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Director's Report

Honorable Chairman, Board of Governors of the Indian Institute of Technology Kanpur, Professor M. Anandkrishnan, Distinguished Chief Guest, Professor Shih Choon Fong, Members of the Board of Governors, Members of the Academic Senate, all graduating students and their family members, all members of faculty, staff and students, invited dignitaries, guests, and members of the media: I heartily welcome you all on this occasion of the fortieth convocation of the Indian Institute of Technology Kanpur.

We are particularly happy to welcome Professor Shih Choon Fong, President, National University of Singapore, amongst us for our Convocation today.

The academic year closing in May 2008 has been momentous and I consider it a privilege to review our activities during this period.

ACADEMIC ACTIVITIES

The academic year 2007-08 has had a successful run. The number of graduating students both at the undergraduate (B Tech - 334, M Sc (5 year Integrated) - 40, B Tech - M Tech Dual Degree (5 year) - 60, M Sc (2 year) - 70, Total = 504) and the postgraduate (M Tech - 356, M Des - 6, MBA - 27, PhD - 101, Total = 490) levels show a satisfactory trend. The enrollment in the Doctoral program as well as the publication record of the faculty and students for the academic year has considerably increased. Faculty members and students published a large number of research papers in journals and conference proceedings. Books published by the faculty are listed in the appendix of this report.

AWARDS AND HONORS

The faculty and students of IITK continue to break new grounds at the frontiers of research. This has been duly recognized in the form of various awards and honors to the faculty including Fellowships of professional societies, Editorship of international journals, and best paper awards to the students. A representative list of Awards and Honors to our faculty members is included as an addendum to the report.

Our undergraduate students Sandip Gupta, Varun Mishra, Shrey Sahay, and Divyanshu Jha have been conferred the **Goldman Sachs Global Leaders Award** and are expected to attend the Global Leadership Institute in the USA. Amartya Mukhopadhyay received **Dr. A. K. BOSE GOLD MEDAL** by the Indian Institute of

Metals (IIM), 2007 for the best M. Tech thesis. Dr. Atul Srivastava won the best doctoral thesis award of **Indian National Academy of Engineering**, while Sunil Verma was conferred the best doctoral research award of the **Indian Laser Association**. Anurag Awasthi, Ankit Lohiya, Subhonmesh Bose and Mohit Bansal received the **O P Jindal Engineering & Management Scholars Scholarship**.

IIT Kanpur is proud of Professor Amalendu Chandra (Chemistry) who was conferred the prestigious **Shanti Swarup Bhatnagar Award - 2007**. Prof. R. N. Mukherjee (Chemistry) received the **Sir J C Bose Fellowship** by DST. Dr. J. K. Bera (Chemistry) and Prof. V. K. Yadav (Chemistry) have been awarded the **Ramanna Fellowship** by DST. **Indian National Science Academy, New Delhi** awarded its fellowships to Professors V. Chandrasekhar (Chemistry), Manindra Agrawal (Computer Science) and R. N. Mukherjee (Chemistry). Professors V. Eswaran and P. Munshi of the Mechanical Engineering Department have been elected Fellows of **Indian National Academy of Engineering**. Dr. Bikramjit Basu (MME) was awarded the **International Coble Award** of the American Ceramic Society. Incidentally, Dr. Basu will be the first Indian and the second Asian to receive this award. Drs. S. A. Ramakrishna (Physics) and Avinash Kumar Agarwal (Mechanical) have been awarded the **INSA Young Scientist Award (2007)**. Professors V. Chandrasekhar (Chemistry) and Gautam Biswas (Mechanical) have received Fellowship of the **National Academy of Sciences (2007)**. Dr. Ramkumar of the Mechanical Engineering Department has been granted the **DAE Young Scientist Award** for the year 2008. The **Young Achiever's award, 2007-08** of the Department of Atomic Energy (DAE) was awarded to Dr. Satyajit Banerjee (HSS). Dr. A. K. Ghosh (Mathematics and Statistics) and Professor V. K. Yadav (Chemistry) have been elected Associate and Fellow respectively of the **Indian Academy of Sciences**. Drs. Yogesh Joshi, Animangsu Ghatak and V. Shankar (Chemical) have received the **IChE Golden Jubilee Young Achiever Award**. Dr. Sameer Khandekar has been awarded the **George Grover Gold medal** by the International Heat Pipe Committee for his outstanding contribution to the development of science and technology of heat pipes. **Welliver Faculty Fellowship** was awarded by Boeing, USA to Professor Prem Kalra. Dr. Ashok K Mittal received the **Amity Best Global HR Faculty Award**. Professors M R Madhav (Civil Engineering), A K Chaturvedi (Electrical Engineering), H S Mani (Physics), M K Harbola (Physics) have been honored with the **Distinguished Teacher award** of IIT Kanpur for the year 2007.

RESEARCH & DEVELOPMENT

The Institute is engaged in providing meaningful education in engineering and science, while conducting original research of the highest standard. The research profile of the Institute is continually growing every year. During the year 2007-2008,

about 111 sponsored projects and 109 consultancy projects were undertaken by the faculty and research engineers/scientists of the Institute with the sanctioned amount of Rs. 4182 lakh and 663 lakh respectively.

Our faculty members have published research papers in reputed national and international journals. This year Dr. Animangsu Ghatak (Chemical) published a paper in *SCIENCE*, a journal that has an impact factor of 30. Faculty filed 15 patents in India and overseas. 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. Some of the organizations include: United Nations Development Program New Delhi; Tata Institute of Fundamental Research Mumbai; Tata Consultancy Ltd. Mumbai; Hindustan Petroleum Corporation Limited Mumbai; Center for Development of Advanced Computing (CDAC) Thiruvananthapuram; Shell Technology India Pvt. Ltd. Bangalore; Prasar Bharati; The Department of Scientific and Industrial Research; Intel Corporation; Santa Clara; Nemgenix Pty Ltd; The Procter & Gamble Co, Ohio; Deakin University; Geelong Victoria; Ecole Centrale Paris; The University of Nottingham; Keio University Japan; UNICEF; Bose Corporation, USA; Cromoz Inc. USA; IBM, New York; Autodesk Asia Pte. Ltd.

The Institute has signed a Memorandum of Understanding with Bharat Sanchar Nigam Limited (BSNL) for setting up the *BSNL-IITK Telecom Centre of Excellence*. The basic objective of the Centre is to provide and facilitate an environment for innovation and application oriented research in the field of Telecommunication and related areas. It will seek to address the technological needs of DoT, BSNL and other related industries.

The Institute has also entered into an MoU with Uttar Pradesh Power Transmission Corporation Ltd (UPPTCL) with the objective of accelerating the development of the transmission system in UP through appropriate application of science and technology. Such efforts would enable the State to utilize the scientific, technological and managerial resources of the Institute in introducing modern technology to accelerate its economic growth and also upgrade the technological skills of its personnel.

To devise concrete product prototypes using Nano Science and Technology, a unique interdisciplinary project funded by nanotechnology initiative of DST, has been undertaken at a current total outlay of 11 crore beginning January 2007. *Centre for Nanotechnology* at the Institute focuses on development of technologies based on the rapidly developing Nano Science. The focus is currently on the inter-related areas of: Development of printable Organic Electronics with Organic-RFID tags as the first

demonstrator prototype and the development of a versatile focused ion beam tool based on microwave plasma ion beam for applications in patterning and templating of soft-materials and substrates. As a part of this project, world class facilities for printing circuits with technologies will be installed.

The Institute has also entered into an MoU with the Archaeological Survey of India, to set up *Centre for Archaeology and Cultural Resource Management*. The Institute shall draw specific short and long term training programs for capacity building for officers of The Archaeological Survey of India in the application of modern technology in archaeology. Initially, the focus will be on Geoinformatics, CAD and Computer Applications in Archaeology and Archaeo-materials.

Mechanical engineering faculty has taken the lead in the joint IITK-ISRO program for developing and launching an indigenous Micro-Satellite. ISRO has provided the initiation grant for the project. The satellite is expected to weigh less than 10 kg and would be based on MEMS sensors and actuators. A similar initiative on designing a lunar rover is under discussion. The Department has also taken the lead in a consortium project on development of Electronic Stability Control Systems for automobiles under the Core group on Automotive Research (CAR) program of TIFAC. Other members of the consortium include IIT Bombay, TATA Motors, Mahindra & Mahindra, Ashok Leyland, and TCS.

Biological Sciences and Bioengineering Department (BSBE) has developed a disposable polymeric bioreactor for therapeutic protein production for medical applications and a cost effective cryogel filter for the purification of blood cells. It has also developed an RNAi-based technology to engineer plants for nematode resistance. The technology now being developed for a larger number of crop plants has received a World Bank research grant of 5.5 crore.

Department of Electrical Engineering has developed technologies for *Low Cost Visual 3-D modeling with Texture Mapping for Small Objects ready for transfer; E-Signboard; a Device-free HCI for Interactive Public Annunciation System, and Language Independent Book Copying Machine with Search Features*. Also technology was developed for working prototypes developed and tested using UHF RFIDs for automatic vehicle identification. Tags using ISO 18000B standard was tested on coaches for speeds up to 80 kmph. Tags and system employing EPC standard was developed and tested for speeds up to 50 kmph on trains and 150 kmph on automobiles respectively. Other technologies developed are IGBT Gate Drive Card with integrated short-circuit protection; power isolation; extremely small pulse-width capability and special measures to prevent nuisance tripping; UHF RFID tag antenna; Continuous Wireless

Monitoring of the Cervical Dilation during pregnancy; a Free Space Optics Based Identification and Interrogation System; and manufacturing functionally-graded wide-band polymeric composites for microwave absorbers. Also the Department has developed software for SCORM module developed in Brihaspati, Brihaspati_sync - *live lecture delivery tools completed*; fingerprint separation s/w and GUI Interface; Audio separation s/w and GUI Interface; Image compression s/w and GUI Interface; Day ahead Auction software for power exchange; determination of V-I characteristics of a Shunt Inductor.

Chemical Engineering Department has developed a *Higee* separation and supportive ionic liquid catalysis technology along with adsorptive separation of mixtures.

Department of Physics has developed a microwave generated subcutoff multicusp plasma source for production of multi-elemental focused ion beams and a 3-D Monte Carlo simulation code for studying electron dynamics in gas in the presence of EM waves.

Some of the major sponsored projects undertaken by the Institute include those funded by Chevron-Texaco Inc USA; Shell-India; HPCL; AOR; IndoGulf Fertilizers-Jagdishpur; Transpek Silox-Vadodara. UKIERI research grant for modeling of gene network along with Indian Institute Toxicology Research Lucknow and University of Nottingham, UK and River dynamics and hazard assessment in the Himalayan foreland sponsored by UKIERI. Other projects include - Performance analysis and trading of wind power generation in emerging power system by Central Power Research Institute; Power Quality problem Analysis and recommended solutions by SAF Yeast Sandila; Quality assurance condition monitoring and fault diagnosis using Intelligent control methodologies by Technology Information; Forecasting and Assessment Council; E-Classroom Rollout in Science College of Chhattisgarh; Passive and active RFID location technology research by the Boeing Company, USA; National RFID Program by the Ministry of Communication and Information Technology; Small Antennas by Pico Mega Systems; Antenna for P-19 Radar; RF Propagation and radiation studies for WLAN system by Airtight Networks; Trans-receiver chip for the next generation of network in Telecommunication; Development of magnetic field sensors based on metallic multilayers with high magnetoresistive sensitivity; Development of magnetic field by Electrolyte Plasma; Exploiting crystallographic texture for improved nano-crystalline metal; and Electrochemical deposition technique for fabricating solar cells and IR Photodectors.

A few major consultancy projects received last year include: Hydrogeological investigations for assessment of quality and quantity of ground water funded by

Johnson Matthey (ICI); Hydrological and hydraulic studies of Bhutahi Balan and Kamla Balan river in the vicinity of the proposed bridge location in respect of unprecedented floods in the region of Muzaffarpur to Purnea Section funded by NHAI; Development of Power Sector in UP by Giri Institute of Development Studies for a Study Group formed by Planning Commission to prepare a road map for rapid economic development of UP; The Institutional Framework for Rural Energy Service from Renewables by Department of Economics; University of Cambridge, Cambridge (UK); Technology Development for Agricultural Extension and Outreach by National Agricultural Innovation Project; Power Metallurgical (P/M) Processing of High Density High Strength Aluminum Metal Matrix Composites by Schlumberger, USA; Feasibility Study for Establishing P/M Production Facility and Ferrous and Non-Ferrous Alloys by Raychem RPG, Mumbai; Yield improvement and inclusion removal from a slab casting tundish by JSW Torangallu; Reduction of tundish skull from a slab casting tundish by JSPL Raipur.

RESEARCH INFRASTRUCTURE DEVELOPMENT

The Institute is adding several major infrastructural facilities for carrying out multidisciplinary R&D activities. A Terrestrial Laser Scanner under the CARE scheme project was procured. ILRIS3D from Optech Inc., Canada was purchased at a cost of Rs. 55 Lakh and will be ready for use by the month of May 2008. This high density surveying instrument opens up several avenues for research and problem solving.

The Cascaded Dilatometer Facility procured under CARE scheme will be housed at the Materials Processing Laboratory (MPL) in the Advanced Centre for Materials Science. A dilatometer is employed for measuring *in situ* the instantaneous dimensional changes in compacts during various thermal cycles.

ICAP 6300 ICP Spectrometer was acquired under the CARE scheme. The use of Inductively Coupled Plasma source (ICP) and Atomic Absorption (AA) are the accepted and most powerful techniques for the analysis of and quantification of trace elements in both solid and liquid samples. Applications range from important environmental analyses to the materials industry, geological applications to clinical research and from the food industry to the semiconductor industry.

The Department of Science and Technology (DST) has a *Fund for improvement of Science & Technology (FIST)* scheme to build infrastructure facilities in universities and higher educational institutions. The grant under this scheme is provided for strengthening infrastructure of the identified department in teaching and research and is to be spent

exclusively for the said purpose. During 2007-2008, the Institute has received FIST grants to add special infrastructure facilities for research purposes. The Department of Chemical Engineering has been provided a total amount of Rs. 6 crore, while the Department of Chemistry has been provided a total amount of Rs. 4 crore.

The Department of Physics is installing a major facility for cross-disciplinary research, namely 1.7 MV Tandetron accelerator, with microprobe and heavy ion irradiation. Beam lines have been designed and fabricated for carrying out research in solid state materials and other cross disciplinary fields with a focus on development of futuristic technology. The facility is expected to be ready by mid June 2008. This is in addition to significant advances made in fabricating nanostructures with the newly established facility on Focused Ion Beam (FIB).

The Institute is also acquiring a new Liquid Helium Liquefier to enable low temperature based and high magnetic field research.

The Department of Physics is establishing a high performance computing facility (One Teraflop operations per second and 0.5 T Byte). This facility will help tackle challenging and complex numerical problems in computational astrophysics, turbulence and materials physics.

INTERNATIONAL COLLABORATIONS

The Institute has entered into MoUs with The Universita' Degli Studi Di Perugia; Deakin University, Victoria; Dan Kook University; University of Modena and Reggio Emilia (Italy); KEIO University; University of Ulster; Ecole Polytechnique, France; University of Nanyang Technological University, Singapore (NTUS); University of McMaster, Canada; Ritsumeikan University and Ritsumeikan Asia Pacific University. The objectives of these MoUs are promoting, strengthening and maintaining scientific and academic co-operation, exchange of faculty, students, and staff for the purposes of engineering research, and educational programs, sharing scientific instrumentation of common interest.

Kanpur International Academic Programme (KIAP) has been initiated by the Institute. KIAP is meant to exchange students between the Institute and universities abroad while bringing in an international flavor to faculty-driven research. Several universities have been invited to join the programme.

FINANCIAL RESOURCE MOBILIZATION

The Institute has had a satisfactory financial year during 2007-08. The total Grant-in-aid received during the financial year from MHRD, Govt. of India, under Non-Plan was Rs 74 crore and Rs 52 crore under Plan.

The last financial year has also been very successful for the fund raising activity at IIT Kanpur. The total amount of donations the Institute received was Rs 5.96 crore from 1017 donors as compared to Rs 5.40 crore contributed by 623 donors in the previous financial year. Many new Faculty chairs have been created for outstanding faculty members of the Institute by our alumni. Two chairs in the names of Professor N.C. Nigam and Professor C.V. Seshadri have been set up by their family, friends and admirers. Several new scholarships and awards have been instituted for students during the year. At present, the Institute has 33 faculty chairs. Priority is now to raise Research Fellowships for outstanding young faculty members with a view to make IITK more attractive to the new faculty.

Under *Annual Gift Program (AGP)*, the response was tremendous. The Institute has received donations of Rs. 56 lakhs contributed by 647 donors during 2007-08. Donations received under AGP have been utilized for supporting excellence in the Institute such as providing travel support to the students and faculty members for attending international conferences, cash award to students for publication of their research papers in reputed journals, travel support to international visiting faculty, filing of patents and for the Summer Undergraduate Research Grant for Excellence Program (SURGE).

Partial travel support to 58 students amounting to Rs. 19 lakhs was given to participate in International Conferences overseas. 171 students were awarded the cash award amounting to Rs. 19 lakhs for publishing their research papers in reputed journals. Faculty members and international visitors were provided travel support to attend conferences and visit the Institute.

SURGE Program was started in Summer 2006 to encourage undergraduate student research. SURGE'07 concluded very successfully. Ecole Centrale, Paris had joined the Program in SURGE'07 and, Ecole Polytechnique, France has signed an MoU to join this Program. The Institute is planning to expand the program in future to add a few more interested prestigious Institutions.

The Institute has now been successful in obtaining a Notification u/s 35(i) of the Income Tax Act from the Central Board of Direct Taxes, Ministry of Finance,

Government of India. Under this section, a person/organization who donates for scientific research to be conducted by the Institute faculty and its students is eligible for 125% tax exemption on the donated amount.

A project called *Opportunity College* was started from the financial year 2006-07. Under this program, unemployed youth in and around the campus are trained to help improve their employability. Three batches (each of 3 months duration) were conducted so far under this program, where about 100 students have been trained. In addition, one batch consisting of the Institute project employees was trained in English language skills. The faculty, students and staff of the Institute have extended their support to run the activities. The total expenditure during the year was Rs. 4 lakh and this was met from the donations received from the alumni and well wishers of the Institute.

Recently, the Institute has created a fund called *Contract Workers' Welfare and Relief Fund* at the Dean of Resource Planning and Generation office. The Fund was created with an initial seed money of Rs. 10 lakhs provided by the Institute from its Non-plan budget. A sum of Rs. 0.6 lakh has so far been received as donation under the *Contract Workers' Welfare and Relief Fund*. The fund aims to provide support for welfare of the contract labor working for the construction projects in the Institute.

STUDENTS ACTIVITIES

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 students. To translate such belief into reality, the Institute nurtures various 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, aeromodelling and astronomy to name but a few.

The overriding objective of the large-scale events of IITK such as **Antaragni**, **Techkritil**, **Josh**, **Udghosh**, **Megabucks** and **Umang** is to infuse a sense of richness and purpose in the lives of students. Antaragni is the Cultural festival. Techkriti is the science and technology festival. Josh and Udghosh are the sports festivals. Megabuck is a festival to promote the spirit of innovation and incubation.

The name of the Film Council was recently changed to **Films and Media Council (FMC)**. Meander - students' magazine, Vox Populi - students' newspaper and Photography club were added to FMC.

These social, cultural and sporting activities play a crucial role in the transformation of a student into a complete person. 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. A new event called **Alfaaz** which began as an event of the Students' book club attained the status of a festival with improved participation from within the campus and also from outside. This event focuses on a variety of literary activities and fills in a long felt need of that section of the campus community with a literary sensibility.

IIT Kanpur came up with a creditable show in the inter IIT sports meet held at IIT Bombay. The team finished fourth in the General championship for Men and Second for Women. There were a number of podium performances both in the team and individual events. To strengthen the sports culture, an inter-hall games event called **JOSH** was also organized which witnessed mass participation from the students. **UDGHOSH**, which acts as a match practice for the Inter IIT Sports Meet, also saw an increased participation both in terms of quality as well as quantity.

Adventure Club as its name depicts is the most vibrant club of the Institute. Year 2007-2008 was a year of new accomplishments in the field of adventure for IIT Kanpur, with an unprecedented participation of 55 students in various activities like Trekking, Tock Climbing and High Altitude Mountain Cycling. For the first time, a basic course in **skiing** was also organized for the new students. The Sports Council has come out with a new initiative of having a **Skating Club**. The aim of the club is to have regular skating sessions, participating in national skating competitions, encouraging skate hockey as a regular sport, and creating a skating rink on the campus.

Techkriti 2008 was a huge success in every sense of the word. It witnessed an audience of over 2000 external students during the festival itself and another 10000 more who participated through online contests. There were several new initiatives which included lectures delivered by international figures including a number of Nobel laureates.

The **Nature Club** organized several Bird Watching expeditions, and to the surprise of many found out rare species of birds on our own Campus. The club also organized tree-labeling campaigns and started a new activity, called Insect Study, which has now many enthusiastic participants.

The Institute has formed a club for Journalism. The student magazine **Meander** now contains both Hindi and English sections. Campus reportage is covered by both **Spark** and **Eyes** newsletters and the students contribute significantly to these. The newsletter called **Vox Populi** continues to voice the concerns of the student community and encourages discussion and debate on several issues of interest to the student community. The **GLDC** – Gymkhana Lecture and Discussion Club, organized lectures by diverse and eminent personalities from various spheres of life, including one by Mr. R.K. Mishra, the winner of the Lead India Contest organized by the Times of India.

Students' Counseling Service is the most active wing of the students. The activities of this Service include organizing the orientation programs for UG as well as PG students; providing specific attention to students having academic, financial or personal problems; following up on the progress of students who need special attention. Overall, the student counseling service, both at the UG and PG levels, enjoys wide appreciation from faculty and students.

A very novel feature has been the opening of Yoga and Naturopathy Center at IIT Kanpur, where the emphasis is totally on de-stressing the campus community in general and the students in particular. Several workshops and conferences have also been organized where professional counselors were invited to create awareness about stress management. Regular camps are being organized through the **Art of Living** and **Jeevan Vidya**. These activities not only help in de-stressing the students, but also inculcate in them certain values, which are necessary to make an individual into a good human being and a thinking citizen.

The placement scenario this year has registered a positive upswing with almost 90 percent of registered students receiving job offers through the student placement office. About 700 public and private organizations were invited to interview the

students. The response from various national and international business majors is encouraging. Many companies of repute have also registered for the on-campus recruitment program for the first time. With an improved facilitation and response system in place, it is hoped that IIT Kanpur will see even better placement levels in the coming years.

The Institute is fully geared to meet the infrastructural requirements for the year 2008-09 that an enhancement in student strength is likely to create. As of now, there are 10 halls of residence, eight for boys and two for girls. The total capacity of these halls is close to four thousand. However in view of the subsequent enhancement in the next two years, IIT Kanpur shall require at least three more halls of residence.

CLOSING REMARKS

Dear graduates, on this occasion of the fortieth convocation, I congratulate each one of you on your achievement. From today, you are on your own. As individuals you will choose the profession that excites you, that generates intellectual passion within yourself, and engages your mind in the best possible way. I fervently hope that you would be successful in your endeavors. Today, you will be going out of the protected environment of the Institute to find your place in the larger order of the society, which involves evaluating the needs of others and responding to the call for action.

Your talents would be reflected in your innovative application of science and technology. Your authentic utilization of knowledge in service to the community will benefit not only our country, but will leave a civilizational impact.

Graduates, you have the responsibility of changing this world into a better place to live in. You are supremely qualified to bring about this transformation given your training, passion, knowledge, and determination. Innovate, create and forge ahead. As leaders, you should continually strive to usher in a revolution of quality in both professional and social domains. Always look for ways and means to help your countrymen. Discover your own *mantra* to create wealth for the benefit of the human society. With your personal standards of excellence, you are ready to evolve just policies that would leave no community or race behind. Simply put, if you cannot break the chain of poverty nobody else will be able to!

Dear Graduates of 2008, I admire you for your fine accomplishments during your stay at IIT Kanpur. My sincere good wishes for the work you aspire to do in the future. I earnestly believe that it is you who will light the lamp for the new world that will be thoughtful, just, and caring.

Organisation

Indian Institute of Technology Kanpur is an autonomous organization incorporated under an Act of Parliament in the year 1961, and is wholly financed by the Government of India, under the administrative control of the Ministry of Human Resource Development. The authorities constituted under the Act and Statutes, which govern and guide the functioning of the Institute in the areas of administration and academic programmes are; the Council of IITs, the Board of Governors assisted by two statutory bodies namely the Finance Committee in the financial matters and the Building and Works Committee in the matters related to construction and repairing of buildings and other major works. The Senate is assisted by its various standing committees. The compositions of these constituent bodies are as follows:

THE COUNCIL OF IITs

Chairman

Shri Arjun Singh
Minister of Human Resource Development
New Delhi - 110 001

Chairmen of the Seven Institutes (Ex-Officio)

Shri Achyut Kumar Saikia
Chairman, Board of Governors
IIT Guwahati

Shri Sanjeev Goenka
Chairman, Board of Governors
IIT Kharagpur

Dr. Anil Kakodkar
Chairman, Board of Governors
IIT Bombay

Prof. A.E. Muthunayagam
Chairman, Board of Governors
IIT Madras

Prof. M Anandkrishnan
Chairman, Board of Governors
IIT Kanpur

Prof. V S Ramamurthy
Chairman, Board of Governors
IIT Delhi

Shri Jaiprakash Gaur
Chairman, Board of Governors
IIT Roorkee

Directors of Institute (Ex-Officio)

Prof. Damodar Acharaya	IIT Kharagpur
Prof. M S Ananth	IIT Madras
Prof. Ashok Misra	IIT Bombay
Prof. S G Dhande	IIT Kanpur
Prof. Surendra Prasad	IIT Delhi
Prof. Gautam Barua	IIT Guwahati
Prof. S C Saxena	IIT Roorkee

Other Members (Ex-Officio)

Prof. Sukhdeo Thorat
Chairman
University Grants Commission
New Delhi

Dr. R A Mashelkar
Director General
Council of Scientific & Industrial Research
Anusandhan Bhawan, Rafi Marg
New Delhi

Dr. K Kasturirangan
Chairman
Council of IISc. Bangalore
National Institute of Advanced Studies
Indian Institute of Science Campus
Bangalore

Prof. P Balram
Director
Indian Institute of Science Bangalore
Bangalore

Three Nominees of the Central Government

Shri Sudeep Banerjee
Secretary
Ministry of Human Resource Development
Dept. of Secondary & Higher Education
New Delhi

Shri D Swarup
Secretary
Ministry of Finance
Department of Expenditure
North Block, New Delhi

Shri Brajesh Kumar
Secretary
Ministry of Information Technology
Electronic Niketan
6, CGO Complex, New Delhi

Prof. R.A. Yadav
Acting Chairman, AICTE
IP Estate
IG Sports Complex
New Delhi

Nominees of the Visitor

Prof. C.N.R. Rao
Eminent Scientist
& Chairman, Scientific Advisory Council to the Prime Minister
Linus Pauling Research Professor & Honorary President
CSIR Centre of Excellence in Chemistry,
Chemistry & Physics of Materials Unit
Jawaharlal Nehru Centre for Advanced Scientific Research
PO - Jakkur, Bangalore

Prof. C S Seshadri
Director
Chennai Mathematical Institute, Chennai
Plot H1, SIPCOT IT Park
Padur PO, Siruseri

Prof. Sabyasachi Bhattacharya
Director
Tata Institute of Fundamental Research
Homi Bhabha Road,
New Delhi

Dr. Kota Harinarayan
Chairman
Research Council of Central Scientific
Instrument Organization
Raja Ramanna Fellow
National Aero Space Laboratories
PO Box 1779,
Bangalore

Shri Tarun Das
Chief Mentor
Confederation of Indian Industry
Plot No. 249-F, Sector 18,
Udyog Vihar Phase IV
Gurgaon (Haryana)

Three Members of Parliament (Two from Lok Sabha and one from Rajya Sabha)

Shri Milind Deora
Member of Parliament (Lok Sabha)
65, Lodhi Estate
New Delhi

Shri Ananta Nayak
Member of Parliament (Lok Sabha)
180, South Avenue
New Delhi

Shri B J Panda
Member of Parliament (Rajya Sabha)
2, Mahadev Road,
New Delhi

Secretary to the Council

Shri Ravi Mathur

Joint Secretary (Technical)

Government of India

Department of Secondary Education & Higher Education

Ministry of Human Resource Development

Shastri Bhawan

New Delhi - 110 001

THE BOARD OF GOVERNORS

Chairman

Prof. M Anandakrishnan

[From 12.06.2006]

Chairman, Indian Institute of Technology Kanpur

& Chairperson, Madras Institute of Development Studies

79, Second Main Road, Gandhinagar

Adyar, Chennai - 600 020

Tamil Nadu

Members

Four Nominees of the Council of IITs

Prof. Rajendra Govind Harshe

Vice Chancellor

Allahabad University

Allahabad

(from 13.04.2007)

Prof. D V Singh

Former Vice Chancellor, Roorkee University &

Former Director, CRRI,

Sunbreeze Apartments, 1002

Towr-'B', Vaishali

Ghaziabad - 201 010

(from 13.04.2007)

Shri Inder Kumar Khosla

Hony. Secy. & Treasurer

Kamala Nehru Memorial Hospital Society

122, Malcha Marg

Chanakyapuri

New Delhi - 110 021

(from 13.04.2007)

Shri Ravi Mathur
Joint Secretary (Technical)
Government of India
Department of Secondary Education & Higher Education
Ministry of Human Resource Development
Shastri Bhawan
New Delhi - 110 001

Shri Dilip Mehra
Principal Secretary
Government of Madhya Pradesh
Dept. of Technical Education and Science & Technology
Mantralay, Vallabh Bhawan
Bhopal - 462 004

[From 05.10.2006]
(Upto 30.08.2007)

Smt. Snehlata Srivastava
Principal Secretary
Government of Madhya Pradesh
Dept. of Technical Education and Science & Technology
Mantralay, Vallabh Bhawan
Bhopal - 462 004

(From 31.08.2007)

Professor S. S. Katiyar
Vice-Chancellor
Chhatrapati Shahuji Maharaj University
Kanpur - 208 024

(Upto 27.11.2007)

Professor R S Nirjar
Vice Chancellor
Ambedkar University
Gautam Buddha Nagar
Greater Noida

(From 28.11.2007)

Shri Aman Kumar Singh
Joint Secretary, Information Technology
& Chief Executive Officer, CHIPS
Government of Chhattisgarh
Department of Commerce & Industry (Information Technology)
Das Bhawan
Mantralaya, Raipur, Chhattisgarh

Director (Ex-Officio)

Professor Sanjay G. Dhande
Director
Indian Institute of Technology Kanpur
Kanpur 208016

Two Nominees of the Senate

Professor I D Dhariyal
Department of Mathematics & Statistics
Indian Institute of Technology Kanpur
Kanpur - 208 016

(Upto 31.12.2007)

Professor Ajai Jain
Dept. of Computer Science & Engineering
Indian Institute of Technology Kanpur
Kanpur - 208 016

(From 01.01.2008)

Professor Jitendra Kumar
Department of Materials Science Programme
Indian Institute of Technology Kanpur
Kanpur - 208 016

(Upto 31.12.2007)

Professor Manoj K Harbola
Department of Physics
Indian Institute of Technology Kanpur
Kanpur - 208 016

(From 01.01.2008)

Secretary

Shri Sanjeev S. Kashalkar
Registrar
Indian Institute of Technology Kanpur
Kanpur - 208 016

THE FINANCE COMMITTEE

Chairman

Prof. M Anandkrishnan
Chairman, BOG
Indian Institute of Technology Kanpur
& Chairperson, Madras Institute of Development Studies
79, Second Main Road, Gandhinagar
Adyar, Chennai - 600 020
Tamil Nadu, India

Members

Shri Ravi Mathur
Joint Secretary (Technical)
Government of India
Department of Secondary Education & Higher Education
Ministry of Human Resource Development
Shastri Bhawan
New Delhi - 110 001

Shri S K Ray
Financial Adviser
Government of India
Department of Education
Ministry of Human Resource Development
Shastri Bhawan
New Delhi - 110 001

Professor I D Dhariyal
Department of Mathematics & Statistics
Indian Institute of Technology Kanpur
Kanpur - 208 016

Director (Ex-Officio)

Professor Sanjay G. Dhande
Director
Indian Institute of Technology Kanpur
Kanpur 208016

Secretary

Shri Sanjeev S. Kashalkar
Registrar
Indian Institute of Technology Kanpur
Kanpur - 208 016

THE BUILDING & WORKS COMMITTEE

Chairman

Professor Sanjay G. Dhande
Director
Indian Institute of Technology Kanpur
Kanpur 208016

Members

Prof. Kripa Shanker
Dy. Director
Indian Institute of Technology Kanpur
Kanpur 208016

Professor Jitendra Kumar
Department of Materials Science Programme
Indian Institute of Technology Kanpur
Kanpur - 208 016

