune, 23rd to 27th January, 2012, Invited Talk on Nonlinear bioconvection in a suspension of phototactic algae.
48. M. Gupta (joint work with A. Bhar), International Workshop on Operator Theory and Its Applications, University of Seville, Seville, Spain, July 2011, delivered talk 'On Orlicz Lorentz subspaces of bounded families and approximation type operators'.
49. M. Gupta, National Conference on Recent Advances in Mathematics at Lucknow University, Feb 2 - 4, 2012, delivered invited lecture 'Frequently Hypercyclic Operators' and chaired a session.
50. M. K. Kadalbajoo, 6th International Conference on dynamic systems and differential equations, May 25- 28, 2011, Morehouse College, Atlanta, Georgia, USA, delivered invited talk and chaired a technical session.
51. M. K. Kadalbajoo, Indo-UK Symposium on Recent Trends in Industrial and Applied Mathematics, November 5-6, 2011, I.I.T. Bombay, delivered invited talk and chaired a technical session.
52. D. Kundu, International Conference held at the Chinese University of Hong Kong, Dec. 27 - 31, 2011, delivered a talk 'Bayesian Analysis of Progressively Censored Competing Risks Data'.
53. N. Misra, New Developments in theory and Applications of Statistics: An international conference in honor of Professor Moti Lal Tiku, Department of Statistics, Middle East Technical University, Ankara, Turkey, May 2 - 4, 2011, chaired a special invited session.

54. N. Misra, National Conference on Advances and Applications in Statistics, Department of Statistics, Panjab University, Chandigarh, February 20 - 21, 2012, chaired a session.
55. N. Misra, XXXI Annual Convention of Indian Society for Probability & Statistics (ISPS) and International Conference on Statistics, Department of Statistics, Cochin University of Science and Technology, December 19 - 22, 2011.
56. N. Misra, Workshop on Reliability Theory and Survival Analysis, Indian Statistical Institute, Kolkata, November 23-25, 2011, chaired an invited talk session.
57. P. Mohanty, International Conference on Abstract Harmonic Analysis, Tianjin, China, May 2011.
58. P. Mohanty, International Conference on Approximation Theory and Harmonic Analysis, Armenia, Sept 2011.
59. P. Mohanty, Discussion Meeting in Harmonic Analysis, I.S.I. Kolkata, Dec 2011.
60. Shalabh, Measurement Error Problem in the Statistical Analysis of Environmental Data at the International Humboldt Kolleg on Adaptive Management of Ecosystems: The Knowledge Systems of Societies for Adaptation and Mitigation of Impacts of Climate Change, Institute for Social and Economic Change, Bangalore, October 2011.
61. Shalabh, Conference of the Department of Statistics and Information Management, Reserve Bank of India, Chandigarh, March 2012.

Physics

62. Zakir Hossain, Max-Planck Institute CPfS, Dresden, Germany, Colloborative research work, Visiting Scientist, 18th June 2011 to 14th July 2011.

CONTINUING EDUCATION ACTIVITIES

Aerospace Engineering

1. C.Venkatesan, Handling quality of helicopters, Air force Test Pilot School, Bangalore, 17-21 Jan 2012.

Biological Sciences and Bioengineering

2. Pradip Sinha, Indian Society for Developmental Biologists, (InSDB) Workshop entitled, Developmental Mechanism in Model Organisms, Workshop, Jaipur, 24-25 Feb 2012.
3. Pradip Sinha, BioCity India Bootcamp for Bio-entrepreneurs (An initiative under UK-India Science Bridge funded by DST and RCUK), Training for the shortlisted teams for Bio-Business Plan Competition 2012, C-CAMP, NCBS, Bangalore, 11-13 Jan 2012.
4. Pradip Sinha, UK-India Innovation and Leadership Meeting and Grand Finale of the Bio-Business Plan Competition- 2012, As part of UK-India Science Bridge objective to promote Bio-entrepreneurial activities, a Bio-Business plan competition is being hosted by IIT Kanpur in collaboration with C-CAMP Bangalore and BioCity Nottingham, UK, Indian Institute of Management, Bangalore (IIMB), 5-6 March 2012.

Chemical Engineering

5. Singh J. K., Molecular Modeling Workshop, Sponsored, Mumbai, Jan 28-Feb 01, 2012.
6. P. A. Apte, Advanced Thermodynamics, NPTEL Web course, Kanpur.