(Upto 31.12.2007)

Professor Ajai Kumar Jain
Department of Computer Science & Engineering
Indian Institute of Technology Kanpur
Kanpur - 208016

(From 01.01.2008)

Shri O P Bhatia
Chief Engineer (Northern Zone) CPWD
3 rd Floor Kendriya Bhawan
Sector H, Aliganj
Lucknow -226 024

Shri D N Agarwal
Retd. Chief Engineer (Electrical) CPWD
M-21, Greater Kailash-II
New Delhi 110048

Shri M D Seth
Retd. Engineer-in-Chief, UPRNN
Consultant
Lucknow -226 001

Shri Subir Saha
Director
School of Planning & Architecture
4-Block B, Indraprastha Estate
New Delhi 110 002

Ms. Seema Raj
Director (T)
Government of India
Ministry of Human Resource Development
Shastri Bhawan
New Delhi 110 001

Secretary
Shri Sanjeev S. Kashalkar
Registrar
Indian Insitute of Technology Kanpur
Kanpur - 208 016

SENATE

[From 01.04.2007 to 31.03.2008]

Director & Chairman Senate

Professor Sanjay G. Dhande
Director
Indian Institute of Technology Kanpur
Kanpur 208016

Deputy Director

Prof. Kripa Shanker

Members of the Senate

AEROSPACE ENGINEERING (AE)

Prof. Krishna Kumar	:	Upto 13.07.2007
Prof. Vijay Gupta		
Prof. Kunal Ghosh		
Prof. RK Sullerey		
Prof. Dayanand Yadav		
Prof. E Rathakrishnan		
Prof. C. Venkatesan		
Prof. T.K. Sengupta		
Prof. Sanjay Mittal		
Prof. S Kamle		
Prof. K Poddar		
Prof. Ashish Tewari	:	From 31.12.2007
Prof. A.K.Ghosh	:	From 31.12.2007

BIOLOGICAL SCIENCES & BIO-ENGINEERING (BSBE)

Prof. Pradip Sinha		
Dr. Dharendra S Katti, ASP	:	From 01.12.2007

CHEMICAL ENGINEERING (CHE)

Prof. SK Gupta
Prof. Anil Kumar
Prof. Deepak Kunzru
Prof. JP Gupta
Prof. PK Bhattacharya
Prof. RP Chhabra
Prof. Ashok Khanna
Prof. Ashutosh Sharma
Prof. Goutam Deo
Prof. Nishith Verma : **From 31.12.2007**
Dr. Jayanta K Singh, AP : **From 01.12.2007**

CHEMISTRY (CHM)

Prof. N Sathyamurthy
Prof. S Sarkar
Prof. BD Gupta
Prof. YD Vankar
Prof. TK Chandrashekar
Prof. V Chandrasekhar
Prof. RN Mukherjee
Prof. Parimal K Bhardwaj
Prof. N.S. Gajbhiye
Prof. P. Gupta Bhaya
Prof. S. Manogaran
Prof. Veejendra K Yadav
Prof. Vinod K Singh
Prof. Amalendu Chandra
Prof. Tapas Chakraborty
Prof. Faiz Ahmed Khan
Prof. S S Manoharan
Prof. J N Moorthy : **From 31.12.2007**
Prof. Sandeep Verma : **From 31.12.2007**

CIVIL ENGINEERING (CE)

Prof. Ashwini Kumar
Prof. PK Basudhar
Prof. Sudhir K Jain
Prof. Sarvesh Chandra
Prof. Bithin Datta
Prof. Vinod Tare
Prof. Ramesh Pratap Singh
Prof. Vinay Kumar Gupta
Prof. S.K. Chakrabarti
Prof. CVR Murty
Prof. Mukesh Sharma
Prof. Onkar Dikshit
Prof. Partha Chakroborty
Prof. Rajiv Sinha
Prof. Sudhir Misra : **From 31.12.2007**
Prof. Rajesh Srivastava : **From 31.12.2007**
Prof. Purnendu Bose : **From 31.12.2007**
Dr. Bharat Lohani, AP : **Upto 30.11.2007**
Dr. Amit Prashant, AP : **From 01.12.2007**

COMPUTER SCIENCE & ENGINEERING (CSE)

Prof. RMK Sinha
Prof. Somenath Biswas
Prof. HC Karnick
Prof. Pankaj Jalote
Prof. TV Prabhakar
Prof. Sanjeev Kumar Aggarwal
Prof. Sanjeev Saxena
Prof. Rajat Moona
Prof. Manindra Agrawal
Prof. Amitabha Mukerjee
Prof. Dheeraj Sanghi
Prof. Phalguni Gupta
Prof. Ratan Kumar Ghosh
Prof. Ajai K Jain
Prof. Shashank K Mehta
Prof. Sumit Ganguly

Dr. Mainak Chaudhuri, AP : **From 01.12.2007**

ELECTRICAL ENGINEERING (EE)

Prof. Avinash Joshi
Prof. Arindam Ghosh
Prof. M Sachidananda
Prof. SC Srivastava
Prof. Anjan Kumar Ghosh
Prof. Prem Kumar Kalra
Prof. Shafi Qureshi
Prof. Sumana Gupta
Prof. Govind Sharma
Prof. AK Dutta
Prof. Utpal Das
Prof. Joseph John
Prof. Pradip Sircar
Prof. Animesh Biswas
Prof. A K Chaturvedi
Prof. Baquer Mazhari

Prof. R.K. Bansal : **From 08.02.2008**
Prof. S Umesh : **From 08.02.2008**
Prof. S.N. Singh : **From 08.02.2008**
Prof. Shyama P Das : **From 08.02.2008**
Prof. Ravindra Arora Emeritus Fellow from 01.07.06 to 31.07.2008
Prof. GC Ray Emeritus Fellow from 01.07.06 to 31.07.2008

HUMANITIES & SOCIAL SCIENCES (HSS)

Prof. Lilavati Krishnan
Prof. Binayak Rath
Prof. AK Sharma
Prof. AK Sinha
Prof. KK Saxena
Prof. BH Boruah
Prof. Binay Kumar Pattnaik
Prof. G Neelakantan
Prof. Achla Misri Raina

Prof. Surajit Sinha
Prof. (Ms) Shikha Dixit : **From 31.12.2007**
Dr. Suchitra Mathur, AP
Prof. Amit Ray Emeritus Fellow from 01.07.06 to 31.05.2009

INDUSTRIAL & MANAGEMENT ENGINEERING (IME)

Prof. AK Mittal
Prof. Arun P Sinha
Prof. R R K Sharma
Prof. Jayanta Chatterjee
Prof. NK Sharma
Prof. Rahul Varman : **From 31.12.2007**
Dr. B V Phani, AP : **Upto 30.11.2007**

MATERIALS & METALLURGICAL ENGINEERING (MME)

Prof. SP Mehrotra
Prof. RC Sharma
Prof. RK Dube
Prof. Brahma Deo
Prof. SC Koria
Prof. Sanjeev Bhargava
Prof. Dipak Mazumdar
Prof. Rajiv Shekhar
Prof. Sandeep Sangal
Prof. R. Balalsubramaniam
Prof. Barada K Mishra
Prof. Deepak Gupta
Prof. Monica Katiyar
Prof. Shant P Gupta Emeritus Fellow from 01.07.06 to 31.07.2008

MATHEMATICS (MTH)

Prof. RKS Rathore
Prof. Manjul Gupta
Prof. MK Kadalbajoo
Prof. Prawal Sinha
Prof. GP Kapoor

Prof. Peeyush Chandra	
Prof. V Raghavendra	
Prof. ID Dhariyal	
Prof. Shobha Madan	
Prof. Debasis Kundu	
Prof. Pravir Kumar Dutt	
Prof. Neeraj Misra	
Prof. P Shunmugaraj, ASP	
Prof. B V Rathish Kumar	: From 31.12.2007
Prof. Dharendra Bahuguna	: From 31.12.2007
Prof. P Shunmugaraj	: From 31.12.2007
Prof. Arbind Kumar Lal	: From 31.12.2007
Prof. UB Tewari	Emeritus Professor from 01.07.06 to 30.06.2009
Dr. Amit Mitra, ASP	: From 01.12.2007

MECHANICAL ENGINEERING (ME)

Prof. AK Mallik	
Prof. Prashant Kumar	: Upto 31.12.2007
Prof. BN Banerjee	
Prof. MS Kalra	
Prof. VK Jain	
Prof. NN Kishore	
Prof. Himanshu Hatwal	
Prof. PM Dixit	
Prof. K Muralidhar	
Prof. Gautam Biswas	
Prof. Prabhat Munshi	
Prof. BP Pundir	
Prof. S.K. Choudhury	
Prof. N.S. Vyas	
Prof. Vinayak Eswaran	
Prof. Kalyanmoy Deb	
Prof. P.S. Ghoshdastidar	
Prof. Subrata Sarkar	: From 31.12.2007
Prof. P K Panigrahi	: From 31.12.2007
Dr. Sameer Khandekar, AP	: Upto 30.11.2007
Prof. Ashok Sengupta	Emeritus Fellow from 01.07.06 to 30.06.2009

MATERIALS SCIENCE PROGRAM (MSP)

Prof. DC Agarwal Emeritus Fellow from 01.07.05 to 30.06.2007
Prof. Jitendra Kumar

PHYSICS (PHY)

Prof. RK Thareja
Prof. SC Agarwal
Prof. SD Joglekar
Prof. Keshawa Shahi
Prof. Rajendra Prasad
Prof. Debashish Chowdhury
Prof. RC Budhani
Prof. Y.N. Mohapatra
Prof. Avinash Singh
Prof. V.N. Kulkarni
Prof. Deshdeep Sahdev
Prof. Manoj K Harbola
Prof. Satyendra Kumar
Prof. V Ravishankar
Prof. Pankaj Jain
Prof. HC Verma
Dr. Sreerup Raychaudhuri, ASP : Upto 30.11.2007

LASER TECHNOLOGY PROGRAM (LTP)

Prof. RK Thareja

LIBRARIAN : Shri Rajeshwar Mishra

Secretary Senate : Shri Sanjeev S. Kashalkar

**THREE NOMINEES OF THE CHAIRMAN, BOARD OF GOVERNORS
(From 01.11.2006 to 31.10.2007)**

Prof. G K Rai
Department of Ancient History Culture & Archeology
Allahabad University
Allahabad

Shri N C Agarwal
General Manager
Hindustan Aeronautics Ltd. (H.A.L.),
Indira Nagar
Lucknow - 226016

Dr. Masood Ali,
Director
Indian Institute of Pulses Research (IIPR)
Kanpur-208024

**SENATE STANDING COMMITTEES:
[01.10.2006 TO 30.09.2007]**

(1) SENATE EDUCATIONAL POLICY COMMITTEE :

(a) MEMBERS (EX-OFFICIO) :

- | | |
|----------------------------|-----------------------------|
| 1. Chairman, Senate | : Chairman |
| 2. Chairman, SPGC
STATS | : Prof. I D Dhariyal, MTH & |
| 3. Chairman, SUGC | : Prof. Dheeraj Sanghi, CSE |

(b) SENATE NOMINEES :

1. Dr. D Yadav, AE
2. Dr. Alope Dutta, EE
3. Dr. R C Budhani, PHY

(c) STUDENTS' SENATE NOMINEES :

- | | |
|---------------------------------------|--------------------|
| 1. Mr. Cherian Varkey Mathew (Y4129) | cherian@iitk.ac.in |
| 2. Mr. Dhiraj Kumar Mahajan (Y250561) | dhiraj@iitk.ac.in |

(2) SENATE ELECTIONS COMMITTEE :

SENATE NOMINEES :

1. Dr. P K Panigrahi, ME

2. Dr. Debasis Kundu, MTH & STAT

3. Dr. B V Phani, IME

: **Chairman**

(3) SENATE LIBRARY COMMITTEE :

(a) LIBRARY :

Librarian

: Shri Rajeshwar Mishra

(b) SENATE NOMINEES :

1. Dr. Ashok Khanna, CHE

2. Dr. P S Ghoshdastidar, ME

3. Dr. K Srihari, CHM

4. Dr. Sanker Ramakrishnan, BSBE

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES :

1. Dr. D Das

AE

2. Dr. K Subramaniam

BSBE

3. Dr. Sanjeev Garg

CHE

4. Dr. Jitendra K Bera

CHM

5. Dr. S K Chakarbarti

CE

6. Dr. Purnendu Bose

EEMP

7. Dr. T V Prabhakar

CSE

:**Chairman**

8. Dr. S Umesh

EE

9. Dr. C A Tomy

HSS

10. Dr. S Swami

IME

11. Dr. R C Budhani

LTP

12. Dr. P K Panigrahi

ME

13. Dr. Monika Katiyar

MME

14. Dr. Jitendra Kumar

MSP

15. Dr. A K Maloo

MTH & STAT

16. Dr. M S Kalra

NET

17. Dr. D Chowdhury

PHY

18. Dr. Ms. Koumudi Prakash Patil (HSS)

M DES

(d) STUDENTS' SENATE NOMINEES :

Mr. Rishabh Uppal (Y3290)

rishabh@iitk.ac.in

Mr. C Saipriyadarshan (Y5149)

darshan@iitk.ac.in

(4) SENATE POST-GRADUATE COMMITTEE :

(a) MEMBER (EX-OFFICIO) :

Dr. Dr. B K Pattnaik HSS : **Outgoing Chairman**

(b) SENATE NOMINEE :

Dr. Rajiv Sinha, CE

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES :

1. Dr. S Kamle	AE
2. Dr. Dharendra S Katti	BSBE
3. Dr. Nishith Verma	CHE
4. Dr. S Verma	CHM
5. Dr. Pranab K Mohapatra	CE
6. Dr. Avinash Agarwal	EEMP
7. Dr. Shashank K Mehta	CSE
8. Dr. K S Venkatesh	EE
9. Dr. A Madan	HSS
10. Dr. Anoop Singh	IME
11. Dr. Asima Pradhan	LTP
12. Dr. Sumit Basu	ME
13. Dr. Anish Upadhyaya	MME
14. Dr. Rajeev Gupta	MSP
15. Dr. I D Dhariyal	MTH & STAT : Chairman
16. Dr. P Munshi	NET
17. Dr. V Subrahmanyam	PHY
18. Dr. Satyaki Roy (HSS)	M DES

(d) STUDENTS' SENATE NOMINEES :

1. Mr. V Sathyaraj	(Y210063)	sathya@iitk.ac.in
2. Mr. Ramesh Kumar Sonkar	(Y3104118)	rksonkar@iitk.ac.in
3. Mr. Hemant Rao	(Y5125010)	hemant@iitk.ac.in
4. Mr. Jai Prakash Narayan	(Y5101011)	jprakash@iitk.ac.in

(5) SENATE RULES COMMITTEE :

(a) MEMBER (EX-OFFICIO) :

Parliamentarian of the Senate :

Dr. N Sathyamurthy CHM : Upto 30.09.2006

(b) SENATE NOMINEES :

1. Dr. D Kunzru, CHE **:Chairman**
2. Dr. M K Kadalbajoo, MTH & STAT
3. Dr. Kamal Poddar, AE

(6) SENATE SCHOLARSHIPS & PRIZES COMMITTEE :

(a) MEMBERS (EX-OFFICIO):

Head Institute Counselling Service : Dr. Goutam Deo, CHE
Chairman, APEC
Dean of Students' Affairs : Dr. Prawal Sinha, MTH & STAT

(b) SENATE NOMINEES:

1. Dr. S K Choudhury, ME
2. Dr. Sanjeev K Agrawal, CSE **:Chairman**
3. Dr. Shobha Madan, MTH & STAT
4. Dr. Brahma Deo, MME

(c) STUDENTS' SENATE NOMINEES :

1. Mr. Anirudh Harlalka (Y3048) anirudhh@iitk.ac.in
2. Mr. Sumant Singh (Y3363) sumant@iitk.ac.in
3. Mr. Shashank Y Rao (Y5430) shanks@iitk.ac.in

(7) SENATE STUDENTS' AFFAIRS COMMITTEE :

(a) MEMBERS (EX-OFFICIO) :

Head Institute Counselling Service : Dr. Goutam Deo, CHE
Chairman, APEC
Representative of COW : Dr. F A Khan, CHM
Dean of Students' Affairs **: Chairman, Ex-Officio**

(b) SENATE NOMINEES:

1. Dr. N S Vyas, ME
2. Dr. A K Chaturvedi, EE
3. Dr. Asima Pradhan, PHY

(c) STUDENTS' SENATE NOMINEES :

- | | | |
|-------------------------|------------|--------------------------------------------------------------|
| 1. Mr. Anirudh Harlalka | (Y3048) | anirudhh@iitk.ac.in |
| 2. Mr. Tony Jacob | (Y3104123) | tjacob@iitk.ac.in |
| 2. Mr. Sumant Singh | (Y3363) | sumant@iitk.ac.in |
| 3. Mr. Abhijit Bagri | (Y2157006) | abagri@iitk.ac.in |

(8) SENATE UNDERGRADUATE COMMITTEE :

(a) MEMBER (EX-OFFICIO) :

Dr. Sreerup Raychaudhuri PHY : **Outgoing Chairman**

(b) SENATE NOMINEE :

1. Dr. Satyendra Kumar, PHY

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES :

- | | |
|-----------------------------|-----------------------|
| 1. Dr. Sanjay Mittal | AE |
| 2. Dr. Anupam Pal | BSBE |
| 3. Dr. Rajdip Bandyopadhyay | CHE |
| 4. Dr. M L N Rao | CHM |
| 5. Dr. C V R Murty | CE |
| 6. Dr. Purnendu Bose | EEMP |
| 7. Dr. Dheeraj Sanghi | CSE : Chairman |
| 8. Dr. A Biswas | EE |
| 9. Dr. M Chandran | HSS |
| 10. Dr. Rahul Varman | IME |
| 11. Dr. H Wanare | LTP |
| 12. Dr. P S Ghoshdastidar | ME |
| 13. Dr. Gouthama | MME |
| 14. Dr. Kamal K Kar | MSP |
| 15. Dr. V Raghavendra | MTH & STAT |
| 16. Dr. P Munshi | NET |

- | | |
|------------------------|-------|
| 17. Dr. H Wanare | PHY |
| 18. Dr. B Bhattacharya | M DES |

(d) STUDENTS' SENATE NOMINEES :

- | | | |
|-------------------------|---------|---------------------|
| 1. Mr. Prateek Bhansali | (Y3228) | prateekb@iitk.ac.in |
| 2. Mr. B Shubham Gupta | (Y4424) | shubg@iitk.ac.in |
| 3. Mr. Varun Khaitan | (Y5495) | varunkh@iitk.ac.in |

**THREE NOMINEES OF THE CHAIRMAN, BOARD OF GOVERNORS
(From 01.11.2007 to 31.10.2008)**

Prof. G K Rai
Department of Ancient History Culture & Archeology
Allahabad University
Allahabad

Prof. V K Suri
Vice-Chancellor
C S Azad University of Agri.& Tech.
Nawabganj
Kanpur-208002

Prof. R P Singh
Department of Oil and Paint
Harcourt Butler Technological Institute (HBTI)
Nawabganj
Kanpur-208002

**SENATE STANDING COMMITTEES:
[01.10.2007 TO 30.09.2008]**

(1) SENATE EDUCATIONAL POLICY COMMITTEE [SEPC]:

(a) MEMBERS (EX-OFFICIO) :

- | | | |
|---------------------|---|-----------------|
| 1. Chairman, Senate | : | Chairman |
| 2. Chairman, SPGC | | |
| 3. Chairman, SUGC | | |

(b) SENATE NOMINEES :

1. Dr. Dayanand Yadav	AE
2. Dr. Ashok Khanna	CHE
3. Dr. Vinod K Singh	CHM

(c) STUDENTS' SENATE NOMINEES :

1. Cherian V Methew	(Y4129)
2. Manu Bansal	(Y3167175)

(2) SENATE ELECTIONS COMMITTEE [SEC]:

SENATE NOMINEES :

1. Dr. B D Gupta	CHM : Chairman
2. Dr. Dipak Mazumdar	MME
3. Dr. Pankaj Jain	PHY

(3) SENATE LIBRARY COMMITTEE [SLC]:

(a) LIBRARY :

Librarian : Shri Rajeshwar Mishra

(b) SENATE NOMINEES :

1. Dr. Debashish Chowdhury	PHY
2. Dr. K Srihari	CHM
3. Dr. Rajiv Sinha	CE
4. Dr. R Sankararamakrishnan	BSBE

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES :

1. Dr. K Ghosh	AE
2. Dr. K Subramaniam	BSBE
3. Dr. Sanjeev Garg	CHE
4. Dr. Jitendra K Bera	CHM

5. Dr. S K Chakrabarti		CE	
6. Dr. Purnendru Bose		EEMP	
7. Dr. T V Prabhakar		CSE	: Chairman
8. Dr. P Sircar	EE		
9. Dr. Satyaki Roy		HSS	
10. Dr. A K Mittal		IME	
11. Dr. Y N Singh		LTP	
12. Dr. P K Panigrahi		ME	
13. Dr. Anish Upadhyaya		MME	
14. Dr. Jitendra Kumar		MSP	
15. Dr. Shobha Madan		MTH & STAT	
16. Dr. P K Panigrahi		NET	
17. Dr. Sreerup Raychaudhuri		PHY	
18. Ms. Koumudi Prakash Patil (HSS)		M DES	

(d) STUDENTS' SENATE NOMINEES :

- | | |
|----------------------|---------|
| 1. C Saipriyadarshan | (Y5149) |
| 2. Ashish Agarwal | (Y6113) |

(4) SENATE POST-GRADUATE COMMITTEE [SPGC]:

(a) MEMBER (EX-OFFICIO) :

Dr. I D Dhariyal MTH & STATS **:Outgoing Chairman**

(b) SENATE NOMINEE :

Dr. V K Gupta CE **: Chairman**

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES :

- | | |
|---------------------------|------|
| 1. Dr. C S Upadhyay | AE |
| 2. Dr. Dharendra S Katti | BSBE |
| 3. Dr. Nishith Verma | CHE |
| 4. Dr. M L N Rao | CHM |
| 5. Dr. Pranab K Mohapatra | CE |
| 6. Dr. Avinash Agarwal | EEMP |
| 7. Dr. Shashank K Mehta | CSE |
| 8. Dr. S Umesh | EE |
| 9. Dr. A M Raina | HSS |

10. Dr. Anoop Singh	IME
11. Dr. Debabrata Gowami	LTP
12. Dr. V Eswaran	ME
13. Dr. D Mazumdar	MME
14. Dr. Rajeev Gupta	MSP
15. Dr. Manjul Gupta	MTH & STAT
16. Dr. P Munshi	NET
17. Dr. Avinash Singh	PHY
18. Dr. Satyaki Roy	M DES

(d) STUDENTS' SENATE NOMINEES :

1. Ankur Verma	(Y5102063)
2. G Naresh Kumar	(Y6114004)
3. Priyanka Dash	(Y6106008)
4. K Sudheendra Rao	(Y5209864)

(5) SENATE RULES COMMITTEE [SRC]:

(a) MEMBER (EX-OFFICIO) :

Parliamentarian of the Senate :

Dr. N K Sharma, IME : Upto 30.09.2007

(b) SENATE NOMINEES :

1. Dr. M K Kadalbajoo	MTH & STATS
2. Dr. Shafi Qureshi	EE
3. Dr. B K Pattnaik	HSS : Chairman

(6) SENATE SCHOLARSHIPS & PRIZES COMMITTEE [SSPC]:

(a) MEMBERS (EX-OFFICIO):

Head Institute Counselling Service : Dr. Goutam Deo, CHE
Chairman, APEC : Dr. Purnendu Bose, CE
Dean of Students' Affairs : Dr. Prawal Sinha, MTH & STAT

(b) SENATE NOMINEES:

- | | |
|-----------------------|-------------------------------|
| 1. Dr. B Deo | MME |
| 2. Dr. Anish Upadhyay | MME |
| 3. Dr. S K Agarwal | CSE |
| 4. Dr. A Mitra | MTH & STATS : Chairman |

(c) STUDENTS' SENATE NOMINEES :

- | | |
|-------------------|------------|
| 1. Adarsh Behra | (Y6030) |
| 2. Piyush Agrawal | (Y3167218) |
| 3. Chirag Mittal | (Y3167100) |

(7) SENATE STUDENTS' AFFAIRS COMMITTEE [S-SAC]:

(a) MEMBERS (EX-OFFICIO) :

- | | |
|------------------------------------|-------------------------------|
| Head Institute Counselling Service | : Dr. Goutam Deo, CHE |
| Chairman, APEC | : Dr. Purnendu Bose, CE |
| Representative of COW | : Dr. A K Chaturvedi, EE |
| Dean of Students' Affairs | : Chairman, Ex-Officio |

(b) SENATE NOMINEES:

- | | |
|--------------------------|-----|
| 1. Dr. P S Ghoshdastidar | ME |
| 2. Dr. Asima Pradhan | PHY |
| 3. Dr. Rajat Moona | CSE |

(c) STUDENTS' SENATE NOMINEES :

- | | |
|-------------------|------------|
| 1. Arvind Kothari | (Y4096) |
| 2. Ankur Verma | (Y5102063) |
| 3. Chirag Mittal | (Y3167100) |
| 4. Ramnik Arora | (Y5365) |

(8) SENATE UNDERGRADUATE COMMITTEE [SUGC]:

(a) MEMBER (EX-OFFICIO) :

- | | |
|-------------------------|----------------------------|
| Dr. Dheeraj Sanghi, CSE | : Outgoing Chairman |
|-------------------------|----------------------------|

(b) SENATE NOMINEE :

1. Dr. A K Chaturvedi EE

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES :

1. Dr. D Das	AE
2. Dr. Anupam Pal	BSBE
3. Dr. Yogesh M Joshi	CHE
4. Dr. M K Ghorai	CHM
5. Dr. Rajesh Srivastava	CE
6. Dr. Purnendu Bose	EEMP
7. Dr. Dheeraj Sanghi	CSE
8. Dr. Animesh Biswas	EE
9. Dr. Suchitra Mathur	HSS
10. Dr. Runa Sarkar	IME
11. Dr. H Wanare	LTP
12. Dr. P S Ghoshdastidar	ME : Chairman
13. Dr. B Deo	MME
14. Dr. Kamal K Kar	MSP
15. Dr. A K Lal	MTH & STAT
16. Dr. P Munshi	NET
17. Dr. Anjan Kumar Gupta	PHY
18. Dr. Bishakh Bhattacharya	M DES

(d) STUDENTS' SENATE NOMINEES :

1. Ashish Agarwal	(Y6113)
2. Chirag Mittal	(Y3167100)
3. B Shubham Gupta	(Y4424)
4. C Saipriyadarshan	(Y5149)

The Faculty

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

The faculty strength of the Institute as on March 31, 2008 was 315. Out of these 20 are shared by two departments on a half time basis. There were also 40 Academic staff comprising of Research Engineers/Scientific Officers/Design Engineers and Library staff, who are treated at par with faculty, on March 31, 2008. 19 faculty members and 04 academic staff retired/voluntary retired/resigned during the period. The Institute also had a number of Visiting Faculty members : 9 Visiting Faculty joined during the year. The Visiting/Adjunct Faculty contribute significantly and they also get an opportunity to know the Institute.

AEROSPACE ENGINEERING DEPARTMENT
STRENGTH : 20

SANTIONED

EXISTING STRENGTH : 17+1

PROFESSOR (Rs.18400-500-22400)

- | | | |
|-----|------|-----------------|
| 1. | 3162 | Vijay Gupta |
| 2. | 3159 | K Ghosh |
| 3. | 1798 | R K Sullerey |
| 4. | 4041 | Dayanand Yadav |
| 5. | 4458 | E Rathakrishnan |
| 6 | 4694 | C Venkatesan |
| 7. | 4581 | T K Sengupta |
| 8. | 4285 | Sudhir Kamle |
| 9. | 4664 | Kamal Poddar |
| 10. | 4696 | Sanjay Mittal |
| 11. | 4660 | Ashish Tewari |
| 12. | 4709 | A K Ghosh |

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

- | | | |
|----|------|--------------|
| 1. | 4785 | C S Upadhyay |
|----|------|--------------|

2. 4733 D P Mishra

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. 4958 Abhijit Kushari
2. 4993 Debopam Das
3. 5129* Sivasambu Mahesh
4. 5280 Brijesh Eshpuniyani

**BIOLOGICAL SCIENCE & BIO-ENGINEERING
STRENGTH : 15**

SANTIONED

EXISTING STRENGTH : 10

PROFESSOR (Rs.18400-500-22400)

1. 4959 Pradip Sinha

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

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

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. 5194 Anupam Pal
2. 5206 Amitabha Bandyopadhyay
3. 5207 (Ms) Jonaki Sen

**CHEMICAL ENGINEERING DEPARTMENT
STRENGTH : 32**

SANTIONED

EXISTING STRENGTH : 18

PROFESSOR (Rs.18400-500-22400)

1. 3113 S K Gupta
2. 2432 Anil Kumar
3. 3314 Deepak Kunzru
4. 3064 J P Gupta
5. 3754 P K Bhattacharya
6. 4244 R P Chhabra
7. 4045 Ashok Khanna
8. 4562 Ashutosh Sharma
9. 4750 Goutam Deo
10. 4794 Nishith Verma

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

1. 5011 V Shankar
2. 5016 Nitin Kaistha
3. 5196 Siddharta Panda

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. 5021 Sanjeev Garg
2. 5106 Animangsu Ghatak
3. 5114 Yogesh Moreshwar Joshi
4. 5175 Jayant K Singh
5. 5208 Pankaj K Apte

CHEMISTRY DEPARTMENT

SANTIONED STRENGTH : 30

EXISTING STRENGTH : 28

PROFESSOR (Rs.18400-500-22400)

1. 3827 N Sathyamurthy
2. 3791 S Sarkar
3. 3990 B D Gupta
4. 4008 Y D Vankar
5. 4325 T K Chandrashekar
6. 4394 V Chandrasekhar
7. 4448 R N Mukherjee

8. 4462 P K Bharadwaj
9. 4047 N S Gajbhiye
10. 3112 P Gupta Bhaya
11. 4460 S Manogaran
12. 4583 Veejendra K Yadav
13. 4596 Vinod K Singh
14. 4676 Amalendu Chandra
15. 4699 Tapas Chakraborty
16. 4746 Faiz Ahmed Khan
17. 4759 S S Manoharan
18. 4789 Sandeep Verma
19. 4816 J N Moorthy

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

1. 4760 K Srihari
2. 5071 Debabrata Goswami
3. 4876 R Gurunath
4. 5024 Manas Kumar Ghorai
5. 5038 Jitendra K Bera
6. 5056 M L N Rao

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. 5127 Sankar Prasad Rath
2. 5091 Anantharaman Ganapathi
3. 5236 Madhav V Ranganathan

CIVIL ENGINEERING DEPARTMENT

SANTIONED STRENGTH : 33

EXISTING STRENGTH : 28

PROFESSOR (Rs.18400-500-22400)

1. 3462 Ashwini Kumar
2. 4068 P K Basudhar
3. 4209 Sudhir K Jain
4. 4399 Sarvesh Chandra
5. 4546 Bithin Datta
6. 4295 Vinod Tare
7. 4586 V K Gupta

8. 4464 S K Chakrabarti
9. 4799 Mukesh Sharma
10. 4657 C V R Murty
11. 4662 Onkar Dikshit
12. 4663 Partha Chakroborty
13. 4695 Rajiv Sinha
14. 4690 Sudhir Misra
15. 4798 Rajesh Srivastava
16. 4775 Purnendu Bose

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

1. 4784 Soumyen Guha
2. 4793 Ashu Jain
3. 4995 Durgesh C Rai
4. 4871 Animesh Das
5. 4978 Javed N Malik
6. 5026 Bharat Lohani
7. 5057 Sachidanand Tripathi
8. 5079 Pranab Kumar Mohapatra

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. 5152 Amit Prashant
2. 5037 Nihar Ranjan Patra
3. 5192 Tarun Gupta
4. 5230 Priyanka Ghosh

**COMPUTER SCIENCE & ENGINEERING
STRENGTH : 18**

20 + 2 HT

PROFESSOR (Rs.18400-500-22400)

1. *3858 S G Dhande
2. *3541 R M K Sinha
3. 3972 Somenath Biswas
4. 4297 H C Karnick

SANTIONED

EXISTING STRENGTH :

5. 4540 Pankaj Jalote
6. 4370 T V Prabhakar
7. 4563 S K Aggarwal
8. 4490 Sanjeev Saxena
9. 4628 Rajat Moona
10. 4754 Manindra Agrawal
11. 4627 Amitabha Mukerjee
12. 4300 Ratan Kumar Ghosh
13. 4385 Phalguni Gupta
14. 4645 Ajai K Jain
15. 4668 Dheeraj Sanghi
16. 4762 Sumit Ganguly
17. 5010 Shashank K Mehta

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

- 1 4934 Anil Seth

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. 5112 Mainak Chaudhuri
2. 5197 Surender Baswana
3. 5222 Peeyush P Kurur
4. 5268 Arnab Bhattacharya

**ELECTRICAL ENGINEERING
STRENGTH : 53**

2 HT

PROFESSOR (Rs.18400-500-22400)

1. *3541 R M K Sinha
2. 3927 Avinash Joshi
3. 4326 M Sachidananda
4. 4495 S C Srivastava
5. 4667 Anjan Kumar Ghosh
6. 4486 Prem Kumar Kalra
7. 4691 Shafi Qureshi
8. 3873 (Ms) Sumana Gupta
9. 4372 Govind Sharma

SANTIONED

EXISTING STRENGTH : 28 +

10. * 4687 Utpal Das
11. 4566 A K Dutta
12. 3999 Joseph John
13. 4652 Animesh Biswas
14. 4478 Pradip Sircar
15. 4670 Baquer Mazhari
16. 4827 A K Chaturvedi
17. 4489 R K Bansal
18. 4745 S Umesh
19. 5003 S N Singh
20. 4776 Shyama P Das

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

1. 4771 Yatindra N Singh
2. 4988 Laxmidhar Behera
3. 4833 K S Venkatesh
4. 4938 K Vasudevan
5. 5013 A R Harish
6. 5113 S Sunder Kumar Iyer

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. 5012 Parthasarathi Sensarma
2. 5015 (Ms) Nandini Gupta
3. 5111 Adrish Banerjee
4. 5162 Ramprasad Potluri

HUMANITIES & SOCIAL SCIENCES

SANTIONED STRENGTH : 31
EXISTING STRENGTH : 24+2

PROFESSOR (Rs.18400-500-22400)

1. 3838 (Ms) Lilavati Krishnan
2. 3989 Binayak Rath
3. 3983 A K Sharma
4. 4373 K K Saxena
5. 4016 A K Sinha
6. 4375 B H Boruah

7. 4791 B K Pattnaik
8. 4729 G Neelakanthan
9. 4488 Surajit Sinha
10. 4700 (Ms) Achla M Raina
11. 4702 (Ms) Shikha Dixit

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

1. 4773 Munmun Jha
2. 4774 C A Tomy
3. 4957 (Ms) Suchitra Mathur
4. 5076 T Ravichandran

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. 4927 (Ms) Mini Chandran
2. 5075 P M Prasad
3. 5078 Sanjay Kumar Singh
4. 5077 Amman Madan
5. 5181 Braj Bhusan
6. *4976 Satyaki Roy
7. 5231 Kumar Ravi Priya
8. 5270 Sarani Saha

LECTURER (Rs.10000-325-15200)

1. *5183 (Ms) Koumudi Prakash Patil
2. 5237 A V Ravi Shankar Sarma
3. 5287 Anindita Chakrabarti

INDUSTRIAL & MANAGEMENT ENGINEERING

SANTIONED STRENGTH : 18

EXISTING STRENGTH : 14

PROFESSOR (Rs.18400-500-22400)

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 (Rs.16400-450-20000)

1. 4830 Sanjeev Swami
2. 4865 (Ms) Veena Bansal

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. 4968 Anoop Singh
2. 5073 Raghu Nandan Sengupta
3. 5142 Peeyush Mehta
4. 5147 B V Phani
5. 5182 (Ms) Runa Sarkar

MATERIALS & METALLURGICAL ENGINEERING

SANTIONED STRENGTH : 32

EXISTING STRENGTH : 20

PROFESSOR (Rs.18400-500-22400)

1. 1932 S P Mehrotra
2. 3845 R C Sharma
3. 3763 R K Dube
4. 4182 Brahma Deo
5. 4245 S C Korla
6. 4524 S Bhargava
7. 4382 Dipak Mazumdar
8. 4565 Rajiv Shekhar
9. 4597 Sandeep Sangal
10. 4571 R Balasubramaniam
11. 4665 Barada K Mishra
12. 4790 Deepak Gupta
13. 4796 (Ms) Monica Katiyar

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

1. 4919 Anish Upadhyaya
2. 4977 Bikaramjit Basu

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. 5034 Ashish Garg
2. 5072 Gauthama
3. 5269 Kallol Mondal.
4. 5273 Krishanu Biswas
5. 5289 Anandh Subramaniam

MATHEMATICS & STATISTICS DEPARTMENT

SANTIONED STRENGTH : 36

EXISTING STRENGTH : 33

PROFESSOR (Rs.18400-500-22400)

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

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

1. 4803 Alok Kumar Maloo
2. 4781 (Ms) Mohua Banerjee

3. 4822 G Santhanam
4. 4832 (Mrs) Rama Rawat
5. 4870 S Ghorai
6. 5029 Joydeep Dutta
7. 5153 Amit Mitra

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. 4537 (Ms) Aparna Dar
2. 4930 Swagato Kumar Ray
3. 5036 Shalabh
4. 5121 (Ms) Nandini Nilakantan
5. 5189 Parasar Mohanty
6. 5200 Anil Kumar Ghosh
7. 5229 Sharmistha Mitra
8. 5235 Sudipta Dutta
9. 5291 Malay Banerjee

LECTURER (Rs.10000-325-15200)

1. 5128 Shital Rajeshbhai Patel

MECHANICAL ENGINEERING

**SANTIONED STRENGTH : 42
EXISTING STRENGTH : 33 + 2 HT**

PROFESSOR (Rs.18400-500-22400)

1. 2265 A K Mallik
2. *3858 S G Dhande
3. 3759 B N Banerjee
4. 3862 M S Kalra
5. 4093 V K Jain
6. 4224 N N Kishore
7. 4286 Himanshu Hatwal
8. 4210 P M Dixit
9. 4398 K Muralishar
10. 4560 Gautam Biswas
11. 4061 Prabhat Munshi
12. 4810 B P Pundir
13. 4452 S K Choudhury

14. 4459 N S Vyas
15. 4482 Vinayak Eswaran
16. 4650 Kalyanmoy Deb
17. 4288 P S Ghoshdastidar
18. 4788 Subrata Sarkar
19. 4801 P K Panigrahi

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

1. 4779 Bhaskar Dasgupta
2. 4823 V Venkata Reddy
3. 4890 Bishakh Bhattacharya
4. 4931 Avinash Kumar Agarwal
5. 5014 Sumit Basu
6. 4928 Kamal K Kar
7. 5022 Ashish Datta
8. 5054 P Venkitanarayanan

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. 4956 Anupam Saxena
2. 5074 J Ramkumar
3. 5120 Sameer Khandekar
4. 5122 Arun Kumar Saha
5. *5129 Sivasambu Mahesh
6. 5199 Ishan Sharma
7. 5234 Shantanu Bhattacharya
8. 5267 Basant Lal Sharma

PHYSICS

SANTIONED STRENGTH : 38
EXISTING STRENGTH : 31 + 4 HT

PROFESSOR (Rs.18400-500-22400)

- 1 3980 R K Thareja
2. 4019 S D Joglekar
3. *4064 Keshawa Shahi
4. 4254 Rajendra Prasad
5. 4642 Debashish Chowdhury
6. 4688 R C Budhani

7. * 4559 Y N Mohapatra
8. 4651 Avinash Singh
9. 4315 V N Kulkarni
10. 4527 Deshdeep Sahdev
11. 4504 V Ravishankar
12. 4552 Satyendra Kumar
13. 4708 Pankaj Jain
14. 4723 H C Verma
15. 4881 M K Harbola

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

1. 4653 K P Rajeev
2. 4692 Mahendra K Verma
3. *4679 (Ms) Asima Pradhan
4. 4831 Sreerup Raychoudhuri
5. 4755 V Subrahmanyam
6. 4797 Gautam Sengupta
7. 5040 S Anantha Ramakrishna
8. 5041 Amit Dutta
9. 5117 Satyajit Banerjee

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. 4893 Harshwardhan Wanare
2. 4964 V V Sreedhar
3. 5028 (Ms) Sutapa Mukherjee
4. 5046 Anjan Kumar Gupta
5. 5102 Zakir Hossain
6. 5115 Tapobrata Sarkar
7. 5123 Sudeep Bhattacharjee
8. *5167 Rajeev Gupta
9. 5284 Tarun Kanti Ghosh
10. 5290 Kaushik Bhattacharya

LECTURER (Rs.10000-325-15200)

1. 5275 S Dhamodaran

MATERIALS SCIENCE PROGRAMME

SANTIONED STRENGTH : 06

EXISTING STRENGTH : 01 + 3 HT

PROFESSOR (Rs.18400-500-22400)

1. 3762 Jitendra Kumar
2. *4064 Keshawa Shahi
3. *4559 Y N Mohapatra

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. *5167 Rajeev Gupta

LASER TECHNOLOGY PROGRAMME

**SANTIONED STRENGTH :
EXISTING STRENGTH : + 02 HT**

PROFESSOR (Rs.18400-500-22400)

1. *4687 Utpal Das

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

1. *4679 (Ms) Asima Pradhan

NUCLEAR ENGG & TECHNOLOGY PROGRAMME

**SANTIONED STRENGTH :
EXISTING STRENGTH : --**

PROFESSOR (Rs.18400-500-22400)

-- --

DESIGN PROGRAMME

**SANTIONED STRENGTH
EXISTING STRENGTH : +2 HT**

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. *4976 Satyaki Roy

LECTURER (Rs.10000-325-15200)

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

Sl No.	Name & Designation (Ms/Shri/Dr)	Department/ Programme
1.	4983 Alok Gupta, Research Engineer Gr-I	A E
2.	5279 Vibha Trapathi , Research Engineer Gr-I	E E
3.	4616 Sushmit Sen, Senior Research Engineer	Robotics
4.	4824 Anjali V Kulkarni, Senior Research Engineer	Mechatronics
5.	5118 Ajay Misra, Senior Research Engineer	A E
6.	4078 Chaturi Singh, Senior Research Engineer	NWTF
7.	5278 Neeru Chhabra, Senior Research Engineer	E E
8.	4318 Amitabha Roy, Principal Research Engineer	E E
9.	3238 Vishal Saxena, Principal Research Engineer	E E
10.	4807 Brajesh Chandra, Principal Research Engineer	A E (NWTF)
11.	4056 V Raghuram, Principal Research Engineer	M E
12.	4777 Rajeev Gupta, Principal Research Engineer	A E (NWTF)
13.	4955 Raghuvir Singh Anand, Principal Research Engineer	E E
14.	4921 Aurobinda Chatterjee, Principal Research Engineer	M E
15.	4015 A L Bhavsar, Scientific Officer Gr.I	CHEM
16.	4815 K K Bajpai, Senior Scientific Officer	C E
17.	3780 Sanjay Gupta, Chief Scientific Officer	ACMS
18.	3985 Bansi Lal, Chief Scientific Officer	PHY/LTP
19.	4090 Prem Chand, Chief Scientific Officer	EPR/PHY
20.	3782 K V Rao, Chief Scientific Officer	ACMS
21.	2028 H P S Parihar, Computer Engineer Gr.II	C C
22.	5285 Saikat Kira, Computer Engineer Gr II	C C
23.	4578 Md Aftab Alam, Senior Computer Engineer	C C
24.	4821 Brajesh Pande, Senior Computer Engineer	C C
25.	4820 Gopesh Tewari, Senior Computer Engineer	C C
26.	5019 Soma Sengupta, Senior Computer Engineer	C C
27.	4721 Md K Ahmad, Senior Computer Engineer	C C
28.	4920 Anju Tewari, Senior Computer Engineer	C C
29.	2035 N P Roberts, Principal Computer Engineer	C C
30.	3868 K S Singh, Principal Computer Engineer	C C
31.	2037 Y D S Arya, Principal Computer Engineer	C C

32.	4817	Navpreet Singh, Principal Computer Engineer	C C
33.	4541	B M Shukla , Principal Computer Engineer	C C
34.	5030	Vipul Mathur, Aircraft Maintenance Engineer	A E
35.	0834	Rajeshwar Misra, Librarian	Kelkar Lib
36.	3981	S K Bose, Deputy Librarian	Kelkar Lib
37.	3969	Umed Singh, Assistant Librarian	Kelkar Lib
38.	3974	(Ms) Neelam Prasad, Assistant Librarian	Kelkar Lib
39.	5148	S K Vijaianand, Assistant Librarian	Kelkar Lib
40.	5157	(Ms) Maitrayee Mondal Ghosh, Assistant Librarian	Kelkar Lib

Academic Programme

EDUCATIONAL GOALS

Education in the Engineering stream should produce trained manpower for maintaining and advancing technological growth. The scope of engineering education should evolve based on the evaluation of technological growth for their usefulness and relevance to the prosperity of the country. The educational strategy in this context should help to develop a knowledge industry and the systems involved in this endeavor should strive for furtherance of knowledge.

The academic goals of the Indian Institute of Technology Kanpur from the viewpoint of its teaching programme are the 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. To promote the concept of virtual research departments by bringing together faculty and students into activities of mutual interest.

TEACHING PROGRAMMES

The Institute offers instruction in various disciplines of science and engineering, both at undergraduate (UG) and postgraduate (PG) levels. These programmes are planned and implemented by the Academic Senate of the Institute. Micro-management and these programmes is carried out by the Senate Undergraduate Committee (SUGC) and the Senate Post-graduate Committee (SPGC), respectively.

Undergraduate Programme

The four-year undergraduate programme consists of two parts having duration of four semesters each. The first part is the Core programme common to all students, and is carefully planned to give the students a strong base in mathematics, physics, chemistry, engineering sciences, technical arts, humanities and social sciences. The second part of the undergraduate programme consists of the Professional courses and

a project in the chosen branch of specialization. At the Bachelor's level, we have B.Tech. programs in Aerospace, Biological Sciences & Bio Engg., Chemical, Civil, Computer Science, Electrical, Metallurgy and Mechanical Engineering. We also have integrated M.Sc. programs in Physics, Chemistry, Mathematics and Statistics. From July 2005, we have started an integrated M.Sc. program in Economics. The students for these programs are selected through JEE and usually they are of very high quality.

Two-Year M.Sc. Programme

There are programs for M. Sc. (2 years) in Physics, Chemistry, Mathematics and Statistics, where the students with B.Sc. (Hons.) background are chosen through an all-India entrance examination known as JAM. These programmes have been largely responsible for the scientific manpower in Indian research institutes and universities.

Postgraduate Programme

The postgraduate programme is intended to 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.

M.Tech. Programme

We have **M.Tech. Programmes** in all the Engineering Branches mentioned above. In addition, there are M. Tech. Programs in interdisciplinary areas such as, Nuclear Engineering, Biological Sciences and Bioengineering, Laser Technology, Environmental Engineering, Materials Science, and Industrial and Management Engineering. The M. Tech. students are chosen through an all-India examination known as GATE.

B.Tech.-M.Tech.

We have also adopted a dual degree (B.Tech.-M. Tech.) program. In this program, the students admitted through JEE are expected to complete the M. Tech. Program in five years. At the end of five years, the student is awarded both B.Tech. and M.Tech. Degrees.

MBA and MDES Programme

We have introduced two interdisciplinary programs, namely, MBA and Master of Design. For these courses as well, the students are selected through the all-India examinations known as JMET and CEED respectively.

Doctor of Philosophy (Ph.D.)

The academic programmes leading to the Degree of Doctor of Philosophy (Ph.D.) exist in all the engineering departments and two interdisciplinary programmes, namely, Materials Science and Nuclear Engineering & Technology. Ph.D. programmes also exist in Chemistry, Mathematics, Physics, Statistics, Economics, English, Philosophy, Psychology and Sociology.

Ph.D. (Dual Degree)

The Ph.D. programme culminates in research on a selected topic leading to a thesis submitted in partial fulfillment of the requirements for the degree.

The Department of Physics offers a M.Sc.-Ph.D. dual degree program. The admission is through JAM. It also allows their M.Sc. students to continue for a Ph.D. degree.

The M. Tech. and Ph.D. students receive research/ teaching assistantships.

D.I.I.T. Programme

The Institute started a D.IIT programme in Video Communications Systems with effect from first semester 1992-93. The duration of the Course is one year. The DIIT Programme is based on existing PG Course for M.Tech. Programme. This programme is monitored by the Department of Electrical Engineering.

Research Environment in IIT Kanpur

IIT Kanpur has demonstrated its excellence in research in many areas. To cite a few areas: Finite Element Methods Using Domain Decomposition, Flow Induced Vibrations, Wind Tunnel Testing of Large Scale Prototypes, Computational Chemistry, Nano-materials and Nano-technology, Geometric Optimization of Large Organic Systems, Genomics and Bio-Informatics, Electronic Structure Calculations, Aggregation and Etching, Molecular Dynamics, Thin Film Dynamics, Optical / EM Field Calculations, Computational Fluid Dynamics and Heat Transfer, Computer Aided Design and Rapid Prototyping, Tomography, Robotics, Multi-Body Dynamics, Geo-seismic Prospecting, Stress Analysis and Composite Materials, Vibration and Control, Semiconductor Physics, Photonics, Neural Networks and Genetic Algorithms, Earthquake Engineering, Impurities in Anti-Ferro Magnet, Raman Scattering, Particle Physics, Spin Fluctuation in Quantum Magnets, Quantum Computation and so on.

The most recent initiative of IIT Kanpur has been the formation of a strong research group in the areas of Nanoscience and Nanotechnology.

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 annually 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. The Committee will work over the period with effect from 01 / 04 / 2007 for a tenure of 2 years

The following is the composition of the CDMC:

Prof. R K Dube	(MME)	Chairman
Prof. S Roychoudhuri	(Physics)	Co Chairman
Prof. Sumit Ganguli	(CSE)	Member
Prof. A K Mallik	(ME)	..
Prof. L Krishnan	(HSS)	..
Prof. Santosh Kr. Gupta	(ChE)	..
Prof. Alope Datta	(EE)	..
Prof. Sanjay Mittal	(AE)	..
Prof. D Kundu	(Maths & Stat.)	..

New Initiatives

(a) M.Sc. in Economics

IIT Kanpur has introduced a M Sc (5 year integrated) program in Economics from July 2005. This program is providing a strong ground in basic sciences, engineering as well as in various emerging areas of Economics.

The knowledge of Economics and use of Technology for creation of wealth are necessary preconditions for breaking the chain of poverty and low standard of living in the developing countries. Economics and Technology have always migrated together from one country to another, from Europe to United States, from United States to Japan and from Japan to Asian Tigers. Today India is in the midst of this tremendous migration of global know-how. American and European companies are increasingly carrying out their design and manufacturing work in India.

India has a great tradition in Economics Education and Research. Prof. Amartya Sen, Prof. Jagdish N. Bhagwati are among the finest and best known Economists in the World, and our Hon'ble Prime Minister is himself an eminent economist.

Today's India needs trained minds that perfectly blend Technology and Economics. The Integrated MSc program in Economics is a step in that direction. Twenty-five students will be admitted through the Joint Entrance Examination and there will be no prerequisite of Economics as a subject at the higher secondary level. The four streams of Economics are focused. They are Econometrics and quantitative techniques; Industrial economics and business policy; Development infrastructure and public policy; and Environment and resource economics. The credit requirement for the graduation is 199 Credit Points. First four semesters would be common with the other branches of BTech and MSc Integrated programmes.

(b) Environmental Science and Environmental Engineering

The Scope of Environmental Science and Environmental Engineering is inherently interdisciplinary and expanding rapidly. Recognizing the challenges for environmentally sustainable development, IIT Kanpur initiated an interdisciplinary M.Tech. Programme in Environmental Engineering and Management in 1997. This experience has convinced the Institute that there is a pressing need to integrate environmental engineering and science across various disciplines to solve problems that have important societal impact.

A National Advisory Committee (NAC) was constituted by IIT Kanpur to identify the strategies related to the education in Environmental Sciences and Environmental Engineering. The NAC further recommended that in order to ensure full and unrestricted growth of environmental science and engineering disciplines, a separate initiative be started.

The sustainability of any academic programme and its viability would depend on better and comprehensive integration of the interdisciplinary aspects of such a programme. It is also essential that research should focus on new emerging areas, which can respond to the varying societal environmental concerns. Faculty members drawn from the current EEM program, and Departments such as Chemistry, Chemical Engineering, Civil Engineering, Physics, Biological Sciences and Bio-Engineering, Mechanical Engineering etc. can provide the best combination to initiate a world class teaching and research academic program in Environmental Science and Environmental Engineering, once proper facilities are created.

It is proposed to initiate a new multidisciplinary facility for Environmental Science and Environmental Engineering at IIT Kanpur, with a focus on the following areas:

Green Technologies

Assessment, monitoring and modeling of environmental quality

Pollution control and remediation
Health risk assessments due to modern technologies and products
Ecological modeling,
Atmospheric Sciences – monsoon dynamics, global warming, ozone depletion
Land reclamation
Water Resources – groundwater as well as surface water
Environmental Geosciences – Earth systems
Environmental Chemistry

To attain these objectives, a comprehensive infrastructure facility including state-of-the-art laboratory will be required. The equipment proposed to be purchased will also be utilized for the on-going research activities in other Departments of the Institute.

National Programme on Earthquake Engineering Education

IIT Kanpur earnestly believes that every Institute of National Importance has an obligation to render necessary service to the country in a crisis. Our country is prone to strong earthquakes, and we need to contain the risks this involves. A trained manpower development programme for earthquake risk mitigation, known as NPEEE (National Programme on Earthquake Engineering Education), has been instituted by the Government of India. IIT Kanpur is the nodal agency for the entire gamut of NPEEE activities. The enthusiastic faculty members of the Institute have made enormous contribution to Earthquake Engineering Education in the country. Their work in the Andaman Islands during the tsunami calamity deserves deep appreciation.

Outreach and National Program on Technology Enhanced Learning

Meaningful growth of an Institution depends on the kind of commitment it has made to the society at large. Benefits of academic excellence cannot remain restricted to the boundaries of the academic wall. In an electronic age that has seen walls razed across states and countries, an institute like IIT Kanpur has a supreme role in providing leadership that addresses societal concerns. As part of our social responsibility, we want to share our expertise with fellow academic institutions across the country and abroad. Towards this goal, we have initiated an Outreach Education Program. Under this scheme, using the VSAT transmission technology, we are providing lecture courses in the areas of engineering and biological sciences to college and university students in the State of Chhattisgarh. IIT Kanpur is promise bound to transmit some advanced courses to the students of newly founded Pandit Dwarka Prasad Mishra Indian Institute of Information Technology, Design and Management (PDPMIITDM), Jabalpur. IIT Kanpur is also participating in a new project, known as Indo-French Cyber University. This will foster international collaboration in the areas of emerging

technologies. The program will include transmission of courses between IIT-Kanpur and the Université Pierre et Marie Curie (Paris). The courses will be taught in English to advanced Master's students in both countries by French and Indian professors.

IIT Kanpur is also participating in the National Program on Technology Enhanced Learning (NPTEL) sponsored by the Ministry of Human Resource Development. Knowledge grows faster when shared. The NPTEL (National Program on Technology Enhanced Learning) is an initiative of the MHRD to promulgate quality education among the Engineering Colleges of the country through Video and Web-based learning material in some of the popular disciplines. In particular, MHRD wants to monitor the standard of Engineering Education in many colleges where well-trained faculty members are not available in many subjects. The task is double-sided in nature. On one hand, the standards of the colleges are to be uplifted, while on the other hand, the courses have to be acceptable to the end users. Seven IITs and IISc Bangalore are the major players in this endeavor. The courses prepared at IIT Kanpur are being transmitted through the educational TV Channel, Eklavya on a regular basis. These courses have earned appreciation from a wide range of learners.

ADMISSION

Undergraduate

Admissions for all the B.Tech. M.Sc. (5-year integrated) and B.Tech.-M.Tech. (Dual Degree) programmes at IIT Kanpur for the academic session 2007-2008 were made by the Joint Admission Committee for all IITs and IT-BHU.

The Joint Entrance Examination (JEE) -2007 was held on April 08, 2007. The following offers of admission were made from IIT Kanpur:

Department/Disciplines Programmes	Total Number of Candidates-Direct Admission						
	JEE-2007				Preparatory Course-2006		Total
	Gen	SC	ST	PH	SC	ST	
B.Tech.							
Aerospace Engg.	19	04	01	-			24
BSBE	20	04	-			01	25
Chemical Engg.	30	06	-			01	37
Civil Engg.	41	08	-			04	53
Computer Sc. & Engg.	26	05	03	01			35
Electrical Engg.	50	10	05	-			65
Mechanical Engg.	37	07	04	-			48

Materials & Met. Engg.	47	09	-	-		05	61
M.Sc. Integrated							
Chemistry	14	01	-				15
Mathematics & Scientific Computing	25	-	01		05		31
Economics	19	03	-				22
Physics	14	-	-		01		15
Total	342	57	14	01	06	11	431
B.Tech.-M.Tech. (Dual Degree)							
Aerospace Engg.	05	01	-				06
Chemical Engg.	08	01	01			01	11
Civil Engg.	12	02	-				14
Computer Sc. & Engg.	20	04	-				24
Electrical Engg.	16	03	-				19
Mechanical Engg.	13	03	-				16
Total	74	14	01			01	90

Two-Year M.Sc. Programme

Admissions to the 2-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. (2 year) and M.Sc.-Ph.D. (Dual Degree) Physics programmes during 2007-2008 are as under:

Sl. No.	Department/Group	Numbers of Admission Offered	Actual Number of Students Joined
M.Sc. (2-year)			
1	Chemistry	27	24
2	Mathematics	25	25
3	Physics	19	17
4	Statistics	22	15
Total		93	81
M.Sc. - Ph. D. (Dual Degree)			
1	Physics	12	08
Total		12	08

Post Graduate

The number of students admitted to the Postgraduate Programme in the First and Second Semesters 2007-2008 is given below:

ENGINEERING

Department / Group	First Semester			Second Semester		
	M.Tech.	Ph.D.	Total	M.Tech.	Ph.D.	Total
Aerospace Engg.	21	04	25	-	04	04
B.S.B.E.	15	11	26	-	09	09
Chemical Engg.	23	10	33	12	08	20
Civil Engg.	54	02	56	-	04	04
Computer Sc. & Engg.	41	02	43	-	06	06
Design (M.Des.)	16	-	16	-	-	-
Electrical Engg.	85	10	95	-	03	03
Mechanical Engg.	38	16	54	-	05	05
Materials & Met. Engg.	15	06	21	04	03	07
I.M.E.	10	03	13	02	01	03
Laser Technology	02	-	02	-	-	-
Material Science	10	02	12	05	03	08
N.E.T.	-	-	-	09	-	09
E.E.M.	16	-	16	-	-	-
M.B.A. (IME)	44	-	44	-	-	-
Total	390	66	456	32	46	78

SCIENCES

Department / Group	First Semester			Second Semester		
	M.Tech.	Ph.D.	Total	M.Tech.	Ph.D.	Total
Chemistry		23	23		17	17
Mathematics		06	06		02	02
Statistics		-	-		-	-
Physics		08	08		03	03
M.Sc.-Ph.D. Dual Degree in Physics		04	04		03	03
H.S.S.		08	08		02	02
Total		49	49		27	27
Grand Total	390	115	505	32	73	105

The total department/programme wise strength of the Post Graduate students during the year 2007-2008 is given below:

ENGINEERING

Department / Group	First Semester			Second Semester		
	M.Tech.	Ph.D.	Total	M.Tech.	Ph.D.	Total
Aerospace Engg.	47	36	83	40	37	77
B.S.B.E.	30	56	86	26	61	87
Chemical Engg.	55	38	93	64	43	107
Civil Engg.	98	34	132	74	34	108
Computer Sc. & Engg.	87	11	98	85	17	102
Design (M.Des.)	24	-	24	24	-	24
Electrical Engg.	163	60	223	159	57	216
Mechanical Engg.	100	62	162	91	63	154
Materials & Met. Engg.	52	30	82	41	29	70
I.M.E.	23	20	43	25	19	44
Laser Technology	09	-	09	09	-	09
Material Science	24	12	36	27	14	41
N.E.T.	15	02	17	21	01	22
E.E.M.	31	-	31	24	-	24
M.B.A. (IME)	72	-	72	72	-	72
Total	830	361	1191	782	375	1157

SCIENCES

Department / Group	First Semester			Second Semester		
	M.Tech.	Ph.D.	Total	M.Tech.	Ph.D.	Total
Chemistry		161	161		164	164
Mathematics & Statistics		64	64		60	60
Statistics		06	06		06	06
Physics		45	45		48	48
M.Sc.-Ph.D. Dual Degree in Physics		34	34		37	37
H.S.S.		50	50		50	50
Total:		360	360		365	365
Grand Total	830	721	1551	782	740	1522

Strength of Undergraduate and Postgraduate Students during 2007 - 2008 - I:

Department /Group	UG (B.Tech./ M.Sc.-)	B.Tech.- M.Tech (Dual	M.Sc. 2-Yr.	M.Sc.- Ph.D. Dual	M.Tech	Ph.D.	M.Sc- Ph.D Dual	Total (UG +PG)
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	5 Yr.)	Degree).		Degree			Degree	
Aerospace	100	36			47	36		219
B.S.B.E.	95	-			30	56		181
Chemical	161	55			55	38		309
Chemistry	59		47		-	161		267
Civil	212	45			98	34		389
C.S.E.	152	129			87	11		379
Economics	53				-	-		53
Design (M.Des)					24	-		24
E.E.	263	100			163	60		586
H.S.S.	-				-	50		50
Math.	125		50		-	64		239
Stat.	-		34		-	06		40
M.E.	202	85			100	62		449
M.M.E.	226				52	30		308
Physics	75		32	17	-	45	34	203
I.M.E.					23	20		43
Laser Tech.					09	-		09
M.S.P.					24	12		36
N.E.T.					15	02		17
E.E.M.					31	-		31
DIIT (EE)					-	-		
M.B.A. (I.M.E.)					72	-		72
Total	1723	450	163	17	830	687	34	3904

GRADUATION

During the year 2007-2008, 994 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.	334
M.Sc. (2 yr. & 5 yr.)	70 & 40
B.Tech.-M.Tech. (Dual)	60
MBA	27
M.Tech.	356
M.Des.	06
Ph.D.	101
Total:	994

COURSES OFFERED

The following Table gives a picture of the courses offered during 2007-2008 at the undergraduate as well as postgraduate level:

UNDERGRADUATE LEVEL

Core Curriculum/ Department Courses	First Sem.	Second Sem.	Summer	Total
Core Courses run by various departments	28	38	03	69
Aerospace Engineering	17	17	01	35
B. S. B. E.	11	13	02	36
Chemical Engineering	20	19	01	40
Civil Engineering	24	22	01	47
Computer Science & Engineering	25	25	02	52
Electrical Engineering	26	26	01	53
Mechanical Engineering	29	28	01	58
Materials & Metallurgical Engineering	14	15	02	31
Chemistry	20	25	02	47
Mathematics	30	27	02	59
Physics	24	25	-	49
Humanities & Social Sciences	16	21	04	41
Industrial & Management Engineering	05	08	-	13
Nuclear Engineering & Technology	-	-	-	-
Materials Science Program	03	01	-	04
Laser Technology Program	01	02	-	03
CPA	02	01	-	03

POST GRADUATE LEVEL

Core Curriculum/ Department Courses	First Sem.	Second Sem.	Total
Aerospace Engineering	14	13	27
Chemical Engineering	15	12	27
Civil Engineering	17	17	34
Computer Science & Engineering	15	15	30
Design (M.Des.)	06	06	12
Electrical Engineering	23	21	44
Environmental Engg. & Management	04	04	08

Mechanical Engineering	22	21	43
Materials & Metallurgical Engineering	10	08	18
Chemistry	15	14	29
Mathematics / Statistics	09 / 01	11 / 01	20 / 02
Physics	09	13	22
Humanities & Social Sciences	20	17	37
Industrial & Management Engineering	07	04	11
Materials Science Program	07	06	13
Nuclear Engineering & Technology	03	06	09
Laser Technology Program	03	03	06
Biological Science & Bio Engg.	14	12	26
M.B.A.	18	18	36

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 2007-2008 (upto May, 2008)

Sl. No.	Contents	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year	Total
1	Students strength at the beginning of the session	509	537	499	475	131	2151
2	Students strength at the beginning of the 2 nd semester	508	529	496	475	158	2166
3	Students joined in 2 nd semester on migration						
4	Number of students withdrawn or on leave on medical ground in 1 st and 2 nd semesters	04	-	06	01	01	12
5	Number of students graduated	-	-	-	334	100	434
6	Number of students dismissed due to poor performance in 1 st and 2 nd semester	-	04	01	-	-	05
		02		01	01	-	04

The following statement shows promotion and detention of M.Sc. (2-year) and M.Sc. (Dual Degree) students in the academic year 2007-2008 (upto May, 2008)

S. No.	Contents	1 st Year	2 nd Year	Total
1	Students strength at the beginning of the session	87	74	161
2	Students strength at the beginning of the 2 nd Sem.	86	73	159
3	Number of students dismissed in 1 st semester			
	Number of students dismissed in 2 nd semester			
4	Number of students graduated in 1 st semester			
	Number of students graduated in 2 nd semester		70	70
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 XL Convocation held on 31-05-2008. Professor SHIH Choon Fong, President, National University of Singapore was the Chief Guest at the Convocation:

Sl No	DEPT	B.Tech h.	B.Tech- M.Tech (Dual Degree)	M.S c. (5Y R)	M.S c. (2Y R)	TO- TAL	MB A	M.D es	M.Te ch	Ph. D.	TOTA L	GRA ND (UG+ PG)
1.	AERO ENGG.	21	03			24			28	04	32	56
2.	BSBE	17	-			17			13	01	14	31
3.	CHEM. ENGG.	45	09			54			28	09	37	91
4.	CHEMISTRY	-	-	12	22	34			-	23	23	57
5.	CIVIL ENGG.	51	-			51			40	09	49	100
6.	COMP.Sc.& ENGG.	48	20			68			35	03	38	106
7.	DESIGN PROG.	-	-			-		06	-	-	06	06
8.	ELECT. ENGG.	58	14			72			69	09	78	150
9.	ENV.ENGG. &MGMT	-	-			-			16	-	16	16
10.	HUMANITI	-	-			-			-	10	10	10

	ES & SOC. SCs.											
11.	INDUSTRIAL & MGMT. ENGG,	-	-			-	27		18	02	47	47
12.	LASER TECH.	-	-			-			07	-	07	07
13.	MATERIALS & MET. ENGG.	48	-			48			23	04	27	75
14.	MATERIALS Sc.	-	-			-			12	03	15	15
15.	MATHEMATICS	-	-		18	18			-	09	09	27
16.	MATHS & SC COMPUTING	-	-	17		17			-	-		17
17.	MECHANICAL ENGG.	46	14			60			64	06	70	130
18.	NUCLEAR ENGG. & TECHNOLOGY	-	-			-			03	02	05	05
19.	PHYSICS	-	-	11	13	24			-	05	05	29
20.	STATISTICS	-	-		17	17			-	02	02	19
	TOTAL	334	60	40	70	504	27	06	356	101	487	994

Research and Development

The Institute is engaged in providing meaningful education in engineering and science, while conducting original research of the highest standard. The research profile of the Institute is continually growing every year. During the year 2007-2008, about 111 sponsored projects and 109 consultancy projects were undertaken by the faculty and research engineers/scientists of the Institute with the sanctioned amount of Rs. 4182 lakhs and 663 lakhs respectively.