Civil Engineering

7. T. Gupta, S.N.Tripathi, Study of impacts of atmospheric haze on Taj Mahal monument, Indo-US Science and Technology Forum, IIT Kanpur, 17th February, 2012.
8. D. C. Rai, O. R. Jaiswal, S. K. Jain, Seismic Design of Railway Bridges, Industry, IIT Kanpur, May 2-6, 2011.
9. D. C. Rai, Seismic Design of Steel Structures as per IS 800-2007, Industry, Uhde India Pvt. Ltd., Mumbai, Nov 18, 2011.

Electrical Engineering

10. M J Akhtar, One Day Workshop on Virtual Laboratories: RF and Microwave Characterization Lab, MHRD initiative, IIT Kanpur, February 04, 2012.
11. M J Akhtar, Virtual Lab Workshop on RF and Microwave Characterization Laboratory, MHRD initiative, IIIT Hyderabad, February 25, 2012.

12. Aditya K. Jagannatham, Cognitive Radio: The Next Frontier in Wireless Communications, BSNL IITK Telecom Center of Excellence & Department of Electrical Engineering IITK, IIT-Kanpur.
13. Aditya K. Jagannatham, OFDM Based 4G Cellular Standards: LTE and WiMAX, BSNL IITK Telecom Center of Excellence & Department of Electrical Engineering IITK, IIT-Kanpur.
14. Aditya K. Jagannatham, Course on Practical Approach to Networking 3G/4G Wireless Networks, BSNL IITK Telecom Center of Excellence & Department of Electrical Engineering IITK, IIT-Kanpur.
15. S. S. K. Iyer, Workshop on "Frontiers of Excellence in Photovoltaic Science and Technology", Indo-US Science and Technology Forum and the National Centre for Photovoltaic Research and Education, IIT Bombay, January 15-17, 2012.
16. S. S. K. Iyer, Organic Solar Cells 2011, Samtel Centre of Display Technology, IIT-Kanpur, 4th to 9th July, 2011.
17. S. C. Srivastava, Deployment and use of NPTEL Courses, NPTEL National Workshop, IIT-Kanpur, 20-21 Aug 2011.
18. S. N. Singh, Operation and Management of Emerging Power Systems, Quality Improvement Program Course, November 21-25, 2011.

Industrial Management and Engineering

19. Raghu Nandan Sengupta, Quantitative Finance Workshop, Self Financing, Hyderabad, 14-17 December 2011.
20. A.K Mittal, Workshop on Intellectual property Rights in Petroleum & energy sector, Self Financing, Rai Bareilly, Feb 25-26, 2012.
21. Anoop Singh, 4th Capacity Building Program for staff of Electricity Regulatory Commissions, Industry (Forum of Regulators), IIT Kanpur, 18-23 July, 2011.

Mathematics And Statistics

22. Mohua Banerjee, Lecture series on Modal logic and algebra, 4th Indian School on Logic and itsApplications (ISLA), Manipal University, January 2012.
23. T.Muthukumar, Lectures on Multivariable Calculus at MTTS programme, ICT Mumbai, June 2011.

Mechanical Engineering

24. Avinash Kumar Agarwal, Dr. Tarun Gupta, Advanced Engine Combustion and Diagnostics, QIP, Industry, IIT Kanpur, June 23- 28, 2011.
25. Tarun Gupta, Dr. Avinash Kumar Agarwal, Engine Emission Formation and Control, QIP, Industry, IIT Kanpur, June 28- July 3, 2011.
26. Shantanu Bhattacharya, Manufacturing Technology Managament Web-based course with IACT Global, Delhi, Web course to Industry through CDTE, IIT-Kanpur, First Batch: Aug- Oct, 2011 (Offered).
27. Shantanu Bhattacharya, NPTEL Lectures on Microfluidic systems and design, Web Course through NPTEL series, IIT- Kanpur, Currently Underway.

28. Shantanu Bhattacharya, MEMS design workshop, Funding from NPMASS, IIT-Kanpur, from 30th August-01st September, 2011.
29. Shantanu Bhattacharya, Hands on Fabrication training on design and fabrication of a microfluidic mixer, Funding from NPMASS, IIT-Kanpur, from 17~18th February, 2012.