Our faculty members have published around 745 research papers in reputed national and international journals. This year Dr. Animangsu Ghatak, department of Chemical Engineering published a paper in *SCIENCE*, a journal that has an impact factor of 30. 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.

Details of some of the major projects sanctioned during the year 2007-08 are as follows:

National Projects

- **Understanding Plant-Nematode Interactions using RNAI**
Indian Council of Agricultural Research, under a World Bank-funded scheme called National Agricultural Innovation Project awarded a five-year Rs. 5.5 crore project to a consortium led by Dr. K. Subramaniam of the department of Biological Sciences & Bioengineering. Earlier, Dr. Subramaniam's group had demonstrated the successful use of RNAi technology to engineer plants for nematode resistance. The current project aims to expand this work to vegetable and pulse crops, as well as to use this strategy to investigate the biology of plant-nematode interactions. Other members of this consortium are National Research Centre of Plant Biotechnology, Indian Agricultural Research Institute and Indian Institute of Pulses Research.
- **Reusable Metallopolymetric Catalysis for Phosphate Ester and Peptide Bond Modifications**
This project deals with the development of reusable catalysts which have the ability to modify nucleic acids and proteins. Following bioinspired paradigms, the aim of this project is to explore the role of multiple metal ion centres, embedded within polymeric matrices, in achieving catalytic turnovers which are close to natural enzymatic

reactions. Sanctioned under the Bioinorganic Chemistry Initiative of DST, it is hoped that objectives detailed in this project will reveal interesting role of polymeric scaffolds and synergism of multiple metal ion centres, to discover reusable synthetic enzyme-like catalysts for controlled modification of biological molecules.

- **Smart Card Reader and Terminal Standards**

Smart cards are commonly used for applications such as ID, loyalty, payment and security. With an earlier project under MCIT, IIT Kanpur and NIC together had been able to establish a standard for the Smart Card operating system called SCOSTA. The SCOSTA standard is compliant to a set of ISO-7816 standards which are the open standard for smart card interactions.

The goal of SMART CARD READER AND TERMINAL STANDARDS project is to establish continuity with SCOSTA card definitions and to develop reader specifications for the hardware and the OS to support SCOSTA based applications. This project therefore aims at developing an open interface which might be used by enforcing agencies and others who would like to operate with the SCOSTA and other similar smart cards for developing larger applications. Some of the desirable features in such a reader are seamless integration of various peripherals; support for multiple smart card reader interfaces including contact and contact-less interfaces and card to card communication and authentication; abstraction of display to support text-only and text and graphics; public key infrastructure to support encryption, decryption and authentication, digital certificates and digital signatures.

- **Nano-Sized SiC based Quantum Structure on Sily Spin on Techniques**

The project aims at developing a simple technique for the growth of nano sized SiC/GeSiC quantum dots/dashes on silicon and evaluating its applications in Microelectronics and Photonics. Both experimental and theoretical studies will be employed in the development. At present, the technique that has been employed in the work is to use C60 (Fullerene) dissolved in CS₂ (Carbon-Di-Sulphide) and spun on (100) and (111) silicon with 0.5 and 3deg miscut towards the nearest <110> at speeds of 4000-4500 rpm. The layers have been examined with SEM.

- **Oxide Based Functional Thin Film Nano Structure for Spintronics and Quantum Information**

This interdepartmental program envisages the use of a Scanning Probe Microscope (SPM) for creating novel nanoscale structures for spintronics and quantum informatics. These structures are being synthesized primarily using

perovskite family of oxides and oxides-based dilute magnetic semiconductors in a field effect transistor (FET) geometry. The focus is to modulate the magnetic state of the material and its magneto resistance by using electric field.

- **Design Centre in Brass Products for Development of Moradabad Cluster and its Allied Craftsmanship**

There is a growing realization that the rich crafts traditions of India and the skill base of Indian artisans are a marketable economics resource. However, there is also a fear that the handicraft sector might perish in its bid for survival against the now established and accepted aesthetics of the machine. This makes it necessary to equip the handicrafts sector with technological innovations to enable the artisans to connect with the globalized market in a commercially sustainable way, without losing their identity. Indigenous handicrafts and its many attributes and processes require urgent consideration for electronic preservation. The aim is to realize the broader scopes of its preservation, conservation and methodical dissemination to various user-groups.

- **Development of a Microaware Plasma based Negative**

The application of microwaves will make the negative ion source electrodeless and free from current carrying filaments, thereby increasing the source lifetime. An intense plasma will be created by electron cyclotron resonance (ECR) mechanism or by collisional wave absorption, depending upon the electron-neutral atom collision frequency and the plasma will be made to diffuse to a cooler region where negative ions will be formed by attachment. A magnetic filter reduces the electron temperature and facilitates the formation of negative ions, and reduces their destruction. A study of plasma dynamics through the filter will be useful to understand the physics behind the filter operation and to determine optimum condition for negative ion formation. Finally characterization of the negative ion source including measurements of negative ion density and temperature, and experiments on utilization of the negative ions will be performed.

- **Modelling of Microphysical and Optical Properties of Clouds**

Cloud microphysical parameters (such as particle size, number concentration), their thermodynamic state (ice or liquid) and the optical parameters (such as extinction coefficients, phase function, single scattering albedo, optical depth) are the key input parameters in the satellite retrieval algorithms. This project seeks to develop a detailed cloud microphysical model that will produce the hydrometeor (liquid water droplets, ice crystals, rain drops) distribution as a function of temperature, relative humidity and chemically and size resolved aerosol

particles acting as CCN and IN and updraft velocity. Modelled microphysical properties will be extensively validated against the field data. The model will be used to investigate the role of different ice nucleation mechanisms in precipitation from mixed-phase clouds, which is unknown hitherto.

- **Finishing of Miniature Holes Super Alloys using Abrasive Flow Machining (AFM)**

It is for development of an Abrasive Flow Machining setup for finishing of miniature holes in super alloys. The health of the process will be monitored online through Acoustic Emission in order to get good quality products. Considering the above facts, the proposed research work will be focused towards the following: Indigenous development of visco-elastic medium for finishing micro geometric features using AFM, to build an experimental set-up having the facility to provide rotating motion to the medium and to understand the new process from surface integrity point-of-view.

International Projects

- **Transceiver Chip For The Next Generation Of Networks In Telecommunication**

It provides planar integrated monolithic microwave integrated (MMIC) circuit solutions of transceiver design to replace bulky 3D components in wireless communications. Full integration of the transceiver will also improve performance, reduce power consumption and expand applications into millimetre wave frequency range. It will also increase the usage of communications transceiver bringing network connections to remote areas of the world.

- **River Dynamic and Hazards Assessment in the Himalayan Foreland**

The Himalayas are the largest active convergent mountain belt on Earth, with topographic relief of over 8 km, frequent large earthquakes, and high orographic rainfall. These conditions impose severe natural hazards on the densely-populated Gangetic Plain of northern India, including landslides near the Himalayan mountain front, which deliver high quantities of sediment to the river systems, leading to channel aggradation and widespread flooding in the Gangetic Plain. This research will test the hypothesis that both landslide and flood hazards are intimately linked to erosion and deposition of sediment along the Himalayan front. This erosion and deposition is driven by local base level changes, and is highly variable in space and time. Base level changes drive flood risk in the plains but also feedback to influence hazards along the mountain front. The research will result in the first coherent overview of the causes and timing of erosion and

deposition across this region, as well as an integrated regional hazard assessment that ties upstream river basin conditions to downstream flood hazard.

- **Mathematical And Experimental Modeling Of The Animal Stress Response Network**

This project envisages a system biology approach to understand genome-wide gene-expression profiles during stress-response and carcinogenesis. The project goals are to build mathematical models towards finding gene-regulatory network under these conditions. Collaborating institutes are Indian Institute of Toxicology Research, Lucknow and University of Nottingham, UK. The contribution of IITK would be in terms of generating the gene expressing data, both in the context of cancer and stress-response, using the model organism fruit fly, *Drosophila*.

Patents filed by IIT Kanpur Faculty during the financial year 2007-2008:

1. Novel low temperature synthesis of Nd-doped bismuth Titanate Nanoparticles;
2. Liquid-solid radially cross-flow multi-stage fluidized bed contactor;
3. Magnetic Float Levitative Finishing;
4. Synthesis of stable nanocrystalline iron carbides by reaction milling in a dual-drive planetary mill;
5. Process for drilling contoured deep hole in super alloys using STED to enhance cooling in Turbine blades;
6. An improved organic optoelectronic device;
7. Profile Measuring Machine;
8. Piston based resistor;
9. Electrospinning apparatus for producing nanofibers and process thereof;
10. Estimation of inertia tensor and centre of gravity of a vehicle on the three axes platform;
11. A process for synthesis of polymeric micro/nanoparticles for drug delivery applications;
12. WDM Optical Packet Switch incorporating Fibre Bragg Gratings and circulator;
13. All optical reflectors based WDM Optical Packet Switch;
14. A Dynamic logic family using only N or P-type enhancement mode-MOSFET;
15. Optical enhancement of two-photon absorption process;
16. Process for synthesis of nanocrystalline hydroxypatite;
17. Remote Service Machine (RSM);
18. Using personal devices for authentication and service access at service outlets;
19. BFPT Thin Films Heterostructure and Process Thereof.

Major Multi-disciplinary Facilities Added during the financial year 2007-2008:

1. Facilities under the FIST Scheme of DST:

The Department of Science and Technology (DST) has a *Fund for improvement of Science & Technology (FIST)* scheme to build infrastructure facilities in Universities and Higher Educational Institutions. The grant under this scheme is provided for strengthening infrastructure of the identified department in teaching and research and is to be spent exclusively for the said purpose. During 2007-2008, the Institute has received FIST grants to add special infrastructure facilities for research purposes.

The Department of Chemical Engineering has been provided a total amount of Rs. 6 crores. The grant will be utilized to achieve vision in the following thrust areas that need to be specially cultivated in the next decade: Advanced and Functional Materials (nanomaterials; composites; catalytic; bio-, opto-electronic and polymer materials); Novel Reaction and Separation Processes; Nanoengineering and Nanosciences; Bioengineering and Biotechnology; Process Intensification; Complex Fluids, Colloid and Interfacial Engineering; Environmental engineering. These areas will remain the engines of growth for chemical engineering in the foreseeable future and will require major departures from many research practices of the yesteryears.

The Department of Chemistry has been provided a total amount of Rs. 4 crores. The department is active in pursuing modern research in the areas both in traditional chemistry and also at the interface of biology, material science, nano-science. The department needs state-of-the-art equipments to meet the challenges in these areas. The equipments sanctioned under the FIST grant are Atomic Force Microscope (AFM) which is primarily employed to decipher processing and materials problems in diverse areas of chemistry, electronics, biology, automotive, aerospace, and energy; fluorescence spectroscopy which is a very valuable technique that can probe excited states of molecules and give a very deep insight into the conformation of biomolecules like proteins as well. Likewise, the other facilities like high performance computing of molecules, clusters and materials; Resonance Raman spectrometer will augment the research performance by different faculty members.

2. Centre for BSNL-IITK Telecom Centre of Excellence:

The Institute has signed an MoU with Bharat Sanchar Nigam Limited (BSNL) for setting up the *BSNL-IITK Telecom Centre of Excellence*. The basic objective of the Centre is to provide and facilitate an environment for innovation and application oriented

research in the field of Telecommunication and related areas. It will seek to address the technological needs of DoT, BSNL and other related industries.

3. Centre for Uttar Pradesh Power Transmission Corporation Ltd (UPPTCL):

The Institute has also entered into an MoU with *Uttar Pradesh Power Transmission Corporation Ltd (UPPTCL)* with the objective of accelerating the development of the transmission system in UP through appropriate application of science and technology. Such efforts would enable the State to utilize the scientific, technological and managerial resources of the Institute in introducing modern technology to accelerate its economic growth and also upgrade the technological skills of its personnel.

4. Centre for Archaeology and Cultural Resource Management:

The Institute has also entered into an MoU with the Archaeological Survey of India, to set up *Centre for Archaeology and Cultural Resource Management*. The Institute shall draw specific short and long term training programs for capacity building for officers of The Archaeological Survey of India in the application of modern technology in archaeology. Initially, the focus will be on Geoinformatics, CAD and Computer Applications in Archaeology and Archaeo-materials.

5. Facilities under CARE Scheme of IITK:

IIT Kanpur has a *Committee for Allocation of Research Equipment (CARE)* Scheme providing financial assistance for the purpose of the specialized equipment for multidisciplinary research of significant value. The Institute is adding several major infrastructural facilities for carrying out multidisciplinary R&D activities.

A Terrestrial Laser Scanner under the CARE scheme project was procured. ILRIS3D from Optech Inc., Canada was purchased at a cost of Rs. 55 lakhs and is ready for use since the month of May 2008. This high density surveying instrument opens up several avenues for research and problem solving. The Cascaded Dilatometer Facility procured under CARE scheme will be housed at the Materials Processing Laboratory (MPL) in the Advanced Centre for Materials Science. A dilatometer is employed for measuring *in situ* the instantaneous dimensional changes in compacts during various thermal cycles.

ICAP 6300 ICP Spectrometer was acquired under the CARE scheme. The use of Inductively Coupled Plasma source (ICP) and Atomic Absorption (AA) are the accepted and most powerful techniques for the analysis of and quantification of trace

elements in both solid and liquid samples. Applications range from important environmental analyses to the materials industry, geological applications to clinical research and from the food industry to the semiconductor industry.

During the year 2007-08, 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:

- The University of Nottingham, Nottingham for collaborating on a project entitled *Mathematical and experimental modeling of the animal stress-response network*
- Dan Kook University, Korea for providing a Summer Course on Organic Electronics - 2007
- The Università' Degli Studi Di Perugia, Italy to award fellowships to young Indian Researchers
- De Montford University Leicester, UK (DMUL) and University of Bristol, Bristol, UK (UOBB) for carrying out a project entitled *High Alpha Aerodynamic & Modelling and Nonlinear Flight Dynamic Analysis*
- The Regents of the University of California for Conformal Deposition of Carbon Particles on Three-Dimensional Microstructures
- Keio University, Japan agreement on Academic Linkage, Collaboration and Exchange programme.
- Deakin University, Geelong Victoria for undertaking a project titled *Exploiting Crystallographic Texture for Improved Nano-Crystalline Metals*
- International Foundation for Science for research agreement for carrying project entitled *Novel Biosynthesis of CdS nanoparticles by immobilized fungus*
- Nanyang Technological University, Singapore for Research collaboration agreement for carrying the project entitled *A model of special economic zone in India with enhanced efficiency in supply chain operations and logistics*
- The University of Allahabad, Allahabad for collaboration in areas related to cultural resource management
- Ferroz Gandhi Institute of Engineering & Technology, Raibareilly to promote and enhance academic interest between both parties, to provide advice for implementation of quality of education at FGIET and to encourage bright students of FGIET to come for PG education at IITK.

- Dayalbagh Education Institute, Agra to carry out joint research activities and projects in the fields of common interest viz. doctoral or post graduate programme and exchange programme for faculty and students.
- Centre for Development of Advanced Computing, Vellayambalam, Thiruvananthapuram for carrying out research on *Universal Front-End for Micro Generators using Renewable Sources*
- Department of Biotechnology, Ministry of Science & Technology, GOI, New Delhi (DBT) being desirous of MEMBRANE BIO-SEPARATION decided to support a project entitled *Milk nutraceuticals : a biotechnology opportunity for Australian and Indian dairy producers*
- Prasar Bharti (Broadcasting Corporation of India) for ongoing scheme of Continuing Education and Training Programme
- Center for Development of Advanced Computing (C-DAC) Noida for transfer of ANGLABHARTI TECHNOLOGY for developing the machine-aided translation system from English to Punjabi.
- Center for Development of Advanced Computing (C-DAC) Noida for transfer of ANGLABHARTI TECHNOLOGY for developing the machine-aided translation system from English to Urdu.
- The Department of Scientific and Industrial Research (DSIR) and Technology Information Forecasting and Assessment Council (TIFAC) New Delhi for collaborate to provide the help to operate TePP Activities Programme as their collaboration therein would be mutually beneficial.
- Technology Development Board, New Delhi has approved the scheme for Seed Support System for Start-ups in Incubators for providing financial assistance as seed support for start-ups in the Institution as a growth oriented initiative between the Board and the Institution.
- IIT-Delhi, IIIT-Allahabad, Knowledge Online.Com (P)Ltd, KritiKal Solutions (P) Ltd., TVS Motor Company Ltd., TIFAC the main aim of this agreement is to implement pre-competitive studies leading to the development of "Computer based Acoustic - vibration quality testing of single cylinder engines".
- Research Design & Standards Organisation, Lucknow for Development of guidelines on seismic design of Railway bridges and training of Railway's Engineers
- United Nations Development Programme, (UNDP), New Delhi for carrying the project entitled *Development of a labour intensive road design, construction and evaluation manual* under National Rural Employment Guarantee Act.
- Research Design & Standards Organization, Lucknow for consultancy and upgradation of PDP 11/73 based data acquisition and control system on schenck track panel fatigue testing machine.

During the year 2007-08, Memoranda of Understanding have also been signed with many companies such as:

- The Cooperative Research Centre for Contamination Assessment and Remediation of the Environment Pvt. Ltd, Cromoz Inc. USA,
- International Business Machines Corporation, New York (IBM),
- Autodesk Asia Pte Limited,
- Intel Corporation, Santa Clara,
- Nemgenix Pty. Ltd. Australia,
- Procter & Gamble Company, Ohio,
- Siemens Information Systems Ltd.,
- Process Intensification Consultants (PIC),
- Hindustan Petroleum Corporation Limited,
- Shinsei Bank Limited, Japan, IHI Corporation, Japan.

A list of major sponsored and consultancy projects sanctioned during the financial year 2007-2008 is provided below.

Sponsored Projects

A. National Projects

- *DEVELOPMENT OF NEXT GENERATION PLASMA DISPLAY PANEL TECHNOLOGY AND 50 HDPDP PROTOTYPE*, funded by CSIR, Total Cost Rs. 132,00,000.00
- *SYNTHESIS AND CHARACTERIZATION OF CARBON MOLECULAR SIEVES FROM ACTIVATED CARBON FIBERS*, funded by CSIR, Total Cost Rs. 9,34,000.00
- *CARBON NANO TUBES COATED CARBON FIBER COMPOSITES IN POLYCARBONATE MATRIX*, funded by CSIR, Total Cost Rs. 11,96,000.00
- *BIOMECHANICAL STUDY ON THE ROLE OF CIRCULAR LONGITUDINAL & OBLIQUE MUSCLES IN GASTRIC MOTILITY USING HIGH PERFORMANCE COMPUTING*, funded by CSIR, Total Cost Rs. 6,01,000.00
- *CREATING A BMP RESPONSIVE REPORTER CELL LINE*, funded by CSIR, Total Cost Rs. 1,10,600.00
- *SYNTHESIS OF PYRIDINE AND CARBOXYLATE DONOR LIGANDS AND THEIR METAL CO-ORDINATION*, funded by CSIR, Total Cost Rs. 8,00,000.00
- *TREATMENT OF WASTEWATER CONTAINING AZO-DYES BY OZONATION AND AEROBIC BIODEGRADATION*, funded by CSIR, Total Cost Rs. 10,96,000.00
- *DEVELOPMENT OF NEW METHODS FOR SYNTHESIS OF 2-SUBSTITUTED CYCLOBUTANONE AND CHIRAL CYCLOPROPANOL*, funded by CSIR, Total Cost Rs. 13,46,000.00

- *STUDYING THE ROLE OF SURFACE AND BULK HETEROGENEITIES OF A RELEASE COATING FOR THE REMOVAL OF BIOFOULANTS*, funded by CSIR, Total Cost Rs. 19,96,000.00
- *INVESTIGATION ON THE EFFECTS OF COMPOSITIONAL MODIFCATIONS ON STRUCTURE AND PROPERTIES OF BIFE 03 THIN FILMS FOR DEVICE APPLICATIONS*, funded by CSIR, Total Cost Rs. 13,49,000.00
- *IDENTIFICATION OF THE MOLECULAR MECHANISMS THAT DETERMINE THE FOVEAL REGION IN THE VERTEBRATE RETINA*, funded by CSIR, Total Cost Rs. 5,58,500.00
- *PHOTOCHROMISM BASED ON C-O BOND HETEROLYSIS: MECHANISTIC INSIGHTS AND MODIFIED BENZOPYRANS TOWARDS IMPROVED PGHOTOBEHAVIOR*, funded by CSIR, Total Cost Rs. 10,50,000.00
- *DETERMINANTS OF CHILD MORTALITY REPORTED CAUSES AND QUALITY OF SERVICE*, funded by CSIR, Total Cost Rs. 3,67,800.00
- *REMOTE SENSING AND ARCHAEOLOGICAL INVESTIGATIONS FOR THE INTERPRETATION OF THE GROWTH OF THE HOLY CITY OF VARANASI*, funded by DST, Total Cost Rs. 6,12,000.00
- *REUSABLE METALLOPOLYMERIC CATALYSIS FOR PHOSPHATE ESTER AND PEPTIDE BOND MODIFICATIONS*, funded by DST, Total Cost Rs. 81,96,000.00
- *DEVELOPING A HIGH SENSITIVITY MEGNETO-OPTICAL IMAGING TECHNIQUE*, funded by DST, Total Cost Rs. 66,71,629.00
- *NHC BASED MULTI SITE COORDINATING LIGAND*, funded by DST, Total Cost Rs. 30,90,000.00
- *DEVELOPMEN OF NEW AFFINITY- BASED CELL SEPARATION TECHNOLOGY USING CRYOGELS*, funded by DST, Total Cost Rs. 24,00,000.00
- *DEVELOPMENT AND CHARACTERIZATION OF LANGMUIR-BLODGETT THIN FILM OF PVA BASED ELECTROACTIVE HYDROGELS FOR USAGE IN SMART STRUCTURES*, funded by DST, Total Cost Rs. 20,40,000.00
- *MOLECULAR PATHOLOGY IN LAFOR'S DISEASE:DEFINING THE CELLULAR FUNCTION OF LAFORIN PHOSPHATASE*, funded by DST, Total Cost Rs. 3,22,000.00
- *ELECTOCHEMICAL DEPOSITION TECHNIQUE FOR FABRICATING SOLAR CELLS AND IR PHOTODECTORS*, funded by DST, Total Cost Rs. 18,84,000.00
- *IDENTIFICATON AND FUNCTIONAL CHARACTERIZATION OF BMP-TARGET GENES IN OSTEOGENESIS*, funded by DST, Total Cost Rs. 22,86,000.00
- *MESOSTRUCTURED FUNCTIONAL THIN FILM AND INTERFACES OF SOFT MATERIALS*, funded by DST, Total Cost Rs. 4,83,58,305.00
- *IDENTIFICATION AND CHARACTERIZATION OF CELLULAR SUBSTRATES FOR LAFORIN PHOSPHATES, THE PROTEIN DEFECTIVE IN IAFORA'S*

- PROGRESSIVE MYOCLONUS EPILEPSY*, funded by DST, Total Cost Rs. 22,73,900.00
- *AN INVESTIGATION OF THE ROLE OF RETINOIC ACID SIGNALING IN DEVELOPMENT OF THE HIPPOCAMPUS*, funded by DST, Total Cost Rs. 23,79,000.00
 - *ROLE OF SECONDARY BONDING INTERACTIONS AMONG FUNCTIONALIZED ORGNOTELLURIUM COMPOUNDS*, funded by DST, Total Cost Rs. 20,00,000.00
 - *SPIN GLASS-LIKE ORDERING & EXCHANGE BIAS INTERACTION IN MAGNEYIC NANOPARTICLES SYNTHESIZED BY CHEMICAL ROUTES*, funded by DST, Total Cost Rs. 21,70,050.00
 - *AQUEOUS NITRIDING OF STEEL BY ELECTROLYTE PLASMA:KINETICS, DESIGN AND SCALE-UP*, funded by DST, Total Cost Rs. 18,27,200.00
 - *PREPARATION OF CARBON NANO-FIBRES BY POLYMERS BLEND TECHNIQUES*, funded by DST, Total Cost Rs. 19,14,000.00
 - *NATURAL DYES- CHEMISTRY STUDIES OF NEWER NATURAL DYES*, funded by DST, Total Cost Rs. 3,03,000.00
 - *DEVELOPMENT OF NOISE POLLUTION LEVEL MONITORING FOR TEXTILE INDUSTRY*, funded by DST, Total Cost Rs. 7,80,000.00
 - *CYCLOADDITION AND REARRANGEMENTS OF DIAZIRIDINES TRIAZIRIDINES AZIRIDINONES AZETIDINES AND AZETIDINONES*, funded by DST, Total Cost Rs. 49,70,200.00
 - *INVESTIGATION OF THE CRYSTALLINE RE3+:YAG FIBRE FOR DOSIMETRY*, funded by DST, Total Cost Rs. 9,66,000.00
 - *EXPLOTING CRYSTALLOGRAPHIC TEXTURE FOR IMPROVED NANAO-CRYSTALLINE METALS*, funded by DST, Total Cost Rs. 20,48,000.00
 - *DEVELOPMENT OF MOLECULARLY IMPRINTED BIOMATERIALS FOR CHOLESTROL RECOGNITION*, funded by DST, Total Cost Rs. 2,76,000.00
 - *INCREMENTAL SHEET METAL FORMING AT MULTI-SCALES*, funded by DST, Total Cost Rs. 38,72,800.00
 - *FIELD EFFECT TRANSISTORE BASED ON EPITAXIAL MULTICOMPONENT OXIDE HETEROSTRUCTURES*, funded by DST, Total Cost Rs. 10,29,000.00
 - *FIST PROGRAM*, funded by DST, Total Cost Rs. 4,45,00,000.00
 - *DESIGN AND DEVELOPMENT OF AN EXOSKELETON ROBOT FOR HUMAN HAND SUPPORT AND REHABILITATION*, funded by DST, Total Cost Rs. 23,13,600.00
 - *SIC TDB SEED SUPPORT SYSTEM FOR START-UPS*, funded by DST, Total Cost Rs. 100,00,000.00
 - *FIST PROGRAM 2007*, funded by DST, Total Cost Rs. 60,70,000.00

- *MODELLING AND SIMULATION OF DEBRIS RE-ENTRY WITH AEROTHERMAL BREAK-UP*, funded by ISRO, Total Cost Rs. 5,63,500.00
- *NUMERICAL AND EXPERIMENTAL STUDY OF DROPLET COMBUSTION UNDER NORMAL AND MICROGRAVITY CONDITIONS*, funded by ISRO, Total Cost Rs. 18,63,000.00
- *MODELING OF MICROPHYSICAL AND OPTICAL PROPERTIES OF CLOUDS*, funded by ISRO, Total Cost Rs. 38,78,000.00
- *EXPERIMENTAL INVESTIGATION OF FLOW AND NOISE CHARACTERISTICS OF IMPINGING TRANSIENT SUPERSONIC JETS FOR SIMULATING TAKE OFF FROM LAUNCH PAD*, funded by ISRO, Total Cost Rs. 8,16,000.00
- *ENVIRONMENTAL OBSERVATORY*, funded by ISRO, Total Cost Rs. 35,04,000.00
- *FINISHING OF MINIATURE HOLES SUPER ALLOYS USING ABRASIVE FLOW MACHINING (AFM)*, funded by ARDB, Total Cost Rs. 29,64,600.00
- *EXPERIMENTAL INVESTIGATION OF AERODYNAMICS CHARACTERISTIC OF BIRD SIZE FLAPPINGS AND DEVELOPMENT OF AN ORNITHOPTER*, funded by ARDB, Total Cost Rs.9,70,000.00
- *DEVELOPMENT AND CHARACTERIZATION OF THIN SANDWICHED STRUCTURES USING POLYMER FOAM*, funded by ARDB, Total Cost Rs. 7,86,000.00
- *CUREDEPENDENT MATERIAL CHARACTERIZATION OF COMPOSITES PREPEGS: FM MODELING*, funded by ARDB, Total Cost Rs.4,83,750.00
- *MODELLING AND DEVELOPMENT OF MULTIPHASE MICRO-STRUCTURED DAMPLING LAYER FOR BROADBAND VIBRATION DAMPLING IN FLEXIBLE LINKS*, funded by ARDB, Total Cost Rs.8,08,000.00
- *DYNAMIC SHEAR STRENGTH OF ADHENSIVELY BONDED INTERFACE THROUGH TORSIONAL SPLIT HOPKINSON BAR*, funded by ARDB, Total Cost Rs.7,46,500.00
- *PERFORMANCE EVALUATION OF CARBON NAOTUBE COATED CARBON FIBER REINFORCED CARBON COMPOSITES FOR STRUCTURAL APPLICATIONS*, funded by ARDB, Total Cost Rs. 25,33,200.00
- *A STUDY OF THE EFFECTS OF WAKE PASSING ON TURBINE BLADE FILM COOLING*, funded by ARDB, Total Cost Rs.12,38,000.00
- *NLF WING ANALYSIS AND DESIGN*, funded by ARDB, Total Cost Rs.22,51,000.00
- *TO ASSES THE ROLE OF ADAM33 GRENE EXPRESSION IN DIAGNOSIS AND MANAGEMENT OF ASTHMATICS CHILDREN: A CASE-CONTROL STUDY*, funded by DBT, Total Cost Rs. 4,17,000.00
- *DEVELOPMENT OF INTRATUMORAL DRUG DELIVERY SYSTEM FOR THE TREATMENT OF LUNG CANCER*, funded by DBT, Total Cost Rs.60,92,000.00

- MILK UTRACEUTICALS: A BIOTECHNOLOGY OPPORTUNITY FOR AUSTRALIAN AND INDIAN DAIRY PRODUCERS, funded by DBT, Total Cost Rs.12,68,000.00
- DEVELOPMENT OF SUPERMACROPROPOUS CRYOGEL MATRICES AS NOVEL POLYMERIC BIO-MATERIALS FOR BIO ENGINEERING APPLICATIONS: CELL SEPRATION, THERAPEUTIC PROTEIN PRODUCTION AND TISSUE ENGINEERING SCAFFOLDS, funded by DBT, Total Cost Rs.73,36,600.00
- GENERATION AND CHARACTERIZATION OF NEURONAL AND NUMEURONAL CELL OF THE NERVOUS SYSTEM FROM THE HUMAN UMBILICAL CORD, funded by DBT, Total Cost Rs.31,47,400.00
- DEVELOPMENT OF A GENETICALLY MODEL FOR CHARACTERIZATION OF THE MOLECULAR MECHANISM OF AMYOTROPHIC LATERAL SCLEROSIS DISEASE DEVELOPMENT funded by DBT, Total Cost Rs. 30,56,000.00
- TELE-OPHTHALMOLOGY, funded by MHFW, Total Cost Rs.10,00,000.00
- SMART CARD READER AND TERMINAL STANDARDS, funded by MCIT, Total Cost Rs.55,00,000.00
- NANO-SIZED SIC BASED QUAUTUM STRUCTURE ON SIBY SPIN ON TECHNIQUES, funded by MCIT, Total Cost Rs.1,06,24,000.00
- EVALUATION OF ORGANO-CHALCOGENOLATE (S,SE,TE) METAL COMPLEXEX AND THEIR NANOPARTICLES FOR PHOTO-SENSING, PHOTOVOLTAI AND ELECTRO-LUMINESCENCE PROPERTIES UNDER CARS SCHEME OF DRDO, funded by DMSRDE, Total Cost Rs. 9,90,000.00
- CORROSION RESISTANT RAILS, funded by SAIL, Total Cost Rs.30,00,000.00
- INAE - YOUNG ENGINEER AWARDEES, funded by INAE, Total Cost Rs. 1,00,000.00
- NATIONAL RFID PROGRAMME , funded by MIT, Total Cost Rs.91,00,000.00
- TRANSIENT FLOW ANALYSIS OF HEAVY DENSITY LIQUID METAL IN SPALLATION TARGET OF ADSS, funded by DAE, Total Cost Rs. 16,21,800.00
- EXPERIMENTAL AND COMPUTATIONAL STUDIES IN FLOW PAST SOFT MATERIALS, funded by DAE, Total Cost Rs. 12,91,750.00
- OXIDE BASED FUNCTIONAL THIN FILM NANO STRUCTURE FOR SPINTRONICS & QUANTUM INFORMATION, funded by DIT, Total Cost Rs. 2,32,61,000.00
- LAB MEASUREMENT OF DYNAMIC SHEAR MODULUS OF FILL SOILS FOR USE IN RAILWAY TRACK FORMATION, funded by RDSO, Total Cost Rs. 4,50,000.00
- EXPERIMENTAL STUDIES OF LIQUID FUEL COMBUSTION USING CHEMILUMINESCENCE SENSOR, funded by DRDO, Total Cost Rs. 22,40,000.00

- *TOTAL SYNTHESIS OF ALL THE CHIRAL FORMS OF PENTENOCIN B*, funded by DRDO, Total Cost Rs. 26,56,500.00
- *DEVELOPMENT OF METAL IMPREGNATED ACTIVATED CARBON FIBRES (ACFS) FOR CONTROL OF CHEMICAL WARFARE AGENTS (CWAS)*, funded by DRDO, Total Cost Rs. 79,74,000.00
- *MICRO GENERATORS USING RENEWABLE SOURCES*, funded by CDAC, Total Cost Rs. 27,00,000.00
- *PERFORMANCE ANALYSIS AND TRADING OF WIND POWER GENERATION IN EMERGING POWER SYSTEM*, funded by CPRI, Total Cost Rs. 21,60,000.00
- *FUTURE OF THE PAST: APPLICATION OF SCIENCE & TECHNOLOGY FOR THE STUDY PRESERVATION & DISSEMINATION OF CULTURAL HERITAGE OF INDIA*, funded by AICTE, Total Cost Rs. 20,50,000.00
- *ACTIVE TECTONIC INVESTIGATIONS AROUND SOUTH MIDDLE ANDAMAN & CAR NICOBAR ISLANDS AND N ISLAND*, funded by INCOIS, Total Cost Rs. 27,00,000.00
- *QUALITY ASSURANCE CONDITION MONITORING AND FAULT DIAGNOSIS USING INTELLIGENT CONTROL METHODOLOGIES*, funded by TIFAC, Total Cost Rs. 83,20,000.00
- *ELECTRONIC STABILITY CONTROL SYSTEMS*, funded by TIFAC, Total Cost Rs. 19,20,000.00
- *E-CLASSROOM ROLLOUT IN SCIENCE COLLEGE OF CHATTISGARH*, funded by CHIPS, Total Cost Rs. 1,22,00,000.00
- *A CRITICAL SURVEY OF LAMINAR*, funded by NAL, Total Cost Rs. 2,04,000.00
- *EXPERIMENTAL STUDIES ON SINGLE AND MULTI-ELEMENT AIRFOILS AT NWTF, IIT KANPUR*, funded by NAL, Total Cost Rs. 30,48,000.00
- *SYNTHETIC JET FOR PROPULSION AND MANEUVERING OF UNDERWATER VEHICLES*, funded by NRB, Total Cost Rs. 26,66,400.00
- *SYNTHESIS AND INVESTIGATION OF YB-BASED STRONGLY CORRELATED ELECTRON SYSTEMS*, funded by BRNS, Total Cost Rs. 23,61,500.00
- *DEVELOPMENT OF MAGNETIC FIELD SENSORS BASED ON METALLIC MULTILAYERS WITH HIGH MAGNETORESISTANCE SENSITIVITY*, funded by ARMREB, Total Cost Rs. 22,65,000.00
- *UNDERSTANDING PLANT-NEMATODE INTERACTIONS USING RNAI*, funded by NAIP, Total Cost Rs. 2,49,65,140.00
- *DESIGN CENTRE IN BRASS PRODUCTS FOR DEVELOPMENT OF MORADABAD CLUSTER AND ITS ALLIED CRAFTSMANSHIP*, funded by MOT, Total Cost Rs. 46,75,000.00
- *SETTING UP HANDICRAFTS MUSEUM*, funded by MOT, Total Cost Rs. 46,75,000.00

- *DESIGN CENTRE IN LEATHER HANDICRAFTS PRODUCTS FOR DEVELOPMENT OF KANPUR CLUSTER*, funded by MOT, Total Cost Rs. 23,37,000.00
- *RESEARCH ENVIRONMENT IN INDIAN INSTITUTE OF TECHNOLOGY*, funded by ICSSR, Total Cost Rs. 1,44,050.00
- *ZONING POLICY IN INDIAN MEGA CITIES*, funded by ICSSR, Total Cost Rs.6,57,900.00
- *DEVELOPMENT OF A MICROAWARE PLASMA BASED NEGATIVE*, funded by NFP, Total Cost Rs.56,50,000.00
- *EVALUATION OF AS FIELD TEST KIT*, funded by UNICEF, Total Cost Rs. 1,00,000.00
- *ENVIRONMENT FRIENDLY TOILET SYSTEM FOR A CONGESTED LOCALITY IN ALIGARH*, funded by UNICEF, Total Cost Rs. 9,03,750.00
- *STUDY FOR MOUNTING OF SLAR ANT*, funded by HAL, Total Cost Rs. 1,50,000.00
- *AUTODESK IITK FOR EXCELLENCE I*, funded by AIP, Total Cost Rs. 6,86,260.00
- *IDR-REPORT (3-I NETWORK) RESOURCES CENTRE AT IITK*, funded by IDFC, Total Cost Rs. 3,00,000.00
- *NANO FINISHING OF ULTRA HIGH SPEED BEARING*, funded by BARC, Total Cost Rs. 11,88,500.00

B. International Projects

- *MATHEMATICAL AND EXPERIMENTAL MODELING OF THE ANIMAL STRESS RESPONSE NETWORK*, funded by UKIERI, Total Cost Rs. 37,67,671.73
- *RIVER DYNAMICAND HAZARDS ASSESSMENT IN THE HIMALAYAN FORELAND*, funded by UKIERI, Total Cost Rs. 40,74,079.00
- *DEVELOPMENT OF FUNCTIONALIZED CARBON NANOTUBES- NUCLEOBASE CONSTRUCTS AND THEIR USE IN BIOMIMETIC CATALYSTS*, funded by IFCPAR, Total Cost Rs. 14,68,000.00
- *CHARACTERIZATION AND MODELING OF THE NONLINEAR CREEP RESPONSE OF STRETCHED PET*, funded by IFCPAR, Total Cost Rs.11,94,200.00
- *BIO INSPIRED DESIGNS OF SUPRA MOLECULAR ARCHITECTURES FROM IOTA-PEPTIDES*, funded by INDOUS, Total Cost Rs. 6,30,000.00
- *PLANT PARASIFIC NENOTODES*, funded by VLIR, Belgium, Total Cost Rs.1,22,629.51
- *TRANSCIEICVER CHIP FOR THE NEXT GENERATION OF NETWORKS IN TELECOMMUNICATION*, funded by BCD, Total Cost Rs.66,79,200.00
- *TIGERZ*, funded by NASA, Total Cost Rs. 5,88,150.00

Consultancy Projects

- *CONSULTANCY FOR REMEDIAL MEASURES FOR FAILED/COLLAPSED R.C.CRICKET STADIUM STRUCTURE UNDER CONSTRUCTION, ETAWAH (SAIFAI) (STAGE-2), funded by UPRNN Ltd., Total Cost Rs. 1,65,300.00*
- *CONSULTANCY FOR REMEDIAL MEASURES FOR FAILED/COLLAPSED R.C. CRICKET STADIUM STRUCTURE UNDER CONSTRUCTION, ETAWAH (SAIFAI) (STAGE-1), funded by UPRNN Ltd., Total Cost Rs. 76,528.00*
- *REMODELLING OF RAIT DRAIN UNDER UPSIDC, funded by UPSIDC Ltd., Total Cost Rs. 46,528.80*
- *DESIGN OF OUTDOOR BTS, Total Cost Rs. 56,120.00*
- *WEB BASED E LEARNING SYSTEM, funded by KIIT University, Total Cost Rs. 86,125.00*
- *STRATEGIC & OPERATIONAL HR FOR PARAG, funded by PARAG, Total Cost Rs. 8,20,000.00*
- *CONSULTANCY FOR REMEDIAL MEASURES FOR FAILED/COLLAPSED R.C.CRICKET STADIUM STRUCTURE UNDER CONSTRUCTION, ETAWAH (SAIFAI) (STAGE-3), funded by UPRNN Ltd., Total Cost Rs. 7,40,789.00*
- *DEVELOPMENT OF DIGITAL AVR FOR CAPTIVE POWER PLANTS, funded by BHEL, Total Cost Rs. 17,60,000.00*
- *POWER METALLURFGICAL (P/M) PROCESSING OF HIGH DENSITY HIGH STRENGTH ALUMINUM METAL MATRIX COMPOSITES, funded by Schlumberger, USA, Total Cost Rs. 11,75,000.00*
- *CONSULTANCY REGARDING HEALTH OF UMRAN ASH DYKE, funded by NTPC, Total Cost Rs. 20,398.00*
- *PARTICIPATION IN FIRE ADVISORY COMMITTEE, Total Cost Rs.56,120.00*
- *DESIGN OF CONCRETE MIX M35, Total Cost Rs.19,690.00*
- *CALIBRATION OF HYDRAULIC JACKS, Total Cost Rs.89,792.00*
- *DESIGN OF CONCRETE MIX M40 WITH SUPER PLASTICIZER FOR TATA MOTORS, LUCKNOW, Total Cost Rs.44,896.00*
- *DESIGN OF CONCRETE MIX M20, Total Cost Rs.14,030.00*
- *CALIBRATION OF PROVING DIAL GAUGES, Total Cost Rs.16,854.00*
- *AGLABHARATI CONSULTANCY, funded by CDAC, Noida, Total Cost Rs.4,00,000.00*
- *FAILURE ANALYSIS OF SHUTTLE BODY, Total Cost Rs.35,917.00*
- *UNDERGROUND DRAINAGE SYSTEM AT OTPS, funded by UPRVUN Ltd., Total Cost Rs.95,596.00*
- *WIND TUNNEL STUDY ON RIGID MODEL OF CABLE STAYED PAVILION ROOF AT UTT, funded by KS&P Ltd., Total Cost Rs. 12,00,000.00*

- *ASSESSMENT OF INFECTIOUS MEDICAL WASTE*, funded by Burgeep, France, Total Cost Rs. 69,692.00
- *MODELLING OF MASS TRANSFER EFFECT IN RESID FCC*, funded by Chevron Texaco, Total Cost Rs.5,84,100.00
- *DESIGN OF CONCRETE MIX 35 WITH ADMIXTURE*, Total Cost Rs. 14,045.00
- *CALIBRATION OF HYDRAULIC JACKS*, funded by Freyssinet Pre-stressed Concrete Co, Total Cost Rs.67,416.00
- *ELECTRONIC FILE TRACKING*, funded by Total Cost Rs.8,40,000.00
- *DESIGN OF CONCRETE MIX M20,M25, M35, AND M40 WITH CHEMICAL ADMIXTURE AND FLY ASH*, funded by Bebanco Northern Contracts, Total Cost Rs.1,40,450.00
- *DESIGN OF CONCRETE MIX FOR NEW CORE LAB BUILDING AT IITK*, Total Cost Rs.14,030.00
- *SWELLING POTENTIAL OF COMPACTED FILL AT COMBINED CYCLE POWER PLANT IN GUJRAT*, funded by SIEMENS, Total Cost Rs.1,28,493.00
- *DESIGN OF CONCRETE MIX M20*, funded by Unitech Ltd., Total Cost Rs.14,045.00
- *RECOVERY OF WAX FROM SLACK WAX AND IMPROVEMENT OF POUR POINT OF THE OIL*, funded by Agarwal oil Refinery, Total Cost Rs.7,04,496.00
- *SUPPORTED LONIC LIQUID CATALYSIS AND HYDRODYNAMICS IN PACKED BED*, funded by Chevron Texaco, Total Cost Rs.24,00,000.00
- *COMPUTATION OF HARMONICS IN THE TRANSFORMER CURRENT UNDER NO-LOAD CONDITION*, funded by BHEL, Total Cost Rs.5,65,915.00
- *EXPERIMENTAL CHARACTERIZATION OF DESIGN EVALUATION AND FINALISATION OF ARMING MECHANISM OF FUZE DASD FOR BOMBLETS OF PINAKA WARHEAD*, funded by ARDE, Total Cost Rs.9,91,800.00
- *IMPROVING PERFORMANCE OF 32T NEW SEEL MAKING TUNDIS AT JAW TO TORANGALLU*, funded by JSW Stal Ltd., Total Cost Rs.7,50,000.00
- *BIOFUEL FOR TWO STROKE ENGINES*, funded by SHELL, Total Cost Rs.40,00,000.00
- *DESIGN OF CONCRETE MIX M20*, Total Cost Rs.10,111.00
- *PROOF CHECKING OF DESIGN DRAWING OF 2250 KL CAPACITY 18MTR STAGING OF OHSR*, Total Cost Rs.20,000.00
- *SEWERAGE SYSTEM AND SEWAGE TREATMENT PLANT OF PURI*, funded by MOEF, GOI, Total Cost Rs.4,57,538.00
- *HIGEE TECHNOLOGY FOR DISTILLATION/ABSORPTION*, funded by HPCL, Total Cost Rs.25,28,100.00
- *DEVELOPMENT OF BI FUNCTIONAL SOLID CATALYST FOR TRANESTRIRIFICATION OF JATROPHAOIL BIODIESEL*, funded by SHELL, Total Cost Rs.40,00,000.00

- *DEVELOPMENT OF POWER SECTOR IN U.P.*, funded by GIRI Insti. Of Dev. Studies, Total Cost Rs. 39,750.00
- *SITE VISIT FOR STUDY OF SUBSOIL CHAR AT SAC & GH BUILDING AT GSVM KANPUR*, Total Cost Rs. 14,708.00
- *AERO DYNAMIC DESIGN OF WAF ROCKETS TRAYECTORY SIMULATION TRANSFER OF SOFTWARE PACKAGE AND TRAINING TO SCIENTISTS*, funded by ARDE, Total Cost Rs.8,59,560.00
- *AIR QUALITY MODELLING*, funded by Envirotech Instrument Pvt. Ltd., Total Cost Rs.50,000.00
- *GEOTECHNICAL INVESTIGATION AND DESIGN OF MACHINE FOUNDATION FOR NOSING PRESS*, Total Cost Rs.1,70,113.00
- *FLIGHT MECHANICS FLIGHT TESTING 6DOF SIMULATION OF MISSILES*, funded by Zeus Numerix, Total Cost Rs.10,00,500.00
- *CALIBRATION HYDRAULIC JACKS*, Total Cost Rs. 67,416.00
- *DEVELOPMENT OF DRUG DELIVERY PROCESS WITH WATER SOLUBLE CARBON NANOTUBE*, funded by Crumoz Inc., Total Cost Rs.12,60,000.00
- *DESIGN AND CONSTRUCTION OF RCC OVERHEAD SERVICE RESERVOIRS SCRUTINY AND APPROVAL OF STRUCTURAL DESIGN*, funded by Nirman, Total Cost Rs.1,40,000.00
- *INSPECTION OF SHOP*, Total Cost Rs. 1,348.00
- *SEEPAGE PROBLEM AT ASH DYKE*, Total Cost Rs. 26,966.00
- *EMBEDDED SYSTEM FOR IMPACT DETECTION*, funded by Apna Tech., Total Cost Rs.8,33,000.00
- *DEVELOPMENT OF VIBRATION ANALYSIS & DIAGNOSTIC SOFTWARE FOR ROTATING MACHINERY*, funded by Forbes Mashall, Total Cost Rs. 22,47,761.00
- *OPTICAL GROUND WATER POLLUTION MONITORING*, funded by CRC-CARE Pty Ltd., Total Cost Rs.79,931.00
- *DESIGN FOR THE CONSTRUCTION OF THE ROB AT KM 200+838 ON NH-28*, funded by Nagarjuna Constructions Ltd., Total Cost Rs. 1,06,630.00
- *DESIGN OF CONCRETE MIX M25*, Total Cost Rs. 14,045.00
- *DESIGN OF CONCRETE MIX M20 WITH PLASTICIZER*, Total Cost Rs. 22,472.00
- *ASSESSMENT OF PERFORMANCE OF ON BOARD WASTE TREATMENT SYSYTEMS IN INDIAN RLY PASSANGER COACH TOILET*, funded by RDSO Lucknow, Total Cost Rs. 5,26,958.00
- *KIOSKWISE MODELING OF MARKET DATA*, funded by Politis, Cyprus, Total Cost Rs. 1,40,000.00
- *FEASIBILITY STUDY OF SUPERFINISHING PROCESS FOR SLICON MIRROR*, funded by BARC, Mumbai, Total Cost Rs. 7,64,400.00
- *WIND TUNNEL TESTING ON RIGID MODEL OF TOWER 200M*, funded by LODHA, Mumbai, Total Cost Rs. 1,00,000.00

- *COMPARATIVE FINITE ELEMENT ANALYSES OF VIBRATION LOOM STRUCTURE*, Total Cost Rs. 56,382.00
- *SITE VISIT REG. CONSULTANCY FOR ASH DYKE PROBLEM*, funded by NTPC, Total Cost Rs. 13,484.00
- *FEASIBILITY STUDY FOR ESTABLISHING P/M PRODUCTION FACILITY AND FERROUS AND NON -FERROUS ALLOYS*, funded by Raychem RPG, Total Cost Rs. 2,50,000.00
- *DESIGN OF CONCRETE MIX M20 USING ADMIXTURE*, Total Cost Rs. 28,100.00
- *CONSTRUCTION AT PLOT CP-8 LUCKNOW*, funded by Lucknow Development Authority, Total Cost Rs. 18,629.00
- *CONSULTANCY FOR GROUND IMPROVED AT KHALILABAD*, Total Cost Rs. 20,250.00
- *DESIGN OF CONCRETE MIX M20 AND M25 WITH PLASTICIZER*, Total Cost Rs. 56,000.00
- *DESIGN OF 1500 KL TANK ON 20M STAGING AT SWARANJAYANTI VIHAR KANPUR*, Total Cost Rs. 20,000.00
- *PROCESS OPTIMIZATION OF ERP AT RCI*, funded by DRDO, Total Cost Rs. 99,000.00
- *CONSULTANCY FOR DESIGN OF PICK UP WEIR*, Total Cost Rs. 30,000.00
- *YIELD IMPROVEMENT FROM 36T TUNDISH AT JSPL RAJGARH*, funded by JPSL, Raigarh, Total Cost Rs. 13,00,000.00
- *STRUCTURAL EVALUATION OF A PART OF EXISTING KAMLA TOWER BUILDING*, Total Cost Rs. 61,282.00
- *RFID READER ANTENNA DESIGN*, Total Cost Rs. 10,000.00
- *CONSULTANCY FOR GROUND IMPROVEMENT WORK AT SAGAR*, Total Cost Rs. 20,250.00
- *GEOTCH INVESTIGATION AND DESIGN OF LEFT SIDE MARGINAL BUND APP ROAD AND SAFT MEASUREMENT RIVER GANGA*, funded by BCD-3, Total Cost Rs. 5,84,980.00
- *DESIGN AND ESTABLISHING PARAMETERS FOR LOOM PADS*, funded by Lohia Sterlinger Ltd., Total Cost Rs. 5,000.00
- *CALIBRATION OF HYDRAULIC JACKS*, Total Cost Rs. 67,416.00
- *FEASIBILITY STUDY REPORT FOR DEVELOPMENT OF DIGITAL BORE MEASURING INSTRUMENT*, funded by Naval Armament Inspector, Total Cost Rs. 1,54,275.00
- *DEVELOPMENT OF GUIDELINES ON SEISMIC DESIGN OF RAILWAY BRIDGES & TRAINING OF RAILWAY ENGINEERS*, funded by RDSO, Total Cost Rs. 21,34,840.00
- *SITE VISIT CONNECTION WITH SUBSOIL INVESTIGATION FOR HOUSING COMPLEX AT INDIRA NAGAR KANPUR*, Total Cost Rs. 9,315.00

- *POWER QUALITY PROBLEM ANALYSIS*, funded by SAF Yeast Corp., Total Cost Rs. 7,08,598.00
- *DEVELOPMENT OF A LABOUR INTENSIVE ROAD DESIGN CONSTRUCTION AND EVALUATION MANUAL*, funded by UNDP, Total Cost Rs. 15,48,481.00
- *CHECKING DESIGN OF HOSPITAL BUILDINGS AT KANNAUJ*, funded by UPRNN Ltd., Total Cost Rs. 3,00,000.00
- *CONCRETE MIX DESIGN OF GRADE M35*, funded by UPRNN Ltd., Total Cost Rs. 1,17,978.00
- *DEVELOPMENT OF A CRYOGEL FILTER FOR LEUKOCYTE DEPLETION BIOTECHNICAL BLOOD TRANSFUSION*, funded by HLL, Total Cost Rs. 25,14,000.00
- *CALIBRATION OF PROVING RINGS*, Total Cost Rs. 22,472.00
- *TECHNOLOGY DEVELOPMENT FOR AGRICULTURAL EXTENSION AND OUTREACH*, funded by NAIP, Total Cost Rs. 1,31,95,000.00
- *RNAI NEMOATODE RESISTANCE (WHEAT)*, funded by Nemgenix, Total Cost Rs. 25,89,440.00
- *DELHI: 2010 COMMANWEALTH GAMES DATA NETWORK*, Total Cost Rs. 1,12,500.00
- *ANALYSIS OF DIAPHRAGM WALL AT ERNAKULAM, COCHIN*, funded by Vakil Mehta Sheth, Total Cost Rs. 56,180.00
- *DESIGN OF GUIDE BUND IN GOMTI RIVER*, funded by Irrigation Dept, Total Cost Rs. 3,98,316.00
- *EARTHQUAKE ENGINEERING LECTURES*, Total Cost Rs. 44,944.00
- *PRELIMINARY STUDY FOR EXTRACTION OF SILICON FROM QUARTZ AND OTHER*, funded by Shree Cement Ltd., Total Cost Rs. 3,59,000.00
- *ANALYSIS OF PARTICULATE SAMPLES FOR EC AND OC AND INTERPRETATION OF RESULT*, funded by IIT Bombay, Total Cost Rs., 6,56,687.00
- *REVIEW OF SEISMIC DESIGN CRITERIA FOR P&G FACILITIES AT BADDI IN HIMANCHAL PRADESH*, funded by Proctor & Gamble, Total Cost Rs., 77,947.00
- *VIBRATVOU PROBLEM IN FACTORY BUILDING*, Total Cost Rs., 12,500.00
- *CONCRETE MIX DESIGN OF GRADE M20 WITH CHEMICAL ADMIXURE*, Total Cost Rs., 22,472.00
- *SEISMIC ANALYSIS OF ESP SUPPORTING STRUCTURES*, funded by BHEL, Total Cost Rs., 8,42,700.00
- *PEER REVIEW OF SEISMIC RETROFITTING OF FACILITIES AT BADDI*, funded by Proctor & Gamble, Total Cost Rs. 3,97,182.00
- *CONSULTATION ON SEISMIC ANALYSIS OF METRO TUNNEL*, Total Cost Rs. 67,416.00

- *THEORETICAL STUDIES ON THE CONFIGURATION DESIGN OF FSAPDS STABILIZER UNIT STABILITY ANALYSIS AND SABOT SEPARATION DYNAMICS*, funded by ARDE, Total Cost Rs. 9,79,464.00
- *ASIA PACIFIC TRADITIONAL MEDICINE AND HERBAL TECHNOLOGY NETWORK PROJECT*, funded by NBRI, Total Cost Rs. 7,00,000.00
- *SECURE TRANSACTIONS BASED ON SMART CARDS*, Total Cost Rs. 6,00,000.00
- *STUDY OF SUBSOIL FOR FOUNDATION OF AUTO FRETAGE PLANT IN GUN SHOP AT OFC*, funded by Indian Ordnance Factory, Total Cost Rs. 93,371.00
- *STUDY OF SUB SOIL FOR FOUNDATION OF UNIVERSAL MILLING MACHINE IN GUN SHOP AT OFC*, funded by Indian Ordnance Factory, Total Cost Rs. 93,371.00
- *HYDROGEOLOGICAL INVESTIGATIONS FOR ASSESSMENT OF QUANTITY AND QUALITY OF GROUND WATER*, funded by Johnson Matthey Chemicals India, Total Cost Rs. 6,75,000.00

Institute lectures conducted during the year 2007-08 are given below:

- *Will Ganga Die?*, by Julian Crandall Hollick, Independent Broadcasting Associates Inc., USA.
- *Mössbauer Spectroscopy in Space: Exploration of the Surface of Mars and its Moon Phobos with the miniaturized Spectrometer MIMOS II*, by Dr Göstar Klingelhöfer, Institut für Anorganische und Analytische Chemie, Johannes Gutenberg-Universität, Mainz, Germany.
- *Whither Oxide Electronics?*, By Prof. R. Ramesh, Department of Materials Science and Engineering and Department of Physics, University of California Berkeley, CA.
- *Energy In India Opportunities And Anxieties*, Subir Raha, Distinguished Honorary Professor, IIT Kanpur and Executive Vice Chairman, Hinduja Group India.
- *Urban Infrastructure – a perspective*, Mahesh. N. Buch, ABV IITM Gwalior.
- *Energy Options for the future*, by Dr. Ing.-habil. Manfred Groll, Visiting Faculty, Dept of Mechanical Engineering, IIT Kanpur, Formerly University of Stuttgart, Germany.
- *The P<>NP Problem*, by Manindra Agrawal, N Rama Rao Chair Professor, Department of Computer Science and Engineering, IIT Kanpur.
- *Ethical Values in Science and Technology*, by Professor K L Chopra, Society for Scientific Values, Delhi.
- *Nanotechnology and Molecular Self Assembly and its interface with Microsystems: Fundamental and applications*, by Shubhra Gangopadhyay, University of Missouri-Columbia.

- *Deployment of technology at Shinsei Bank*, by Dhananjay Dvivedi, Shinsey Bank, Tokyo.
- *Interaction between Mathematics and Physics*, by M. S. Narasimhan, TIFR/IISc, Bangalore.

Alumni Association Activities

Many initiatives were taken up by the Alumni Association in the year 2007-08.

New Activities:

a) Alumni Magazine

The first issue of the alumni magazine was published in the month of August 2007 and dispatched to all alumni. This initiative of IITKAA was fraught with many difficulties, not the least of which was that we had to raise a substantial sum of money to finance it.

b) Redesigning of Election Software

The election software used for online voting has been enhanced from Javascript to Java using Java Crypto API for generating public and private RSA key pairs for Election officer and Administrator. The new version is not only resource efficient more safe and secure but also very user friendly. The votes are completely anonymous and safe. Prof. Karnick (CSE) guided the development of the first version of this software. Prof. Moona of CSE dept. has guided the new version.

c) Wiki an online

The Alumni Association, IIT Kanpur launched IIT Wiki, an online forum that allows past and present students of IITK to freely create and edit web page content using any web browser. Users can share their thoughts, discuss, create their home pages and seek guidance from senior alumni through IIT Wiki. Users can customize their own areas, add their own pages, make links to their respective wing and department pages, create chapter websites, host pictures, start blogs, etc. The IIT Wiki is free for all students and alumni of IITK.

d) Automation of AA Accounts

We have also moved towards the automation of AA accounts by the use of Tally software.

Major Events/Activities during the year:

Nostalgia

The 'Nostalgia' event jointly organized by AA and the Student's Gymkhana, is held every year for bidding farewell to the students completing their graduation/post graduation.

The Class-of-2007 had their event on 17th April 2007. Arvind Khotari, President, Student's Gymkhana inaugurated the evening and delivered a farewell speech.

On this occasion the Director, Secretary, AA, Dean of Students' Affairs and DRPG addressed the students and wished them all the best for their future. The evening concluded with a dinner party.

Reunions at IITK:

IITK alumni from around the globe participated in these events. The attendees usually included alumnus awardees, entrepreneurs, bureaucrats and professionals from all walks of life.

The reunions were inaugurated by the Director, Dy. Director, Deans and Faculty in the Outreach building. The other activities included Lunch at the Director's residence, Reunion Group Photograph, Campus tour, Felicitation of Alumni by the Director, Lunch at Students' Hall, Open Session, Grand Reunion Dinner and New Year Celebration.

- The Silver Jubilee Reunion of the Class - of - 83 was held during 27th - 29th December 2007 with 64 alumni attending the event with their families.
- The 30th year reunion of the Class - of - 1978 was held from 2nd - 4th January 2008 with 15 alumni attending the reunion.
- The 35th -year Reunion of the Class - of - 1973 was held during 30th December 2007 - 1st January 2008, with 45 alumni participating in the event.
- Reunion of Class-of-82 was organized by Prof. Dheeraj Sanghi of IITK during 12th - 13th of January 2008

Reunion outside IITK:

Thirty four Alumni of the 1986 batch got together at Khandala, India on 15th September 2007.

Distinguished Alumni Awards:

The following are recipients of the Distinguished Alumni Awards in 2008 which were given on February 24, 2008.

Prof. Ashok Misra (BT/CHE/1968) Director, IIT Bombay

Dr Ravi Seth (BT/ME/1968) President Avaya Laboratory.

Mr. Harsh Manglik (BT/ME/1970) Chairman & Managing Director Accenture India

Prof. Ashok Sinha (BT/EE/1973) Chairman & Managing Director, Bharat Petroleum Corporation Limited.

Prof. Jitendra Malik (BT/EE/1980) Arthur J. Chick Professor, Department of Electrical Engineering and Computer Sciences, University of California at Berkeley.

Prof. Arup K. Chakraborty (BT/CHE/1983) Robert T. Haslam, Professor of Chemistry and Biological Engineering, Massachusetts Institute of Technology.

Satyendra K. Dubey Memorial Award :

The Satyendra K. Dubey Memorial Award was instituted in 2005 by IITK in the memory of the late Mr. Satyendra K. Dubey (BT/CE/1994/IITK) and his exemplary life.

Mr. Anubrotto Kumar Roy/ Dunu Roy (BT/MT/CHE/67/69/IITB) is the recipient of this award for the year 2007.

Souvenirs:

AA has a large collection of good IITK souvenirs which were sold to the alumni during reunions and other occasions.

Alumni Newsletter

The IIT Kanpur Alumni Association publishes its Newsletter every two months. Alumni Newsletter is a means to build bridges between IITK and its alumni and to cater to the various generations of alumni in India and abroad. Soft copies of the Newsletter are sent to more than 15,000 alumni, all current & former faculty and current students of IIT Kanpur.

Alumni Database:

The database of alumni has been continuously updated and maintained and we hope Batch Coordinators will help us further update it. We have email addresses of 15323 alumni, and postal addresses of 14757 out of a total of 22907 alumni. Of these, 9984 alumni are registered on the website.

Activities of Alumni Chapters:

Alumni Chapters are fairly active in India and abroad. Chapters are active in Delhi, Bangalore, Bombay, US West Coast and East Coast. However, we need more chapters to be created and/or become active.

Some of the activities during 2007-8:

- IITK Bangalore chapter held a get-together on 23rd June 2007. Almost 60 IITK alumni, along with their families, came together at “Aashirwad”, ITC Infotech campus for the alumni meet. Khem Aithani (MT/IME/83), President of the Bangalore Chapter and Pawan Kumar (BT/CE/69) spoke on the occasion.
- The first off-campus Distinguished Alumni Awards was held on June 24th 2007 in the grounds of the Indian Consulate in New York City. The recipients were Ambuj Goyal BT/EE/1978 and Ravi Akhoury BT/EE/1968. The awards were presented by Her Excellency the Consulate General Neelam Deo and Prof. S.G. Dhande, IITK director. The ceremony was hosted by the IITK East coast Alumni Association
- IIT 2007 - Global Alumni Conference was held in Silicon Valley, California, from July 6th - 8th. Over 3,500 people including Directors, faculty members and alumni of all IITs participated in this conference. IITK was represented at the event by Prof. S.G. Dhande, Director, and about 450 IITK alumni attending, making this the largest gathering of IITK alumni ever held outside India.
- The Delhi Chapter of IIT Kanpur organized an interaction session with the students joining IIT Kanpur on July 21st 2007. Over 100 alumni and their family members were present.
- IIT Alumni Japan Conference: India-Japan Partnership - New Global and Strategic Perspectives on 15th -17th November 2007
- The Pan IIT picnic was held on September 8th, 2007 at the Woodlands Park in Sunnyvale. About 700 alumni from all IITs attended the event, IITK's alumni attendance was about 150.

Central Facilities

P. K. KELKAR LIBRARY

P. K. KELKAR LIBRARY

P. K. Kelkar Library is housed with all modern amenities, in a magnificent three-storied building covering an area of 5730 square meters. The Library has been rendering essential support to the academic, research and development programme of the Institute. 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 Saturday; 9 a.m. to 5.30 p.m. on Sundays and Gazetted holidays, and for 24 hours during the three examinations each semester.

NEW ADDITIONS

The total collection of 9036 consisting of 3442 books, 5134 bound journals and 460 theses (on CD) was added during 2007-2008. A budget of Rs.1 crore was utilized for procurement of books. A few books were also procured in the interdisciplinary interface of science, religion and consciousness against 'Library Special Book Endowment Fund (LSBEF)', donated by Ms. Irma Johnson, one of the ex-Library Advisors, MIT, USA.

SUBSCRIPTION TO PERIODICALS / DATABASES

The periodicals budget of Rs.5.75 crores for 2007-2008 was utilized to subscribe to 1324 titles of which 442 are print, 858 are print+online and 24 are only online. The Library added 5134 bound volumes to its periodicals holdings. Besides, 4011 books and 750 old periodicals were also bound.

An additional special grant of Rs.1.38 crores was utilized for procurement of following digital back files and online access to titles / databases:

A. Digital back files:

1. Wiley journals (Numerical Engineering Collection, Chemistry Collection, Angewandte Chemie International Edition)
2. Journal of Fluid Mechanics (1956-96)
3. Royal Society of Chemistry journals -- 68 titles (1841 to 2004)
4. Elsevier journals (General Physics, Mathematics, Environmental Sciences, Earth & Planetary Sciences.)
5. Emerald journals - Management titles

6. SIAM journals -- LOCUS (1952-1996)
7. JSTOR

B. Online access to journals/databases:

1. EBSCO (Business Source Complete, SocIndex with full text, Econlit with full text, Humanities Intl. Complete)
2. Six Nature titles
3. Five Cell Press titles
4. Shared access to 143 Wiley titles (33 subscribed by IITK and 107 titles subscribed by IIT Delhi/ Bombay/ Roorkee and IISc)

E-RESOURCES THROUGH INDEST-AICTE

As a core member to the INDEST-AICTE, IITK academic community is entitled to access 20 full-text e-resources and to 6 bibliographic databases. From 2008 ASTM standards and journals are being subscribed through INDEST-AICTE.

LIBRARY SERVICES

WEEKLY DISPLAYS

The books added to the Library collection are displayed on the first working day of each week and a weekly 'List of Additions' is available on the system. The current issues of the journals are also displayed on alternate days thrice a week.

CIRCULATION

During the year 2007-2008, 44380 publications were circulated for home study. A large number of books and journals from reference, textbook, and general collection areas were also consulted by users within the Library.

DOCUMENT DELIVERY SERVICES & CONSULTATION FACILITY TO EXTERNAL USERS

Inter-Library Loan (ILL) services are extended free to sister IITs, IISc, TIFR, BARC, host of INDEST-AICTE members and other technical institutions & universities. During 2007-2008, ILL (OUT) requests for 763 articles/chapters were received and

processed from the host of Institutions, whereas ILL (IN) requests for 106 articles/chapters were made to other libraries.

Consultation facility of the library was extended to 1300 external users including 85 NICEE programme participants.

DIGITAL LIBRARY INITIATIVES

The following digital library initiatives continue were added afresh:

1. CD Submission of Theses: 460 theses (on CD) were added during 2007-2008.

2. Access to Electronic Theses and Dissertations (ETD)

Access to our ETD has been limited to intranet only. Now efforts are underway to host our ETD collection on the web as decided by the Institute Senate. A sever (mirror) with capacity of one TB has been procured for the purpose.

3. Faculty/Academic Staff Publications

'Faculty/Academic Staff Publications' consisting of papers published in conference/journals, lecture notes, delivered lectures/speeches, technical/project reports and the like continue to be added as a second subset to the IRs. The work is still in progress.

4. CD-ROM Database

A CD-ROMs database consisting of accompanying material to books/journals has been finally created, accessible through the library OPAC "(catalog search) under the head CD-ROMs".

5. New Library Software Package

Migration from the iit-KLAS to LibSys of LSPremia, a web centric software package, has been in progress during 2007-08. Initially all the modules of both the software were running parallel for couple of months. The migration of database to the LibSys is final and the work for Circulation module is running through LibSys whereas the work for the rest of the modules of the library is in progress. The Serials module has been taken afresh in the new package.

It has been possible to provide the following new services through the new package:

- Alert services in the areas of Renewal of books, Overdue books, Reserved books collect notice.
- Login based services: Online Renewal and Reservation of Books, initially for the faculty and transaction History of issue/return.
- Online Public Access Catalog (OPAC) services: access to different databases, viz. Books, Conference Proceedings, Journals including New Arrivals of Current Issues and Holdings, CD-ROMs, Textbooks and Standards.

Work-in-progress:

- Self issue / return facility through smartcard, initially for faculty only.
- Online book indent request.
- Harvesting of Theses database

Research Papers Published in Journals.

1. ICT and AIDS literacy: a challenge for information professional in India. *Program: the electronic library*, 41, 2, 2007, 134-147, Maitrayee Ghosh.
2. IATUL: Promoting Science and Technology Librarianship in the Changing library Landscape. *Turkish Librarianship*, 21,4, 2007, 476-493, Maitrayee Ghosh.

Research Papers Published in Conference Proceedings

1. Symposium on experiences with DSpace for institutional and organizational repositories, sponsored by HP University Relations, India, Gurgaon, August 20-21, 2007, by R Mishra, S K Vijaianand, P P Noufal and Gaurav Shukla.
2. Challenges and Innovations: Establishing an ETD @ Indian Institute of Technology Kanpur, proceedings 10th International Symposium on Electronic Theses and Dissertations (ETD 2007), Uppsala, Sweden, June 13-16, 2007, by R Mishra, S K Vijaianand, P K Noufal and Gaurav Shukla.
3. Commonwealth Fellowship on Education and Technology: a programme supporting sustainable professional development *Knowgenesis International Journal for Technical Communication*, 2, 2, 2007, 5-21, Maitrayee Ghosh.
4. Added values to e-theses- ETD 2007 international Symposium at Uppsala: a summary report. *Library Hi Tech News*, 6, 2007, 23-25, Maitrayee Ghosh.
5. Global access to Science- Scientific Publishing for the future: the report of IATUL 2007 conference @ KTH, the Royal Institute of Technology, Sweden. *Dlib Magazine*, September/October, 2007, Maitrayee Ghosh.
6. CERLIM: Libraries Without Walls 7 @ Aegean island, Greece- A visit to remember! *Library Hi Tech News*, 24, 9/10 2007, 8-10, Maitrayee Ghosh.
7. ETDs in India: towards a national repository with value added e-theses service, proceedings 10th International Symposium on Electronic Theses and Dissertations (ETD 2007), Uppsala, Sweden, June 13-16, 2007, Maitrayee Ghosh.
8. Need of Information Security in the 21st Century: with Special Emphasis to Computer Security. Proceedings, PLANNER 2007- Library as a Global Information Hub: perspectives and challenges; December 7-8, 2007 at Guwahati University, Guwahati, 36-47, Anjana Bhatnagar.
9. Knowledge Management for Rural Development: the Indian context; proceedings of the Workshop on Knowledge Management for Rural Development, NIRD, Hyderabad, 2007, Neelam Prasad.

10. Dublin Core (DC) Metadata: a Techno-Savvy Approach of Traditional Cataloguing. Proceedings, International Conference CALIBER 2008 - From Automation to Transformation. February 28 - March 1, 2008 at Allahabad University, Allahabad, 232-246, Anjana Bhatnagar.

Conference Attended Outside IIT Kanpur

1. Seminar on E-Publishing and Global Promotion of Indian Publications, organized by Globe Publications and Indian Journals.com, Hotel Clarks, Lucknow, Apr 24, 2007. Invited participant in Panel Discussion, R. Mishra.
2. Workshop for Revision of Curriculum of Three Years Diploma Programme in Library and Information Science for the State of Punjab, NITTT & Research, Chandigarh, May 21-22, 2007. Invited expert participant, R. Mishra.
3. National Workshop on E-Resources Management for Excellence, IIT Madras, Central Library, July 16-18, 2007. Participant, Ramesh Yernagula.
4. INDEST-AICTE Workshop & 5th Annual Meet, IIT Roorkee, Central Library, Dec. 27-28, 2007, Invited presentation, R. Mishra.
5. Libraries Without Walls 7: Exploring anywhere, anytime delivery of Library services, "Digital discoveries: India's initiatives towards information literacy for a knowledge society", Molyvos, Lesvos, Greece, Sept. 14-18, 2007. Invited presentation, Maitrayee Ghosh.
6. International Association of Technological University Libraries (IATUL) 28th annual conference at KTH, Royal Institute of Technology, Stockholm, Sweden during 11-12th June 2007. Participant, Maitrayee Ghosh.
7. International Workshop on 'Digital Preservation of Heritage: Research Issue in Archiving and Retrieval (IWDPH 2007)' at Indian Statistical Institute, Kolkata, Oct. 29-31, 2007. Participant, Anjana Bhatnagar.
8. Workshop on 'Self-Archiving and Digital Repository (WSADR 2007)' at Indian Statistical Institute, Kolkata, October 31 Nov. 3, 2007. Participant, Anjana Bhatnagar.
9. 6th International Caliber- 2008 jointly organized by the INFLIBNET Centre, Ahmedabad and University of Allahabad on the theme "From Automation to transformation' held at the University of Allahabad on 28th, 29th Feb and 1st Mar 2008. Participant, Rekha Bharti.
10. Workshop on "Digitization of Resources Using Open Source Software: Greenstone Digital Library" jointly organized by IIM Lucknow and NASSDOC, New Delhi held during Sept 23-25, 2007 at IIM Lucknow. Participants, Rekha Bharti and Sunil Kumar Rana.
11. PLANNER 2007: Library as a Global Information Hub; perspectives and challenges, December 7-8, 2007 at Guwahati University, Guwahati . Participant, Sunil Kumar Rana.

COMPUTER CENTER

Computer Center at IIT Kanpur is a central facility that caters to the computing needs of the faculty members and the students for their research and teaching. It also manages Internet and campus LAN infrastructure. It provides several popular applications like email and web access. It currently supports more than 5000 users.

For Central File service, Computer Centre has acquired a file server consisting of HP EFS Gateway with 6 nodes, HP Enterprise Virtual Array 8000 with 33.6 TB Disk space, HP MSL tape library with 4 LTO3 drive with 60 slots, backup server HP DL380 and Backup software HP storage works.

For high performance computing, Computer Center has acquired another SMP server HP Integrity rx8640 with 16 processor (32 core) Itanium 1.6 GHz, 18MB Cache per processor, 128 GB RAM. Computer Centre also has a 48 node cluster from HP and another 96 node cluster from SUN Microsystems. Each node of HP cluster is a dual Opteron 2.6 GHz CPU with 8GB RAM. Each node of SUN cluster is a dual Opteron 2.4 GHz CPU with 4GB RAM. It runs Linux on all nodes and there is a master node, which runs SUN Grid Engine software to manage access to the cluster.

Computer Center has about 200 PCs running Linux or Window 2000 Operating System. All the PCs in the Center are connected through a 1000 Mbps switched network. About 150 PCs are based on Intel Pentium 4 with Hyper threading 3.4GHz processor with 1GB RAM. Rest PCs are AMD Athlon 5000+ dual core CPU with 2 GB RAM.

Computer Center supports an institute-wide 8000 points, 1000 Mbps fiber optic network that connects all Academic departments, Central library, Student Hostels, R&D hostel, Visitors' Hostel, Lecture halls and all Administrative Sections. This is one of the largest campus networks in an academic institute. Connectivity to faculty residences is provided through ADSL . For other residential users, both inside and outside the campus, dialup service is provided. For Internet access, we have a leased line of 45 Mbps capacity from VSNL and 20 Mbps capacity from Reliance. IIT Kanpur is one of the best

connected campuses in India. We also provide wireless access in several important buildings on campus.

Computer Center also has a specialized Virtual Reality Lab, for researchers in visualization and other similar needs. This includes an excellent 3-D projection facility, with a backend graphics engine, and two SGI advanced workstations for development work.

Computer Center provides email and web access facilities to all its users. Faculty members have access to all CC facilities for the life time.

Computer Center operates 24 hours a day, 365 days an year. It has a power back up through a 270 KVA online UPS and a 320 KVA generator set. Air conditioning is provided by the central air conditioning plant and split air conditioners.

HARDWARE IN THE COMPUTER CENTER

Computers in the Center have broadly been divided into various categories based on the activity supported by them. The broad categories and servers with configuration in each of the categories are listed below:

Central File Server

1.	HP Enterprise File server	6 node HP EFS cluster gateway. Each node HP DL380 G5 with dual core xeon 2.6 Ghz, 8 GB RAM. HP Enterprise Virtual array 8000 with 33.6 TB Disk space, HP MSL tape library with 4 LTO3 drive and 60 slots, backup server: HP DL380 G5 and Backup software: HP storage works.
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Mail File Server

1.	SUN V440	4* 1.28 GHz UltraSparc IIIi processors, 8 GB RAM, 6TB SAN storage with tape backup facility.
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Compute Servers

1.	HP SMP Sever	HP Integrity rx8640 with 16 processor (32 core) Itanium 1.6 GHz, 18MB Cache per processor, 128 GB RAM, 4 X 300 GB SCSI Disk.
2.	HP Cluster	Master nodes (1): HP DL585, AMD Opteron Quad Processor 2.6 GHz, 16 GB RAM, 2X145 GB Disk, 2X300 GB Disk, DVD Rom Drive Compute nodes (48): HP DL145, AMD Opteron Dual Processor 2.6 GHz, 8 GB RAM, 2X145 GB Disk, DVD Rom Drive
3.	SUN Cluster	Master nodes (2): SUN V40z, AMD Opteron Dual Processor 2.4 GHz, 8 GB RAM, 3X146 GB Disk Compute nodes (96): SUN V20z, AMD Opteron Dual Processor 2.4 GHz, 4 GB RAM, 36 GB Disk.
4.	HP 9000/ L-3000	4 processors, 2GB RAM, 108GB disk
5.	IBM RS 6000	4 Processors, 2GB RAM, 108GB disk
6.	Compaq ES40	4 Processor, 2GB RAM, 108 GB disk

Utility Servers

1	Internal web server (web)	Dual-Xeon, 2.0 GHz, 1GB RAM
2	External web server (www)	Dual-Xeon, 3.06GHz, 4GB RAM
3	Personal webpages - edit (webhome)	Dual-Xeon, 2.8GHz, 4GB RAM
4	Remote access server (access)	Dual-Xeon, 2.0GHz, 1GB RAM
5	Students Gymkhana server (navya)	Dual-Xeon, 2.0GHz, 1GB RAM
6	Web proxy (proxy)	Dual-Xeon, 3.2GHz, 4GB RAM
7	Web proxy (vsnlproxy)	Dual-Xeon, 3.2GHz, 4GB RAM

8	Mailbox server (mailhost)	Dual-Xeon,3.2GHz,4GB RAM
9	Lists server (lists)	P4, 3.6GHz, 2GB RAM
10	Web-based mail service (webmail)	Dual-Xeon, 3.06GHz, 4GB RAM
11	Windows Server 1 (CCNT1)	Dual-Xeon, 2.8GHz, 4GB RAM
12	Windows Server 2 (CCNT4)	Dual-Xeon, 2.8GHz, 4GB RAM
13	FTP server (ftp)	Dual-Xeon, 3.06GHz, 4GB
14	Internal DNS, YP server (nis)	Dual-Xeon, 3.06GHz, 4GB
15	Outgoing mail server (mail2)	Dual-Opteron 2.4 GHz, 8 GB RAM
16	Outgoing mail server (mail3)	Dual-Xeon, 3.2GHz, 4GB RAM
17	MS Exchange Mail Server1	Dual-Xeon, 2.0 GHz, 1GB RAM
18	MS Exchange Mail Server2	Dual-Opteron 2.4 GHz, 8 GB RAM
19	Application Server (aatish)	Dual-Opteron 2.4 GHz, 8 GB RAM
20	Application Server (falaq)	Dual-Opteron 2.4 GHz, 8 GB RAM

Servers for Office/Library/Digital Library Automation

1. HP L-1000 PA-RISC 8500@360 MHz, 512 MB RAM, 27GB HDD.
2. SUN E-450 (OA, Digital Lib.) Four sparc @ 400 Mhz, 2GB RAM,36 GB HDD one 1000 storage with 12 X 18 GB.
3. Zenith One up (NT server) 2 Pentium-Pro processors, 1 GB RAM, 12 GB HDD.
4. PCs (150) in admin sections Pentiums with varying configurations.
5. Sun E250 (data vault) 2 Spare II Processor, 1 GB RAM, 216 GB HDD in RAID.
6. Compaq ML 530 server Server for thin clients.
7. Compaq thin clients 125 thin clients for Office Automation.

OTHER EQUIPMENT

Computer Center has two spam filtering hardware from Barracuda Networks.

Computer Center also supports campus networking, and has one main switch, firewall, router, 50 distribution switches, and over 400 access switches.

SOFTWARE IN THE CENTER

Database packages- Oracle, Ingress

CAD/CAM and solid modeling package- I-Deas, Autocad

FEM Packages- MSC Nastran, MSC Mark

CFD Packages- Fluent

Tool to solve symbolic mathematical equations- Mathematica, MathCad

Simulation- Arena, Solversuite, Gams, Cplex

Chemical Process modeling - Aspen plus

Statistical Analysis Packages- Statistica, SPSS, SAS

Numerical Libraries - NAG

Graphic Presentation - Tecplot 360, Origin

Deform-3D

Atila, Maple, Adobe Digital video studio, Macromedia Director, Macromedia dream viewer, 3D studio Max 5.1

Catia, Toleran, Chemcad

Autocad 2002, Mechanical desktop, Land Desktop

GE04, Magic RP

Most flavors of Unix operating systems-AIX, Solaris, HP-UX, True64 Unix, Linux

Windows 2000 and Windows NT environments,

Office Suites- Applixware, Staroffice, Office 2000, Mathype

Compilers-NAG Compiler, Fujitsu Fortran Compiler, Visual Studios (C, C++, Pascal, Ada, Fortran-77, Fortran-90, Java, etc.)

Most of the popular Microsoft Products-Front Page, Back Office, Project, etc.

Abaqus 6.4

Hypermesh 5 user license.

All the softwares which come with RedHat/Mandrake Linux distributions

We have site licenses for Solaris, Sun Forte Compiler suite (C, C++, HPC), NAG libraries, and NAG compilers.

Acrobat 6.0 Win 50 users license.

CENTER FOR DEVELOPMENT OF TECHNICAL EDUCATION

The Centre for Development of Technical Education continued its multifaceted activities. Under Quality Improvement Programme (QIP) 07 candidates in M.Tech. and 02 in Ph.D. were admitted to various departments. The Curriculum Development Cell (CDC) approved 12 text book writing proposals in addition to the 18 projects which had been sanctioned earlier. The work for both proposals is under progress. During the last financial year 05 book writing projects have been completed.

Through the Continuing Education Programme numerous short-term courses, conferences and workshops were organized. A List of all short-term courses and workshops/conferences/seminars is enclosed herewith.

List of Conducted Short Term Courses Under QIP

<i>Sl. No.</i>	<i>Coordinator(s)</i>	<i>Dept.</i>	<i>Title of the Course</i>	<i>Duration</i>
1.	Dr. Gauthama & Dr. B. Basu	MME	Ultra-fine Grained Materials and Nanocomposites	May 12-16, 2007
2.	Dr. P Venkitanarayanan & Dr. S Khandekar	ME	Modern Experimental Techniques in Mechanics of Fluids and Solids	May 07-11, 2007
3.	Dr. Bikramjit Basu	MME	Materials for Biomedical Applications	May 07-11, 2007
4.	Dr. B P Pundir	ME	Advances in Vehicle Emission Control Technology	May 21- 25, 2007
5.	Dr. V K Jain	ME	Micromachining	June 18-23, 2007
6.	Dr. Prabhat Munshi	ME	Nuclear Power Engineering	July 09-14, 2007
7.	Dr. Sanjay K Singh	HSS	Industrial Organization and Policy: Contemporary Theory and Practices	July 16-20, 2007
8.	Dr. Peeyush Mehta	IME	Supply Chain Management	July 16-20, 2007
9.	Dr. D P Mishra	AE	Spray and Combustion	Dec. 03-08, 2007

10.	Dr. Nandini Gupta	EE	Recent Advances in Testing and Design of Electrical Insulation	Dec. 17-23, 2007
11.	Dr. P M Prasad	HSS	Law and Economics	March 17-22, 2008

Self-financing Courses

Sl. No.	Coordinator (s)	Dept.	Title of the Short Term Course	Duration
1.	Dr. B V Phani	SIDBI	Managing Industry Standard Oracle 9i Database	Feb. 1-May 1, 2007
2.	Dr. B V Phani	SIDBI	Statistics, Data Analysis and Applications	Mar. 15 - May 15, 2007
3.	Dr. RRK Sharma	IME	Project Management for Engineering Executives of RBI, Govt. of India	April 02-06, 2007
4.	Dr. B. Deo	MME	Process Control in Steelmaking	April 18-20, 2007
5.	Dr. B. Deo	MME	Position and Thermal Tracking of Steel Ladles	April 21, 2007
6.	Dr. B V Phani	SIDBI	Solving Challenges of Chemistry Through Analyses	May 1 -July 1, 2007
7.	Dr. Nitin Kaistha	ChE	Practical Chemical Process Control	May 07-11, 2007
8.	Dr. M Agrawal	CSE	Data Structures and Algorithms	May 14 - June 15, 2007
9.	Dr. Satyendra Kumar & Dr. D Mazhari	SAMTEL & EE	Organic Electronics 2007	May 21-25, 2007
10.	Dr. B V Phani	SIDBI	Systems Applications & Products Finance & Control	May 15- July 15, 2007
11.	Dr. Y N Singh	EE	Brihaspati2- Installation, Management and Effective Use	June 15-16, 2007
12.	Dr. Onkar Dikshit	CE	Computer Applications in Archaeology -Surrey and GPS Module I	July 1-15, 2007
13.	Dr. S K Agrawal	CSE	Programme Optimization for Multicore Architectures	July 02-07, 2007

14.	Dr. Sanjay K Singh	HSS	Industrial Organization and Policy: Contemporary Theory and Practices	July 16-20, 2007
15.	Dr. Avinash Kr. Agarwal	ME	Advances in IC Engines and Alternative Fuels	Sept. 13-17, 2007
16.	Dr. Onkar Dikshit	CE	Advanced Practices in Surveying and Leveling	Oct. 23-25, 2007
17.	Dr. B V Phani	SIDBI	Advance Analytical Chemistry	Oct. 23 -Dec. 23, 2007
18.	Dr. A K Lal	MA	National Meet of Research Scholars in Mathematics and Statistics	Oct. 30 – Nov.3, 2007
19.	Dr. Siddhartha Panda	CY	Plasma Applications 2007	Nov. 3-4, 2007
20.	Dr. B V Phani	SIDBI	Course on Heat Transfer & Fluid Mechanics	Nov. 5, 2007 – Jan. 5, 2008
21.	Dr. P K Kalra	EE	Course on Principles and Practices of Radio Frequency Identification (RFID)	Nov. 10-15, 2007
22.	Dr. B V Phani	SIDBI	Supply Chain Management	Nov. 15, 2007- Jan. 15, 2008
23.	Mrs. Soma Sengupta & Mr. Khaleeq Ahmed	CC	Oracle based Application Development	Nov. 20-24, 2007
24.	Dr. S N Singh	EE	Course on Best Practices in Transmission and Distribution of Power	Nov. 27-29, 2007
25.	Dr. P K Kalra	EE	Course on Audio and Video: Processing, Coding, Standards and Display	Nov. 26 -Dec. 06, 2007
26.	Dr. P Gupta	CSE	Software Engineering for IITM Gwalior	Dec. 12-19, 2007
27.	Dr. Dipak Mazumdar	MME	Modeling of Metals Processing Operations	Dec. 21-25, 2007
28.	Drs. A Kushari & A K Agarwal	AE	Advances in Combustion Science & Technology	Dec. 31, 2007 – Jan.2, 2008
29.	Dr. Onkar Dikshit	CE	Geographical Information System (GIS)	Jan. 03-13, 2008

30.	Drs. RRK Sharma & R N Sengupta	IME	A Nine day Course in Quantitative Finance	Jan. 05-13, 2008
31.	Dr. S. Sangal	MME	Advanced Materials Characterization Methods: Principles and Practice	January 07-10, 2008
32.	Dr. Manindra Agrawal	CSE	Alumni Meeting for 1986 Batch	Jan. 11-13, 2008
33.	Dr. Anil Seth & Mohue Banerjee	CSE & Mathes	2 nd Indian Winter School on Logic	Jan. 14-26, 2008
34.	Dr. S. Qureshi	EE	VLSI Design & Related Software	Feb. 10-13, 2008
35.	Dr. Y D S Arya	CC	Linux Fundamentals and System Administration	Feb. 18-Mar. 02, 2008
36.	Drs. Animesh Das & Partha Chakroborty	CE	Principles of Transportation Engineering	Mar. 12-14, 2008
37.	Dr. D C Rai	CE	Seismic Design of Steel Structures	Mar. 15-19, 2008
38.	Dr. S C Koria	MME	Materials and Heat Balance in Metallurgical Processes	Mar. 15-19, 2008
39.	Dr. P Gupta	CSE	ABV-IITM Courses	Mar. 15-23, 2008
40.	Dr. D C Rai	CE	Experimental Methods in Earthquake Engineering	Mar. 20-24, 2008

Workshops/Conferences/Seminars

Sl. No.	Coordinator (s)	Dept.	Title of the Conference/ Workshop/Symposium	Duration
1.	Dr. P M Prasad	HSS	IPR Workshop 2007	March 31-April 1, 2007
2.	Dr. Somenath Biswas	CSE	International Workshop on Computational Biology	April 02-04, 2007
3.	Dr. P K Kalra	EE	Brain Storming Meeting of IIR -2008	April 05-07, 2007
4.	Dr. Anoop Singh	IME	National Workshop on Project	April 19-22,

			Financing for Energy and Infrastructure Section	2007
5.	Dr. V Raghuram & Mr. TVK Gupta	ME	Current Manufacturing Technologies	May 17-19, 2007
6.	Drs. Ajanta Sachan & Sudhir K. Jain	CE	Sponsored Workshop on Summer Camp 2007	June 06 – July 06, 2007
7.	Dr. H C Verma	PY	Teachers' Workshop on Innovative Physics Teaching	June 08-13, 2007
8.	Dr. R Sankara Ramakrishnan	BSBE	Summer School Programme	June 10-24, 2007
9.	Drs. Satyaki Roy & G Biswas	NPTEL & ME.	National Workshop on NPTEL	June 27-28, 2007
10.	Drs. A K Lal & P Chandra	MA	National Meet of Research Scholars in Mathematics and Statistics-2007	July 02-06, 2007
11.	Dr. H. Wanare	PY	Symposium on Coherent Control of Optical Phenomena	July 9-10, 2007
12.	Dr. K Poddar	AE	National Conference on Wind Tunnel Testing	July 13-14, 2007
13.	Dr. P K Kalra	EE	IIR -2008 Workshop	July 19-22, 2007
14.	Dr. K K Bajpai	CE	Workshop on Earthquake Engg. Literature Survey	Aug. 27 – Sept. 05, 2007
15.	Dr. A Upadhyaya	MME	Workshop on Recent Advances in Powder Metallurgical Processing of Ferrous Alloys and Composites for Ordinance Applications	Sept. 25, 2007
16.	Dr. RRR Sharma	IME	National Conference on Materials, Inventory and Supply Chain Management	Oct. 06-07, 2007
17.	Dr. A Ghosh	ME	Workshop on Futuristic Shaping Technologies at Meso, Micro and Nanoscales	Oct. 09-12, 2007
18.	Dr. N S Gajbhiye	CY	International Conference on	Oct. 14-19,

			the Applications of the Mossbauer Effect	2007
19.	Dr. Onkar Dikshit	CE	Workshop on Advanced Practices in Surveying and Leveling	Oct. 23-25, 2007
20.	Dr. P Gupta	CSE	Workshop on ACM ICPC (Asia Region -Kanpur Site) Contest - overhead waived	Oct. 27-28, 2007
21.	Drs. V Chandrasekhar & Sandeep Verma	CY	Symposium on "Indo-German Frontiers of Chemistry"	Oct. 26-28, 2007
22.	Dr. P Gupta	CSE	ACM ICPC (Asia Region - Kanpur Site) Contest	Oct. 27-28, 2007
23.	Dr. A K Ghosh	AE	Symposium on Infrastructure Development and Augmentation for Ground Testing of Aerospace Vehicles and Airport Series	Nov. 15-18, 2007
24.	Dr. Mukesh Sharma	CE	Workshop on Air Pollution Inventory and Health	Dec. 04-06, 2007
25.	Dr. R Balasubramaniam	MME	Metals and Alloys: Past, Present & Future	Dec. 07-10, 2007
26.	Dr. S Kureshi	EE	Workshop on Synthesis of Digital Circuit	Dec. 09-22, 2007
27.	Dr. Kamal K. Kar	ME	International Conference on Advanced Composite Materials and Processing	Dec. 11-14, 2007
28.	Drs. S. K. Aggarwal & Mainak Chaudhuri	CSE	High Performance Computing: Compilers and Architectures	Dec. 13-15, 2007
29.	Drs. L. Krishnan & A K Sinha	HSS	XVII Annual Conference of National Academy of Psychology	Dec. 16-20, 2007
30.	Drs. A. Kushari & A K Agarwal	AE	Workshop on Advances in Combustion Science and Technology	Dec. 31, 2007 -Jan. 2, 2008
31.	Drs. Anil Seth &	CSE &	Workshop on Second Indian	Jan. 14-26,

	Mohua Banerjee	MA	Winter School on Logic	2008
32.	Dr. Sudhir K. Jain & Dr. D. Sanghi	CE & CSE	Workshop on Alumni Relations and Fund Raising: A New Paradigm for Excellence	Jan. 09-10, 2008
33.	Dr. Sudhir K. Jain	CE	Workshop on Developing a Strategic plan for the global dissemination of confined Masonary Guidelines	Jan. 26-28, 2008
34.	Dr. P Gupta	CSE	Workshop on Biometrics	Jan. 27 – Feb. 1, 2008
35.	Dr. Dheeraj Sanghi	CSE	CNB 2008: A Workshop of Railway Enthusiasts	Feb. 09-10, 2008
36.	Dr. T V Prabhakar	CSE	NAIP International Workshop	Feb. 14-16, 2008
37.	Dr. P. Munshi	ME	Workshop CT 2008: Tomography	Feb. 16-18, 2008
38.	Dr. T V Prabhakar	CSE	ODAALS Workshop	Mar. 04-06, 2008
39.	Dr. R S Anand	EE	National Conference on Engg. Trends in the Photovoltaic Energy Generation & Utilization	Mar. 27-29, 2008

**CENTER FOR
CREATIVE WRITING AND PUBLICATION**

1. Dr. Veena Talwar, Oldenburg of Baruch College, New York, delivered a talk on Lucknow: Shaam e-Awadh on 31 December 2007.
2. Dr. Adam Klein, New York, delivered a talk on Creative Writing on 18 February 08.
3. Dr. Lalit Joshi of Allahabad University delivered a talk on Engaging the Past: The Filmmaker and the Historian on 7 March 08.
4. Dr. Suhitra Mathur conducted weekly literary discussions on varied authors.

STAFF DEVELOPMENT COORDINATION CENTER

The staff training unit has been imparting training programs for the institute's staff members and for the staff members of other institutes. During this year, the staff training unit arranged following training programs:

1-IN-CAMPUS TRAINING PROGRAMS

A-REFRESHER PROGRAMS

SN	CADRE	PROGRAM	PARTICIPANTS
1-	Jr. Suprintendents,	Refresher	- 20 -
2-	Jr/Sr Assistants,	Refresher	- 35 -
3-	Sr.Tech. Assistants,	Refresher	- 30 -

B-MOTIVATIONAL PROGRAMS

1-	Group-A-Officers,	Soft skill Development,	- 25 -
2-	Suprintendents	Leadership Development,	- 30 -

C- NATIONAL WORKSHOPS

1-	STA/TA of other IIT'S IIIT'S/NIT'S	Safety Management	- 26 -
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2 - OFF-CAMPUS TRAINING PROGRAMS

The unit nominated officers/employees to various training institute for attending specialized training programs;

1-	Group-A-Officers	-7-
2-	Group-B- Employees,	-2-

Due to non approval of further training programs by the Registrar, the staff training unit has been rendered non functional since October 2007.

SC/ST and OBC CELL

SC/ST & OBC CELL (2007-2008)

The cell consists of **Prof. Arvind K Sinha** (Deptt. of Humanities & Social Sciences), Liaison Officer (**w.e.f. October 20, 2006**) and **Shri R R Dohare**, Superintendent & In-charge, Recruitment Section, in addition to their normal duties. Prof. Arvind K Sinha is available in **Room No. 221** (Directorate), Faculty Building at the Institute on **Phone No. 2597950** and Shri R R Dohare is available in **Room No. 224**, 2nd Floor, Faculty Building at the Institute on **Phone No. 2597391**.

In a meeting, wherein the following were present, the under mentioned decisions were taken:

- | | | |
|----|---------------------|------------------------|
| 1. | Prof. S.G. Dhande | Director |
| 2. | Prof. Kripa shanker | Dy. Director |
| 3. | Prof. A.K. Sinha | Liaison Officer |
| 4. | Shri S.S. Kashalkar | Registrar |
| 5. | Shri R.K. Sachan | Dy. Registrar (Admin.) |

- (1) Liaison Office will also look after the matter of students belonging to various reserved category i.e. SC, ST, OBC and PH etc.
- (2) Special drive for recruitment of reserved category be taken up every year.
- (3) Recruitment roster will be submitted to Board every year for information.
- (4) Liaison Officer will propose the programmes for reserved category of the Institute for empowering & helping them. Opportunities and training etc. will also be made and implemented for upliftment of such categories.
- (5) Grievance will be readdressed by Liaison Officer after analysis and input from concerned sections/ departments of the Institute.
- (6) To assist Liaison Office, an Advisory Committee be constituted under chairmanship of Liaison Officer.

In compliance, the following Advisory Committee has already been constituted to assist the Liaison Officer with regard to the issues related to SCs/ STs/ OBCs and PWDs.

- | | | |
|----|------------------------------------|----------|
| 1. | Liaison Officer (Prof. A.K. Sinha) | Chairman |
|----|------------------------------------|----------|

- | | | |
|----|----------------------------------------------------------------------------------------|--------|
| 2. | Dy. Registrar (Admin.) (Shri R.K. Sachan) | Member |
| 3. | Supdt. (Recruitment & Liaison Office) (Shri R.R. Dohare) | Member |
| 4. | One Student Representative*
(President, Student Gymkhana or Nominee) | Member |
| 5. | One representative from Group B, C & D Staff*
(Shri Praveen Gonade, Superintendent) | Member |
| 6. | One representative from Group-A Staff*
(Shri M.K. Diwaker, Assistant Registrar) | Member |
- * shall be nominated for one year

Terms of reference

1. The Committee will serve as a critical observer regarding implementation of Govt. of India directives issued from time to time.
2. The Committee shall propose promotional schemes for upliftment of the reserved category community for improvement of the situation.
3. Any personal grievance, if referred by the Institute Administration, shall be examined, analysed and conclusions shall be submitted to the Administration.
4. Providing input on case to case basis where the matter is referred by the National/ State bodies to the Institute.
5. To promote/ undertake sociological research of the situation related to such community in order to formulate further course of action to improve the situation.
6. The role of Liaison Officer will remain the same as per the directives of GOI.

Implementation of reservation orders:

The effective date of implementation of reservation for **SCs** and **STs** in the direct recruitment is **5th September 1974** in this Institute and the implementation of reservation for **OBCs** 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 Judgement 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 far as possible efforts would be made to provide adequate representation of SCs, STs and OBCs in 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 Recruitment & Career Progression Scheme (in operation at present) which is personal promotion scheme (non-vacancy linked promotion scheme), there is **no promotion based on vacancies**, hence reservation in career advancement is not applicable.

Concessions/ Relaxations:

- (a) The upper age bar in the Institute (as per RCPS) is as follows: Group C&D Posts - 18 to 27 years; Group B Posts - 32 years. Relaxation in age is admissible as per Central Govt. Rules. Employees of IITs who are educationally qualified 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. There is no upper age limit for Group-A Officers at the Institute.
- (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 : 1st class/AC-III and for Group B, C & D : 2nd class rail fare];

- (d) Experience requirement is relaxable at the discretion of competent authority.
- (e) In addition to relaxation of experience requirement, higher initial pay is given to exceptionally qualified and deserving candidates. During the period of report, higher initial pay was given to the following employee:
- (i) Two additional increments in the pay-scale of Rs.3200-85-4900 given to Shri Sushil Kumar Kamal (SC), Junior Technician, Department of M.M.E..
- (ii) One additional increment in the pay-scale of Rs. 3200-85-4900 given to Shri Raja Babu (OBC), Junior Technician, Department of Chemistry.
- (iii) One additional increment in the pay-scale of Rs.4500-125-7000 given to Shri Vipin Kumar Katiyar (OBC), Pharmacist, Health Centre.

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. A copy of the Advt. is sent to AIR/ Doordarshan for publicity. The copies of Employment Notices/ Notifications are sent to recognised 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 Vacanices					Total	Published in
			SC	ST	OBC	PH	UR		
1/2007	Assistant Placement Officer	8000-13500	-	-	1	-	-	1	All Editions of Dainik Jagran, Dainik Bhaskar, Amar Ujala, Times of India, Hindustan Times, University
	Assistant R & D Officer	8000-13500	-	1	-	-	-	1	
	Physical Trg. Instructor	5500-9000	-	-	-	-	1	1	
	Sr. Library Information Assistant	5500-9000	-	1	-	1-UR	1	3	

	Technical Assistant	5500-9000	2	4	1	2-UR	4	13	News & Employment News
	TA (Translation)	5500-9000	-	-	1	-	-	1	
	Staff Nurse	5000-8000	-	-	1	-	1	2	
	Pharmacist	4500-7000	-	-	1	-	2	3	
	Junior Assistant	3200-4900	1	-	2	1-SC	5	9	
	Junior Technician	3200-4900	3	-	5	1-UR	7	16	
2/2007	Homoeopathic Consultant	-	-	-	-	-	1	1	Kanpur edition of Amar Ujala
AFRO Placement Cell	Asst. Security Officer	5500-9000	-	1	-	-	-	1	Vide letter No. RA/Advt.1/2 007-IITK/5834 dated 25.4.2007
Total			6	7	12	5	22	52	

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

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.
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.

Inclusion of SC/ST Member:

One SC/ST 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/ Assessment Committee meetings held through Recruitment Section is given below:

For Selection	Total 21 Selection Committee meetings: 11 S/C meeting, wherein SCST/OBC representatives included 08 S/C meeting, wherein OBC representatives included 02 S/C meeting, wherein SCST representatives included
For Assessment	No assessment committee meeting held during the period

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	G.Total
	As per Reservation	As per Seniority	Total		
Type-IA	-	-	-	-	-
Type-1B	4	2	6	38	44
Type-I	2	3	5	16	21
Type-II	3	3	6	4	10
Type-III	-	-	-	21	21
Type-IV	-	-	-	15	15
Type - V & VI	No reservation		-	13	13

2. There is no reservation in the quarters of Type -V & VI (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:

One case of Shri Giriraj Singh, Technical Assistant (PF No.4577) was taken up by the Liaison Office for redressal of his grievance [who joined the Institute on 13.8.1990] Shri Singh had completed 8 years of his service on 12.8.1998 for his 1st assessment

according to R&CDS; but due to implementation of V-CPC w.e.f. 01.5.1998, he was not granted his 1st assessment in the higher pay-scale of Rs.2000-3200 (revised to Rs.6500-10500). Shri Singh had sound health/ body upto 1998; unfortunately he met with a paralysis attack during 1999 and got physically disabled for which he has a certificate of physical disability measuring 60%, issued by the competent authority, which has already been submitted by him in the Administration Section. He also belongs to Scheduled Caste category.

His case was dealt by the Administration Section in the light of Recruitment & Career Progression Scheme ((RCPS), but he did not qualify the bench mark prescribed for qualifying the assessment and accordingly the "result of assessment" was intimated to him as "Not qualified". There-after he met in the Liaison Office for redressal of his grievance. In terms of RCPS, he is eligible for his 1st assessment w.e.f. 01.7.2003. Shri Singh, so far, has completed more than 17½ years of his service at the same level where he joined the Institute.

The Liaison Office submitted a request to the Dy. Registrar (Admin.) for consideration of his case in the light of **Section-47 (Non-discrimination in Government employment)** of "**The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995**" which came into existence on January 01, 1996, wherein it is mentioned that "No promotion shall be denied to a person merely on the ground of his disability: Provided that the appropriate Government may, having regard to the type of work carried on in any establishment, by notification and subject to such conditions, if any, as may be specified in such notification, exempt any establishment from the provisions of this section".

In the light of above, on humanitarian grounds, the matter is under sympathetic consideration of the Institute' Higher-ups for his 1st assessment.

Any **Caste falsification** brought to notice is also followed up by the Liaison Office. 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	-	-	-	26	26

Retirement	-	-	-	03	03
Deaths	-	-	-	-	-
Resignation	-	-	-	12	12
V/Retirement	-	-	-	05	05
C/Retirement	-	-	-	-	-
SVRS	-	-	-	-	-
Deputationists repatriated	-	-	-	-	-
Termination	-	-	-	-	-
Dismissal	-	-	-	-	-
Total	-	-	-	46	46

B: Non-Academic:

Area(s)	SC	ST	OBC	PH	GEN	TOTAL
Appointments						
a) On permanent basis (Through open Recruitment)	-	-	-	-	-	-
b) On compassionate grounds	1	-	1	-	1	3
c) On deputation basis	1	-	1	-	2	4
d) On contract for 5 yrs	5	4	9	4	13	35
Total	7	4	11	4	16	42
Retirement	12+2*	-	-	-	52	66
Deaths	-	-	-	-	1	1
Resignation	3	1	2	1	-	7
V/Retirement	-	-	-	-	-	-
C/Retirement	-	-	-	-	-	-
SVRS	-	-	-	-	-	-
Deputationists repatriated	-	-	-	-	-	-
Termination	-	-	-	-	-	-
Dismissal	-	-	-	-	-	-
Total	15+2*	1	2	1	53	72+2*

• Cleaners

Assessment under RCPS**Detail of Employees assessed under RCPS during 2007-08**

SL No.	Pay Scale		SC	ST	OBC	UR	Total
	Previous	Present					
1	2650-4000	3050-4590	5	-	-	6	11
2	3050-4590	4000-6000	4	-	-	7	11
3	3200-4900	4500-7000	1	1	-	3	5
4	4000-6000	4500-7000	2	-	-	1	3
5	4500-7000	5500-9000	1	-	-	16	17
6	5000-8000	5500-9000	1	-	-	3	4
7	5500-9000	6500-10500	-	-	-	3	3
8	6500-10500	7500-12000	-	-	-	6	6
9	7500-12000	8000-13500	-	-	-	2	2
Total			14	1	-	47	62

The Institute has awarded "fitment" to the employees of Group 'B', 'C' & 'D' under RCPS during 2007-08, as detailed below:-

Detail of Employees awarded "fitment" under RCPS during 2007-08
 (Only pay-scale changed w.e.f. the date of joining or 01.5.1998, whichever is later)

SL No.	Pay Scale		SC	ST	OBC	UR	Total
	Previous	Present					
1	4000-6000	4500-7000	-	-	-	-	-
2	4500-7000	5000-8000	1	-	-	1	2
3	5000-8000	5500-9000	-	-	-	-	-
Total			1	-	-	1	2

Detail of Employees awarded "fitment" under RCPS during 2007-08 (only)
 (Only designation changed w.e.f. the date of joining or 01.5.1998, whichever is later)

SL No.	Pay Scale		SC	ST	OBC	UR	Total
	Previous	Present					
1	3200-4900	3200-4900	-	-	-	-	-
2	4500-7000	4500-7000	-	-	-	1	1
3	5000-8000	5000-8000	-	-	-	-	-
Total			-	-	-	1	1

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 01.04.2008:
Recruited through DOFA Office**

Academic	SC	ST	OBC	GEN	Total
Teaching	-	-	-	315	315
Non-Teaching	1	-	-	40	41
Total	1	-	-	355	356

**B. Existing Strength of Non-Academic Staff as on 01.04.2008:
Recruited through Recruitment Section**

Group	SC		ST		OBC		GEN	Total
A	5	15.15 %	0	0.00 %	4	12.12 %	24	33
B	56	17.45 %	5	1.56 %	31	9.66 %	229	321
C	44	23.16 %	5	2.63 %	36	18.95 %	105	190
D	44+14*	24.18 %	0	0.00 %	10	5.49 %	128	182
Total	149+14*	20.95 %	10	1.35 %	81	10.81 %	486	726+14*

Group/ Stream/ Mode	SC		ST		OBC		GEN	TOTAL
ANR	2	14.29	0	0.00	3	21.43	9	14
ANU	2	22.22	0	0.00	0	0.00	7	9
ATR	1	25.00	0	0.00	1	25.00	2	4
ATU	0	0.00	0	0.00	0	0.00	6	6
Total of Group 'A'	5	15.15	0	0.00	4	12.12	24	33
BNR	3	11.54	2	7.69	6	23.08	15	26
BNU	23	22.55	0	0.00	0	0.00	79	102
BTR	17	16.83	2	1.98	25	24.75	57	101
BTU	13	14.13	1	1.09	0	0.00	78	92
Total of Group 'B'	56	17.45	5	1.56	31	9.66	229	321
CNR	14	20.59	1	1.47	18	26.47	35	68
CNU	9	36.00	1	4.00	0	0.00	15	25
CTR	11	17.19	1	1.56	18	28.13	34	64
CTU	10	30.30	2	6.06	0	0.00	21	33
Total of Group 'C'	44	23.16	5	2.63	36	18.95	105	190
DR	7	24.14	0	0.00	10	34.48	12	29
DU	37	24.18	0	0.00	0	0.00	116	153
Total of Group 'D'	44	24.18	0	0.00	10	5.49	128	182
CLEANERS	14*		0		0		0	14*

TOTAL	149+1 4*	20.95	10	1.35	81	10.81	486	726+14*
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								

B. Existing Strength of Account-II Employees as on 01.04.2008:**Recruited Through DORD Office**

Group	SC	ST	OBC	GEN	Total
B	-	-	1	5	6
C	1	-	-	14	15
D	3	1	6	3	13
Total	4	1	7	22	34

C. Existing Strength of Mess Employees as on 01.04.2008:**Recruited through COW Office**

Group	SC	ST	OBC	GEN	Total
B	-	-	1	3	4
C	-	-	1	3	4
D	13+6*	-	33	58	104+6*
Total	13+6*	-	35	64	112+6*

* Cleaners, not counted towards reservation

The data as available for showing the representation of SCs/STs related to the students admitted in the 1st Semester 2007-08 in various programmes/ disciplines at the Institute is given below:

Number of UG students who actually joined the following programmes during the 2007-08 I-Semester

Programmes	Registration Data in the 2007-8-I Semester			
	SC	ST	GEN	Total
B.Tech.				
AE	4	1	19	24
BSBE	3	1*	20	24
ChE	6	1*	30	37
CE	8	4*	40	52

CSE	5	3	26	34
EE	10	5	50	65
MME	9	5	47	61
ME	7	4	37	48
Total	52	24	269	345

* Students admitted through Preparatory course

Programmes	Registration Data in the 2007-8-I Semester			
BT-MT	SC	ST	GEN	Total
AE	1	1	5	07
ChE	1	0	8	9
CE	2	0	12	14
CSE	3	2	20	25
EE	3	2	16	21
ME	3	0	13	16
Total	13	5	74	92

Programmes	Registration Data in the 2007-8-I Semester			
MSc(5 yr)	SC	ST	GEN	Total
Chemistry	1*	0	10	11
Economics	1+3*	0	18	22
Maths	1	1*	22	24
Physics	1	0	14	15
Total	7	1	64	72

* Students admitted through Preparatory course

Programmes	Registration Data in the 2007-8-I Semester			
MSc(2 yr)	SC	ST	GEN	Total
Chemistry	4	0	20	24
Mathematics	4	1	20	25
Statistics	0	0	15	15
Physics	3	1	13	17
Total	11	2	68	81

Programmes	Registration Data in the 2007-8-I Semester			
MS-PH(dual)	SC	ST	GEN	Total
Physics	1	0	5	6
Total	1	0	5	6

Registration Data of M. Tech. / MBA / M.Des. students of 2007-08-I Semester

Dept	GN	SC	ST	Total
AE	40	06	01	47
CHE	50	05		55
CE	90	08	-	98
EE	151	09	03	163
ME	93	06	01	100
MME	48	03	01	52
CSE	87	-	-	87
MSP	22	02	-	24
IME	22	01	-	23
MBA	62	09	01	72
NET	12	03	-	15
LT	09	-	-	09
EEM	27	03	01	31
BSBE	27	03	-	30
MDES	20	03	01	24
TOTAL	760	61	09	830

Registration Data of Ph D students of 2007-08-I Semester

Dept	GN	SC	ST	Total
AE	34	02	-	36
CHE	32	05	01	38
CE	33	01	-	34
EE	56	04	-	60
ME	58	03	01	62
MME	25	04	01	30
CHM	149	12	-	161
MATH	63	01	-	64
PHY	44	01	-	45
M Sc.-PhD (Dual)	32	02	-	34
HSS	47	02	01	50
CSE	10	01	-	11
MSP	09	03	-	12
STA	06	-	-	06
IME	18	02	-	20

NET	02	-		02
BSBE	48	07	01	56
TOTAL	666	50	05	721

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 1996. It has got its own office which is equipped with two bilingual personal computers for smooth and efficient working. It is managed by a liaison officer, Assistant Registrar, a Superintendent and two technical assistants (Translation). 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 Prakostha performs various activities like organization of Hindi Diwas, Hindi workshop, 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 envelopes etc. have been made bilingual. Three Assistants have been trained in Hindi typing under the Hindi training programme organized by the Hindi Shikshan Yojana Kanpur. Similarly two Stenographers have been trained in Hindi Stenography under the scheme.
5. Regular class of Prabodh, Praveen & Pragya for the Non Hindi speaking employees have already been started. Four Non Hindi speaking employees have been trained in Prabodh and Praveen and two in Pragya.

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

The Annual Report of the Institute for 2006-2007 and the Audit Report 2006-2007 received from the Account Section/AG,UP were translated into Hindi and fair copies typed for submission to the ministry.

The press release and invitation cards for the convocation were issued bilingually. All periodical reports were sent to the Ministry and the Nagar Rajbhasha Karyanvayan Samiti in time.

In compliance with the directives of Official Language Department, New Delhi, Hindi week was observed by conducting various competitions and on 14 Sept. 2007 Hindi Diwas samaroh was held in the Lecture Hall complex, in which winners of the various competitions were honoured with suitable books awards.

Following Competitions were held from 08.09.06 to 14.09.07 :

- a) Dictation competition (Fourth class employees)
- b) Translation competition (Non Hindi Speaking Employees)
- c) Noting Drafting competition
- d) Hindi essay competition
- e) Poetry recitation competition

Winner of above competitions were as under:

A. Dictation Competition (Fourth Class)

1. Moh. Naeem Ahmed (First)
2. Shri Arvind Kumar Panday (Second)
3. Shri Hemant Kumar (Third)

B. Translation Competition (Non Hindi Employees)

1. Shri Gautam Karmakar (First)
2. Shri Binus (Second)
3. Shri Digambar Urkude (Third)

C. Noting and Drafting Competition

1. Shri Somnath Danayak (First)
2. Shri Hari Singh (Second)

3. Shri Ram Lakhan (Third)

D. Essay Competition

1. Shri Sanjeev Kumar (First)
2. Shri Ram Lakhan (Second)
3. Shri Ravi Kant Panday (Third)

E. Poetry Recitation Competition

1. Shri Ram Lakhan (First)
2. Shri Somnath Danayak (Second)
3. Shri Hari Singh (Third)

During the year 2006-2007 about 139 letters from Directorate, 255 letters from Registrar's office, 320 letters / circulars from Administration Section and 235 letters from were issued in Hindi.

Rajbhasha Prokoshtha is dedicated to the upliftment of Hindi at the Institute. It is always prepared to co-ordinate with each and every department of the institute in the implementation of the orders and directives received time to time from the Ministry of Human Resources & Development, Govt. of India.

MEDIA TECHNOLOGY CENTER

The Media Technology Center is an attempt to encourage and cultivate a sense of appreciation and explore the skills involved in the new media for creative expressions. The Center aims to provide a meaningful platform for the students of the Indian Institute of Technology Kanpur to foster their creative potential and merge it with their gradual process of acquiring and exchanging knowledge with technology-based education at the Institute.

The Media Technology Center successfully completed the first phase of National Program on Technology Enhanced Learning (NPTEL) by producing quality video and web based courseware in five major engineering and science disciplines.

The main objective of NPTEL program is to enhance the quality of engineering education in the country by developing curriculum based video and web courses. This is being carried out by seven IITs and IISc Bangalore as a collaborative project. In the

first phase of the project, supplementary content for 129 web courses in engineering/science and humanities have been developed. Each course contains materials that can be covered in depth in 40 or more lecture hours. In addition, 110 courses have been developed in video format, with each course comprising of approximately 40 or more one-hour lectures. In the next phase other premier institutions are also likely to participate in content creation.

Five major engineering disciplines have been covered in this project so far (NPTEL Phase I) at the undergraduate (B.E./B.Tech) level.

1. Civil Engineering
2. Computer Science and Engineering
3. Electrical Engineering
4. Electronics and Communication Engineering
5. Mechanical Engineering

In addition, a number of core curriculum courses common to all engineering programmes such as mathematics, physics, chemistry, management, electronics, language etc. have also been included. Students and teachers of Information Technology and Computer Applications will also find a number of courses from the above that are useful for their studies or for supplementing their lectures. The project in its first phase (2003-2007) has been fully supported by a grant from the Ministry of Human Resources and Development.

Currently the centre is involved in converting video based courses into appropriate streaming format and has collaborated with google to create a free YouTube library of engineering courses. There are more than 60 courses online already and the numbers are constantly increasing.

The video lectures can be directly accessed at <http://youtube.com/iit>. The web courses can be accessed at <http://nptel.iitm.ac.in/home.php>.

Students of the Design Program and the Department of Humanities and Social Sciences have a direct relevance to the Center with their academic course work. The

resources and expertise are shared to create a range of productions ranging from documentary films to commercial ads.

Committed manpower and resources of the Media Technology Center are involved round the year, providing their support in various academic and non-academic events.

FINANCE

The Ministry of Human Resources & Development (MHRD) has released Rs. 7480.00 lakh as Non-Plan Grant and 5200.00 lakh as Plan Grant in the financial year 2007-2008.

NON-PLAN

The total receipt under Non-Plan during the financial year 2007-2008 from Ministry of Human Resources & Development, Government of India is Rs. 7480.00 lakh. The Institute has also generated its own Internal Receipts of Rs. 2244.74 lakh, which includes Rs. 738.73 lakh as student fees, Rs. 500.84 lakh interest earned on investments/bank balances and Rs. 1005.17 lakh as other miscellaneous income.

The Institute has also withdrawn an amount of Rs. 70.00 lakh from Endowment fund account of the Institute for Non Plan activities during the financial year 2007-2008.

The Total Non Plan expenditure during the financial year 2007-2008 comes out to Rs. 9823.77 lakh against the total earnings of Rs. 9794.74 lakh.

PLAN

A total receipts under Plan during the financial year 2007-2008 is Rs. 5200.00 lakh grant-in-aid under Plan from the MHRD, Government of India.

The total expenditure under Plan has been restricted to Rs. 5200.00 lakh. This expenditure includes Rs. 2749.00 lakh on Building & Works and Central AC Facility, Rs. 1637.22 lakh on Non-Consumable purchases including Equipment, Furniture & Fixtures etc., Rs. 813.78 Lakh on Library Books, Digitalization of Library and Periodicals & Journals.

INCOME AND EXPENDITURE UNDER MAJOR HEADS

Sl. No.	Particulars	Income (Rs. In Lakh)	Expenditure (Rs. In Lakh)
1	Non- Plan	9794.74	9823.77
2	Plan	5200.00	5200.00
3	GPF/CPF	1209.42	761.70 (Non Plan)*
4	JEE	479.09	418.41 (Non Plan)*
5	GATE	206.77	198.60 (Non Plan)* 1.58 (Plan)
6	GATE (JMET)	5.19	8.90 (Non Plan)*
7	Research & Development	1233.03	721.38 (Non Plan) 30.32 (Plan)
8	Deans Capital Fund	52.77	22.78 (Non Plan)* 9.13 (Plan)
9	Hall Management	395.63	401.79 (Non Plan)*
10	Fund Hall Management	70.26	70.82 (Non Plan)*
11	Pension Hall Management	51.80	58.63 (Non Plan)*
12	Student Gymkhana	33.07	31.68 (Non Plan)*
13	Visitors Hostel	65.37	65.20 (Non Plan)*
14	Endowment Fund	1254.25	916.71 (Non Plan)
15	GATE (JAM)	154.76	81.65 (Non Plan)*
16	New Pension Scheme	34.80	00.01 (Non Plan)*

Endowment Report

The total amount of donations received during 2007-08 was Rs. 5.96 crore contributed by 1017 donors as compared to Rs. 5.41 crore contributed by about 623 donors in 2006-07.

Many new Faculty Chairs, Student's Scholarships and Awards have been instituted during the financial year 2007-08.

Partial travel support from the donations enabled 58 IITK students' participation in International Conferences during 2007-08. The financial support ranged from Rs. 20,000 to Rs. 40,000 per student.

Partial travel support from the donations enabled 7 new faculty members' participation in International Conferences during 2007-08.

In the year 2007-2008 cash awards for publishing research papers in reputed international journals were given to 171 students of IITK.

The following expenditure was made during 2007-08 for various DRPG activities.

S.No.	Project Title	Total Amount
1-	Opportunity College Project	4,18,407.00
2-	Development of Campus School	6,600.00
3-	To Support schools in Campus	30,000.00
4-	2007 SURGE Program	8,89,193.00
5-	Cash Award to Students	19,06,500.00
6-	Travel Support to New Faculty	3,00,000.00
7-	Travel Support to Students	19,53,466.00
8-	General Corpus Fund	3,17,861.00
9-	Patent Filing	15,12,339.00
10-	Contract Workers Welfare Relief fund	5,00,000.00
11-	Prabhu Goel Chair	4,15,926.00
12-	Prabhu Goel Research Centre for Computer Security	42,20,537.00
13-	N. Rama Rao Chair	9,78,472.00
14-	New CSE Building Maintenance Project	89,312.00
15-	Initiation Grant to New Faculty in CSE	64,304.00
16-	Infosys Fellowship	15,000.00
17-	Research I-Foundation	76,29,247.00
18-	Research and Outreach Activities in earthquake engineering	8,95,863.00
		2,21,43,027.00

FACILITIES TO STUDENTS

1. RESIDENTIAL ACCOMMODATION FOR STUDENTS

Halls 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, are provided room accommodation in the Halls of Residence with mess and other facilities. Students, who are wards of campus residents, as a special case, are permitted to stay with their parents on the campus.

The Institute has eight Halls of Residence for boys, namely Hall I to Hall-V, Hall-VII to Hall-IX and two for girls (GH-1) and GH-2 i.e. Hall- VI with total capacities of 3700 and 480 for boys and girls respectively. In addition, there is accommodation for 83 students in single bedroom apartments (SBRA).

The Halls have single and double-seater rooms. Presently, most of the senior undergraduate and all post graduate students are given single-seater 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-Year) are living in double seater 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. 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 (SBRAs)

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 SBRAs under the supervision of the Warden-in-Charge.

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
	10	06

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 income of their parents does not exceed Rs. 2,00,000.00 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 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 2007-08.

TABLE-I (A): Scholarships for B. Tech. / B. Tech.-M. Tech. Dual degree/ M. Sc. (Integrated) for the year 2007-08

Undergraduate Scholarships	Year				
	I	II	III	IV	V
MCM @ Rs. 1000/- p.m. with Freeship	102	100	89	99	09
Freeship	---	23	12	06	02
Free Basic mess plus Pocket Allowance @ Rs.250/- p.m.	50	60	31	33	4+1
Lalit Narain Das Memorial Scholarship	--	--	--	01	01
Kinra Scholarships	01	01	01	--	--
Indian Women's Association-Bonn Scholarships	--	--	--	01	--
Neeraj Kapoor Memorial Scholarships	--	--	--	01	--
Ram Rajendra Malhotra Educational Society Scholarships	03	--	--	--	--
Pt. Balajee G. Hardiker Scholarship	01	--	--	--	--
Dr. V. Rajaraman Scholarships	--	--	--	02	--

Dr. D. R. Bhagat Scholarships	--	--	02	--	--
Arakere & Karen Vasudev Scholarship	--	--	01	--	--
Govinda & Indira Srikanth Scholarship	--	--	--	03	--
Anil and Reshma Nigam Scholarship	--	--	01	--	--
Anurag Bartaria Scholarship	01	--	--	--	--
Prof. Natarlal Kapur Scholarships	--	--	01	--	--
Vasudeo Laxman Sahasrabuddhe Vaidya Scholarship	--	--	01	01	--
P. D. Murti Memorial Scholarship	--	01	01	01	--
Nita Goyal & Ashish Gupta Scholarships	01	01	01	01	--
Simran-Mandeep Kainth Memorial Scholarship	--	01	01	--	--
Dilip Kohli Memorial Scholarship	--	--	01	--	--
Mona & Paramjit Singh Scholarship	--	--	01	01	--
Baljit & Nirmal Dhindsa Scholarship	--	01	--	--	--
Dr. Hari Mohan & Pushpa Srivastava Scholarship	--	--	01	--	--
Prof. CNR Rao Science-Talent Scholarship		--	01	--	--
Sri Kalpa Nath Singh Scholarship	--	--	01	--	--
N. S. Rajaraman Scholarship	--	01	--	--	--
Sri Temasek @ IITK Scholarship	--	01	--	--	--
Smt. Jagat Kaur Memorial Scholarship	--	01	--	--	--
Sri Jamuna Das & Basanti Gupta Scholarship	--	01	--	--	--
Shanti Devi & Onkar Nath Maewal Scholarship	--	--	01	--	--
Romesh Chandra Memorial Scholarship	--	--	--	02	--
K. N. Saluja Scholarship	2	2	---	---	---
Sri. Singhsan Singh Scholarship	---	---	1	---	---
BGM Foundation	---	---	1	---	---
Dharmavati Garg Scholarship	---	---	---	03	---
Bishaber Gupta and Anguri Gupta Scholarship	---	---	01	---	---
Yogendra Nath and Sushma Gupta Scholarship	---	01	---	---	---
Harish and Sushila Chandra Scholarship	01	---	---	---	---
Shiv Kumari Shukla Scholarship	---	---	---	01	---
Bhuwan and Indira Joshi Scholarship	---	01	---	---	---
Pratima Ghosh Memorial Scholarship	---	01	---	---	---
Tapan Kumar and Swapna Bandhyopadgyay Scholarship	---	---	01	---	---
Sagnik Asis Ray Scholarship	---	---	---	01	---
Aedunuthula Prasad Memorial Scholarship	---	---	---	01	---
Bimlavati and Nawal Kishore Kapur Scholarship	---	---	01	---	---
Jasmine and Mohiuddin Scholarship	---	01	---	---	---
Dr. Gurucharan Singh Kainth Scholarship	---	01	---	---	---
District Society Welfare Scholarship, Kanpur					04
State Merit Scholarship, Government of A.P.		01			
Post Metric Scholarship, Gwalior	--	--	01	--	--
NTS Scholarships	20	23	12	10	01

SAIL, Bokaro City	--	01	--	02	--
TAYO Rolls Limited, Jamshedpur	--	--	--	01	--
Tata Iron Steel Co. Ltd.	--	--	03	03	--
FAEA Scholarship	01	--	--	--	--
Bihar School Examination Board, Patna-17	01	--	--	--	--
Pratibha Scholarships	--	01	01	--	--

TABLE-I (B): Scholarships for M. Sc. (2-year)/ M. Sc. - Ph. D. Dual degree 2006-07

Undergraduate Scholarships	M. Sc. (2-years)	
	I-year	II-year
MCM @ Rs. 1000/- p.m. with Freeship	33	20
Freeship	--	02
Free Basic Mess Plus Pocket Allowance @ Rs.250/- p.m.	6	04+02+01
Dr. R. C. Srivastava Memorial Scholarship	--	01
ACC fellowship	01	--
Smt. Durga Devi Memorial Scholarship	--	01

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 is given to those SC/ST category students whose parents income does not exceed Rs. 2,00,000/- per annum in the previous financial year.

POSTGRADUATE STUDENTS

The amount of teaching/research assistantship or fellowship for M. Tech. students is Rs.5000/- per month while that for Ph.D. students in engineering disciplines was (a) Rs.9500/- for first two years and (b) Rs.10,000/- for subsequent years. The amount of assistantship or fellowship for Ph.D. students in Sciences and Humanities & Social Science was (a) Rs.8000/- per month for the first two years of their programmes and (b) Rs.9000/- per month for subsequent years, with stipulation that these students are expected to devote up to eight hours per week towards job(s) assigned to him/her.

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

2	Purchase of Stationary items and payment of photocopying charges or purchase of books	5,000.00	1,000.00
---	---------------------------------------------------------------------------------------	----------	----------

3. SPECIAL ASSISTANCE TO SC/ST 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) and 7.5% for the Scheduled Tribes (ST) students. A separate merit list is drawn for those SC/ST students, who appear for the Joint Entrance Examination, Cut-off point for calling them for the Counselling 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 admission for a one year preparatory course scheme.

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 and room rent exemption are admissible to these SC/ST category students whose parents income does not exceed Rs.2,00,000/- 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.

4. 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 these activities. Table-III shows the awards and prizes given during 2007-08. In addition, 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-III: AWARDS AND PRIZES (2007-08)

S. No.	Awards and Prizes	B. Tech./ M. Sc. (Intg.)/Dual degree	M. Sc. (2-Year) / Dual degree
1.	President's Gold Medal	1	--
2.	Director's Gold Medal	1	--
3.	General Proficiency Medal	19	4
4.	Proficiency Medal	16	2
5.	Cadence Gold Medal	1	--
6.	Cadence Silver Medal	1 (M. Tech)	--
7.	Prof. Adidam S. R. Sai Memorial Gold Medal	1 (M. Tech)	--

8.	Prof. Adidam Sri Ranga Sai Memorial Medal	1	--
9.	Ratan Swarup Memorial Prize	1	--
10.	Banco Foundation Prize (ME)	2	--
11.	Dr. Shanker Dayal Sharma Medal	1	--
12.	Prof. Vijay Mahajan Gold Medal	1 (MBA)	--
13.	Dr. S. D. Bokil Memorial Medal	1 (M. Tech)	--
14.	Sangeeta Pradhan Memorial Medal	--	1
15.	Batra Gold Medal	1	--
16.	IEEE/Pedes'96 Award	1 (M. Tech)	--
17.	Bhagwani Devi Maheshwari Gold Medal	2	--
19.	Syngenta Excellence Award	1	1
20.	Tata Consultancy Services Prize	4	--
21.	Prof. Bal Deva Upadhyaya Memorial Gold Medal	1 (M. Tech)	--
22.	Mars G. Fontana Prize (MME)	1	--
23.	N. Balakrishnan Award	1	--
24.	Prof. J. N. Kapur Prizes	2	01
25.	Smt. P. K. Subbulakshmi Memorial Award	1	--
26.	Gargi, Kritika & Maitreyi Awards	3	--
27.	Sridhar Memorial Prize (EE)	1	--
28.	Ajai Agarwal Memorial Prize (CE)	1	--
29.	Jayesh Memorial Award	3	--
30.	Dr. Sangeeta Goel Memorial Award	1	--
31.	Notional Prizes (UG)	105	6
32.	Notional Prizes (PG)	41 (M. Tech.)	
33.	O. P. Bajaj Memorial Award	1	--
34.	Amit Saxena Memorial Award	1	--
35.	Aditya Birla group of Industries Scholarships	5	--
36.	O.P. Jindal Scholarship	04	--
38.	INLAKS Scholarship	2	--
39.	Goldman Sachs Global Leaders Program	4	--
41.	Mehta M. Tech. Gold Medal Award	1 (M. Tech)	--
42.	IITK Excellence Award for Leadership	1	--
42.	IITK Excellence Award for Art & Cultural	1 (M. Tech)	1
43.	IITK Excellence Award in Community Services	1	--

5. ACTIVITIES OF STUDENTS' GYMKHANA

As mentioned above, academic activities are only one facet of student life at IIT Kanpur. Our students actively participate in various extra and co-curricular activities focused towards the holistic development of their mind and body. The year 2007-2008 also saw a very active calendar in the form of various activities.

GAMES AND SPORTS ACTIVITIES

In the arena of sports IIT Kanpur came up with a creditable show in the Inter IIT sports meet held at IIT Bombay. The team finished overall fourth in the Men's' General championship and in Women's Championship, IITK was overall second. In Inter IIT IITK team had a number of podium performances both in the team and individual events.. To strengthen the sports culture, an inter-hall games event called JOSH was also organized which witnessed mass participation from the students.

The Tae-kwon-do Club is an active club during the year. The Club has now more than two hundred members who come regularly. The Club is also taking out students to take part in the District Championships where the students performed credibly.

The Nature Club organized several Bird Watching expeditions, and to the surprise of many, found out very rare species of birds in our own IIT Campus. The Club also organized a workshop on Introduction to Gardening.

Udghosh'07

Udghosh'07, which was organized from 20th to 23rd September'07, witnessed mass and quality participation from outside colleges. Some of the salient features of the festival were as under:

Total number of outside participants was 657 from various colleges from the country. The size of the IITK contingent was around 150.

All the standard Inter IIT competitive events were organized except weight lifting. Informals such as Chess, Carom and Slow cycling were also conducted with a huge participation from outside colleges as well as IITK people. The enthusiasm for Chess amongst IITK students was particularly noticeable.

A dedicated team of volunteers for the security team along with the HECs of different halls and the SIS ensured smooth conduct of the festival.

No untoward incident took place and all of the participants and particularly the IITK students cooperated well to maintain discipline during the conduct of the festival.

The opening ceremony was done in a unique manner by inviting **Shri Alok Kumar (DM, Kanpur)** being the Chief Guest, and **Shri Rajeev Sabarwal (SSP, Kanpur)** and the Dean of Students Affairs Prof. Prawal Sinha, amongst the other dignitaries present. The march-past of all the college contingents was escorted by the Pipe Band of **5th Kumaon Regiment** in an impressive fashion.

There was a cultural show by the school children from Guru Har Rai public school and Sri Guru Nanak public school. The fire cracker show in the end of the ceremony opened udghosh'07.

IIT Kanpur students excelled in almost every event winning **Gold Medals** in Athletics (Men and Women), Football, Basketball (Men), Water polo, Hockey, and **Silver Medals** in Volleyball, Table Tennis (Men and Women), Tennis (Men and Women), Badminton (Men).

The participants were quite satisfied with the Hospitality of IIT Kanpur and the keenness of the organizing team to sort out their problems at the earliest.

CULTURAL ACTIVITIES

Antaragni'07

Antaragni '07 was conducted from the 25th to 28th October 2007. Nearly 80 colleges and 1400 participants from across the country visited the institute to participate in the four day event. In many ways, Antaragni'07 was bigger and better than ever before. Firstly, Antaragni managed to get the highest amount of funds the festival has ever seen in the history. This directly translated into better shows, more enthusiasm and more fun. Secondly, Antaragni broke the shell of a traditional cultural festival. It came out with a purpose, a campaign to show the youth a path they could take up which would help in nation building. The idea was drilled through poster campaigns and competitions. The biggest step in this direction was the panel discussion "Indian Legislature and Judiciary: Shaking hands or locking horns?" where well known panelists Hon'ble Justice V N Khare, Mr. Prashant Bhushan, Hon'ble Justice N K Mehrotra were invited, which helped spread the Antaragni fever all over the country like never before.

Antaragni '07 kick started on 25th October 2007 at 6 PM when Deputy Director Dr Kripa Shankar, Festival Advisor Dr Amit Ray and Dean of Student Affairs Dr Prawal Sinha lighted the inauguration lamp. The opening ceremony also had a performance of Alumni along with our own students. Meanwhile, Antaragni flared elsewhere as well. Informal events like Dares, Blind Dates, Treasure Hunts and quizzes were conducted at the Mall every evening.

These catered to the crowd perennially present at the SAC. Movie shows were scheduled every night in an elegantly constructed Open Air Theatre. With the multi-cuisine food court in attendance until the wee hours of the morning, the SAC remained alive 24/4. The days ended with the much talked about discotheque, Calypso, which saw eager, long queues and high energy. This was a regular feature on the first three nights of the festival

Day two at Antaragni saw the fest come into its own, with almost all major events kicking off big time. Dramatics, musicals, dance events, English literary events, Hindi literary events, fine arts events – performers in every sphere came forward to show us what they had. India Haat opened in the SAC grounds, and continued to regale audiences for the next two days. Rithambhara, the fashion show, saw its preliminary round in the morning and its final on the same day. A Salsa + Merengue workshop, too, was held.

Day three saw new competitive events kick off, with the quizzes also hitting the scene. Prelims for Mridaksh, the personality contest, were held. Nukkad, the street play competition, was one of the highlights of the day, with the home team showing us once again why it is the best. The day ended with Synchronicity, which, to put it simply, rocked. This year it was a step further "Poets of The Fall", newest sensation on the European rock scene performed in Synchronicity.

Day four was one of the biggest days as it had the famous Pakistani Singer Atif Aslam as the person who was performing. There was a tremendous response from the all corners. In fact we could not accommodate all the people who wanted to attend the show. Even though there were some small unwanted incidents but still this was one of the major achievements in this Antaragni.

A few firsts:

- (1) 2000 participants from outside the campus.
- (2) Synchronicity by Poets of the Fall.
- (3) Atif Aslam performed in Blitzkrieg.
- (4) Phenomenal media coverage on national television.

The home team put up an exceptional overall performance.

FILM FESTIVAL

Umang 08

Film and Media Council (FMC) organized its Annual Film Festival Umang'08 from 18th to 20th January 2008.

Some of the salient features of Umang'08 were as follows:

- Apart from formal opening, it had the honorable presence of **Dr. Chandraprakash Dwivedi**, writer, director and actor of **Chanakya (TV series 1990)**, acclaimed to be the best ever Indian TV series by the critics. He also holds with him the credentials of directing the monumental film **Pinjar**. Also, the show would be featured **Mr. Atul Tiwari**, writer - **Mission Kashmir**, **Netaji Subhash Chandra Bose - The Forgotten Hero**.
- For the first time, movies were screened at three places ie. Auditorium, Outreach Auditorium and Open Air Theater (OAT - in Audi ground).
- More than 35 movies were screened in Umang 08. The films spanned all possible genres and themes as were feasible given the timeframe, and were very well appreciated by the entire campus community.
- The student community of IIT Kanpur and the participants from the outside colleges participated in making their films as a part of Umang (Director's Cut) and the selected films here were also screened. The focus was not only on quantity but also definitely on quality. All films screened were selected after a rigorous and time exhaustive

selection process. The effort of IITK students in film making was highly appreciated this time by the judges.

- All the standard events other than screening movies were carried out like Director's cut, treasure hunt and Antakshari.

ALFAAZ 2008

A new called 'Alfaaz' has been added to the list of festivals in 2007. This event focused on all kind of literary activities and was meant for wide variety of persons, be it a writer, a speaker, a poet, or even a listener.

TECHNICAL FESTIVAL

TECHKRITI 2008

Techkriti 2008 was successfully conducted from Feb 14th to 17th 2008. It witnessed an audience of over 2000 external students present during the festival itself and at least 10000 more who participated through online contests. The audience was given a plethora of options to choose from and there was something in it for everyone. Be it the contests ranging from innovations in hardware to bio-business plans, be it the lectures delivered by international figures including a number of **Nobel laureates**, be it the professional shows or be it the fun events, Techkriti 2008 was buzzing with excitement and enthusiasm. There was a panel discussion on Global Climatic Changes and Environmental Pollution which had tremendous response from both students and faculty. Overall, the festival has been widely hailed as the best in IIT Kanpur ever and has set immensely high standards that will be indeed difficult to emulate.

Hamfest, which enticed all hams across India, was conducted as a major event in Techkriti '08. CRANES officially sponsored HAMFEST. Promotion of Techkriti was done in Alumni Association meetings. Notably the response from the Delhi Chapter was very encouraging. Several Alumni were contacted and they showed immense interest in funding Techkriti not only for 2008 but also in the coming years.

In short this year Techkriti was the biggest ever Techkriti which had lot of events to remember for life.

6. PHYSICAL ACTIVITIES (CPA)

Compulsory Physical Education activities (CPA) are senate approved courses for four-year B.Tech. five year M.Sc.(Integrated) and five yer B.Tech.-M.Tech.(Dual) degree students. These courses are offered in the first two semesters of the academic program under the course numbers PE-101 & PE 102. In both the courses, there are two components, namely:

S.No.	PE Classes	Schedule	Timing
01.	Physical Exercise	Morning	One hour per week
02.	Personality development activities	Evening exercise	Two hour per week

The Dean of Students' Affairs is the instructor in charge of these courses. The courses are graded as S (Satisfactory) / X (unsatisfactory). The grade will be given after the end semester examination. A minimum of 75% attendance and satisfactory performance in each of the two components is necessary for passing the courses.

All students undergo total three hours of activities per week. The students have to opt for one of the following fifteen Personality Development activities categorized into two streams:

A. GAMES & SPORTS

1. Athletics Boys & Girls
2. Badminton Boys & Girls
3. Cricket Only boys
4. Hockey Boys only
5. Table-Tennis Boys & Girls
6. Tennis Boys & Girls
7. Football Only boys
8. Swimming Boys and girls
9. Basketball Boys and Girls
10. Volleyball Boys only
11. Weight lifting Boys only

B. Other Personality Development Activities

Yoga, NSS, Tae-Kwon-Do, NCC

The students who want to opt for an activity under Games & Sports can give preferences for at most two games. The final allotment of activity will be based on trial(s) of the opted game(s), provided they are selected in trials, students who are allotted an activity under games & sports will have to undergo three hours of games per week. The remaining students (those allotted an activity under Other Personality Development Activities) will undergo Physical Exercises once a week for an hour out of three hours per week. For these students, remaining two hours will be for the allotted personality development activity. It has been observed that increasing number of fresh students are not fit physically. This affects their overall personality and development. In view of this the PE section has advised a new structure for the physical exercises. Under this structure, all fresh students will be subjected to an AIFA test to evaluate their current state of fitness. Each student will be given a performance card, which will trace their improvement

through the semester. Marks will be given based on the fitness evaluation. This grade will be decided on marks obtained.

Physical Exercise

Participation is once in a week. This runs during August-November in the morning. Jogging, long distance run, light weight training, games & athletics are undertaken for at least twelve weeks. The initial fitness profiling of the students is done during the orientation period:

Personality Development Activities

Participation will be thrice/twice a week (for Games & Sports thrice a week, for the other personality Development Activities twice a week). Selection trials are held from July 28 to August 01 to fill up the seats for different activities.

Students are required to fill up option forms for the streams, which will be collected on the day of registration.

Number of seats available under different stream is as follows. These numbers may change, if circumstances so require:

1. NSS (Coordinator, Dr. H.C.Verma) Total Seats=30
NSS will be conducted twice a week (two sessions of an hour's duration each) with a total of twenty four hours of activity during the semester. Seats will be filled on the basis of first come first serve on the day of Registration.

2. YOGA (Coordinator: Dr. K.K.Saxena) Total Seats=30
Yoga will be conducted twice a week (two sessions of an hour's duration each) with a total of twenty four hours of activity during the semester. Seats will be filled on the basis of test/interview conducted by the Coordinator.

3. TAE-KWON-DO (Coordinator: Dr. Satyendra Kumar) Total Seats=30
Tae-Kwon-Do will be conducted twice a week (two sessions of an hours duration each) with a total of twenty four hours of activity during the semester. Seats will be filled on the basis of first come first serve on the day of registration.

4. NCC (Coordinator): Commanding Officer, NCC Total seats=No limit
NCC activities will be conducted once/twice a week with a total of twenty four hours of activity during the semester. For NCC no trial will be held. Any student, except foreign nationals, can take NCC There is no limit on number of seats.

5. Games & Sports (Coordinator, Mr. Vishram Yadav) Total Seats=250(206+44 girls)

Games & Sports will be held thrice a week (three sessions of an hour's duration each) with a total of 136 hours of activity in the semester. Seats will be filled through selection trials conducted by the coordinator. Allotment of activities will be done within 10 days from the registration.

Students failing to get a seat in the opted activity join NCC straightway without any loss of time.

S No.	Games & Sports	Boys	Girls	Trial timings	Trial Location
1	Athletics	20	10	30 July-3 Aug.	Main Stadium
2	Badminton	06	04	30 July-3 Aug.	Indoor Stadium
3	Basketball	18	12	30 July-3 Aug.	Main Stadium
4	Cricket	18	00	30 July-3 Aug.	Main Stadium
5	Football	22	00	30 July-3 Aug.	Main Stadium
6	Hockey	22	00	30 July-3 Aug.	Main Stadium
7	Table Tennis	06	04	30 July-3 Aug.	Main Stadium
8	Tennis	06	03	30 July-3 Aug.	Main Stadium
9	Volley ball	20	00	30 July-3 Aug.	Main Stadium
10	Weight Lifting	08	00	30 July-3 Aug.	Main Stadium
11	Swimming	15	06	30 July-3 Aug.	Main Stadium

PE-102 Second semester from January to April

This course runs similarly during January April in the evening. Students are allowed to join PE 102 only after clearing PE-101.

PE 101 and PE-102 courses are senate approved compulsory courses for the first year students of four year B.Tech. Five Years Integrated and B.Tech-M.Tech. Dual degree students. The Physical Education Section has been given the responsibility to conduct these courses.

CALENDER FOR COMPULSORY PHYSICAL ACTIVITIES COURSE

S.N.	Instructors	Games & Sports	Venue
1	Mr. Vishram Yadav	Basket Ball (Boys & Girls)	Main Ground
2	Mr. S S Prasad	Cricket Boys	Main Ground
3	Mr. D.P.Dohare	TT Weight Lifting	Gymnasium Hall
4	Mr. R L Dhiman	Hockey	Hockey Ground
5	Mr. P.K.Misra	Athletics	Main Ground
6	Mr. Sunil Kumar	Football	Football Ground
7	Mr. Amit Kumar	Volleyball	Main Ground

01	August 2007	1. Introduction of games, explanation of rules and
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	6,8,13,20,22	regulations. 2. Teaching fundamental skills of the game with drill/lead up games. 3. First year Cross Country on 17 August 2007, 6:00 P.M. at main stadium
02	September 2007 3,5,10,12,17,19,24,26	1. Coaching and teaching technique of the game, practice with in selected groups 2. Practice matches with CPA and all probable for institute teams 3. D7 A side regular football matches 5-12 September 07
		4. Swimming event coaching camp 05-07 September 07
	1 st mid semester examination Aug.30-31 September 2007	5. TT & Badminton 1 st year matches 05-12 September 07
		6. Athletics events, Basketball, Hockey & Cricket 1 st year matches 19-21 September 2007
		7. Water polo matches cum coaching camp 19-21 September 07
		8. Institute Aquatics team selection trail 19-21 September 07
03	October 2007 4,23,25,30 Mid Sem. Exam. 8-10 Oct.2007 Mid Sem. Recess. 13-21 Oct.2007	1. Institute Teams selection trials 2. Intramural matches for 1 st year students (selection of the games announced later) 3. Coaching camp for Udghosh Sports Festival 2007
04	November 2007	1. Intramural matches for first year students.

S N.	Date	Nature of activities
1	August 2007 7,9,14,16,21,23	1. Warming up jogging, running, simple exercise and specific exercise 2. Introduction, explanation of rules & regulation of games opted as CPA
2	September, 2007 6,11,13,18,20,25,27	1. Strength, endurance, stretching and circuit training etc. 2. Teaching fundamental skills of the game with drill/lead up games 3. Selecting good sportsman for first years B Team 4. Selection for institute main team
3	October-2007 04,23,25,30	1. Practice matches with A and B 2. 7-A side leagues matches first year A and B institutes main team
4	November 2007	1. 7-A side league matches to continue

	1,6,8	
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11. WARDENS

HALL OF RESIDENCE No. I

Dr. Arun P. Sinha, Warden-in-Charge

Dr. Sanjeev Garg, Warden

Dr. Satyajit Banerjee, Warden

HALL OF RESIDENCE No. II

Dr. Ashish Garg, Warden-in-Charge

Dr. Jayant K Singh, Warden

Dr. Shalabh Srivastava, warden

HALL OF RESIDENCE No. III

Dr. P. S. Ghoshdastidar, Warden-in-Charge

Dr. Abhijit Kusheri, Warden

Dr. Amit Prashant, Warden

HALL OF RESIDENCE No. IV

Dr. H. Karnik, Warden-in-Charge

Dr. V. Subrahmanyam, Warden

Dr. Anish Upadhyay, Warden

HALL OF RESIDENCE No. V

Dr. Rajesh Srivastava, Warden

Dr. S. Panda, Warden

Dr. T Ravichandran, Warden

HALL OF RESIDENCE No. VI

Dr. Y.N. Singh, Warden-in-Charge

Dr. Suchitra Mathur, Warden

HALL OF RESIDENCE No. VII

Dr. Sameer Khandekar, Warden-in-Charge

Dr. Amit Mitra, Warden

Dr. Zakir Hossain, Warden

HALL OF RESIDENCE No. VIII

Dr. S.N. Singh, Warden-in-Charge

Dr. Pranab Mohaparta, Warden

Dr. Venkitanarayan P

HALL OF RESIDENCE No. IX

Dr. Sudhir Kamle, Warden-in-charge

Dr. A.K. Saha, Warden

Dr. J. Ram Kumar, Warden

HALL OF RESIDENCE- GH

Dr. V.N. Kuklarni, Warden-in-Charge

Dr. Shikha Dixit ,Warden

Dr. Asima Pradhan ,Warden

SBRA

Dr. Goutam Deo, Warden-in-Charge

Mr. Sandip Sitaram Patil, Convener

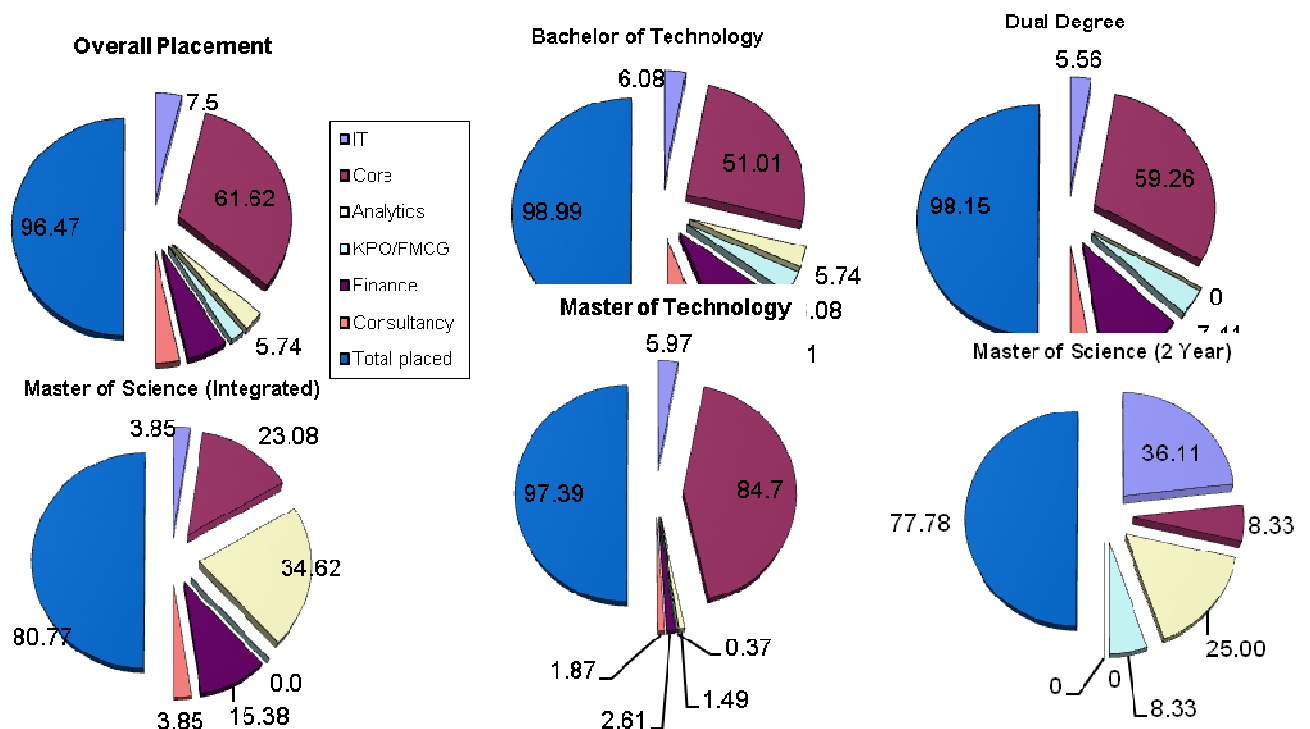
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STUDENTS' PLACEMENT

The Students' Placement Office (SPO) continues to play a vital role in assisting the students in their career planning and placement. As in past years, several counseling sessions and workshops were organised to help students prepare for the final interviews.

Invitation letters for participation in the Campus Recruitment Programme 2007-08 were sent to over 500 Organizations. Pre-Placement Talks were held during the 7th semester beginning on 24th August 07. 58 companies visited the campus for their pre-placement presentations. The final Placements began on 1st December 07 and lasted till the end of March 07.

A total of 126 companies visited the campus and recruited 656 students out of 680 students registered with the SPO (see attached Table). The placement statistics for our B.Tech students touched nearly 99% this year while for the M.Tech. students it is over 97%. The overall placement for 2007-08 has been over 96%. With the objective of providing uniform opportunity to all students registered for placement, the policy of "one job per student" is followed. The average salary this year for the overall batch is Rs.6.50 lakhs per annum. The core sectors attracted maximum number of students. Amongst the new organizations, the major ones that recruited this year are UBS Hong Kong, JP Morgan, ICICI Lombard, Nagarjuna Fertilizers, Renault, Nokia, John Deere, Essar, and the DAR Group. Placement for the MBA Programme is organized separately by the IME department. Their placement was 100%.



One of the important initiatives taken this placement season was the introduction of a Placement Feedback Guide, comprising interviews and articles by students placed and some generic placement preparation tips for students. A new placement automation system (PAS) was developed in-house by the student volunteers of SPO. It has served as a professional interface for interacting with companies and students and aided in an efficient Database Management. It included all the processes right from registration of students to the announcements of final job offers.

The Students' Placement Office coordinated the Summer Internship Programme for the pre-final year students of all the engineering departments. Internship offers have been made to 95 students so far through SPO

The SPO would like to thank everyone in the Institute who helped in the placement process.

Placement Data 2007- 08 with details

B.Tech	Total							Total placed	Percent placement
	registered	IT	Core	Analytics	KPO/F MCG	Finance	Consultancy		
AE	13	2	6	0	0	4	1	13	100.00
BSBE	14	0	3	3	3	4	1	14	100.00
CHE	40	1	21	2	2	9	3	38	95.00
CE	46	2	32	0	1	4	7	46	100.00
CSE	37	3	23	1	0	8	2	37	100.00
EE	54	4	21	3	7	8	11	54	100.00
MME	47	4	17	5	3	10	6	45	95.74
ME	45	2	27	3	2	6	5	45	100.00
Sub-total	296	18	150	17	18	53	36	293	98.99
Dual									
AE	4	0	4	0	0	0	0	4	100.00
CHE	11	1	9	0	0	0	0	10	90.91
CSE	18	1	8	0	1	7	1	18	100.00
EE	11	1	5	0	1	2	2	11	100.00
ME	10	0	6	0	2	2	0	10	100.00
Sub-total	54	3	32	0	4	11	3	53	98.15
M.Tech									
AE	18	1	15	0	0	0	0	16	88.89

BSBE	9	1	4	0	0	0	3	8	88.89
CHE	18	1	13	1	0	0	1	16	88.89
CE	24	0	23	0	0	1	0	24	100.00
CSE	39	4	32	0	1	2	0	39	100.00
EE	63	2	58	1	0	2	0	63	100.00
EEM	8	0	6	0	0	1	0	7	87.50
IME	12	1	8	2	0	1	0	12	100.00
LT	5	3	2	0	0	0	0	5	100.00
MME	11	3	7	0	0	0	0	10	90.91
MSP	7	0	5	0	0	0	2	7	100.00
ME	53	0	53	0	0	0	0	53	100.00
NET	1	0	1	0	0	0	0	1	100.00
<i>Sub-total</i>	268	16	227	4	1	7	5	261	97.39
M.Sc Int.									
CHM	5	1	3	0	0	0	0	4	80.00
MTH	14	0	0	8	0	4	0	12	85.71
PHY	7	0	3	1	0	0	1	5	71.43
<i>Sub-total</i>	26	1	6	9	0	4	1	21	80.77
M.Sc 2yrs									
CHM	4	1	1	0	0	0	0	2	50.00
MTH	11	7	0	0	0	0	0	7	63.64
Stats	16	0	2	9	3	0	0	14	87.50
PHY	6	5	0	0	0	0	0	5	83.33
<i>Sub-total</i>	36	13	3	9	3	0	0	28	77.78
Grand					26				
Total	680	51	418	39		75	45	656	96.47

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 and Air-conditioning maintenance services
 Water supply and sewage disposal
 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 construction activity:

Sl. No.	Unit	Responsibility	Unit-in-charge
1.	Civil Division-I	Maintenance, up-gradation and development works. 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	Sr. Electrical Engineer / Superintending Engineer
4.	Horticulture	Development & maintenance	Executive Engineer
5.	Estate	Estate management & sanitation	Estate Officer

During the financial year 2007-08, IWD has undertaken the following major development works

Sl. No.	Name of work	Value of work (Rs. in Lacs)	Start	Completion
1	Construction of New Core Labs.	1400	22.04.07	21.02.09
2	Construction of Centre for Environmental Sc. & Engg. Bldg.	600	05.06.06	May 2008
3	Construction of JEE / GATE office building at IIT Kanpur.	350	01.01.07	May 2008
4	Construction of lab space for Unmanned Helicopter Vehicles and other research activities.	350	01.01.07	May 2008
5	Construction of Pseudo Dynamic Test Facility & Mezzanine Floor in Metallurgical Engg. Lab.	500	23.10.06	Dec. 2008
6	Conversion of Pilot Plant building into Nanoscience Bldg. (SH: Clean room accessories etc.).	120	13.06.06	March 08
7	Expansion of 33 kV sub-station & installation of new SS No.-VII for acad. area (Ph.-II).	450	10.08.07	May 2008

Following new major projects have been taken up in the current year:

1. Construction of building for dept. of Industrial Management Engineering.
2. Construction of Utility Building at National Wind Tunnel Facility.
3. Construction of Sports Complex
4. Construction of Gymkhana Complex (Student Activity Centre & Open Air Theatre)
5. Renovation of existing sports facility.

Following new major projects are under planning:

1. Construction of faculty residences
2. Construction of faculty club.
3. Construction of faculty lounge
4. Conversion of Northern Western Labs into Multistorey Labs.

STORES & PURCHASE SECTION

The Store and Purchase Section is an important service unit to cater to the needs of departments/units for purpose of various equipment, 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 sources.

The Import Section handles customs clearance of all foreign consignments and matters relating to Import Licenses/Custom 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 2007-2008 the Purchase Section placed 1757 orders valued Rs.68,54,48,775=53 which includes import order numbering 434 costing Rs. 50,06,75,059=66 and Indigenous Order numbering 1323 costing 18,47,73,715=87. The purchase orders and their values under various categories are as follows.

<i>Category</i>	No. of P.O.	Amount(in Rs.)
Import :-		
(A) Institute fund		
Consumable	27	24,16,950=05
Non consumable	46	7,41,50,802=49
(B) Project fund		
Consumable	125	1,56,73,521=99

Non consumable	236	40,84,33,785=13
Total Import (A&B)	434	50,06,75,059=66
(C) Indigenous :-		
Institute fund		
Consumable	231	10,641,778=56
Non consumable	356	70,755,106=71
(D) Project fund		
Consumable	217	15,917,174=68
Non consumable	519	87,459,655=92
Total Indigenous (C&D)	1323	18,47,73,715=87
Total Value	1757	68,54,48,775=53

Central Stores procures highly technical items as and when required by the different departments to maintain pace with science and technology development. It stocks some items of consumable 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 19 personnel.

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

Stores Accounts maintain the expenditure details under working expenses and stationery grants sanctioned to Department/Section etc.

This Section also started reconditioning of wooden & steel furniture. During the financial year 2007-2008 we have reconditioned different types of furniture and issued to various departments. The details of reconditioned furniture are as follows. (1) chair 71 Nos(2) computer table 3 Nos (3)office table 53 Nos(4)Almira 12 Nos (5)Wooden Racks 16 Nos(6) Filling Cabinet 6 Nos (7)Stool 1 No (8) Notice Board 3 Nos. In this way we have saved lot of money of the institute.

We have been successful in computerizing the transactions 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 in this financial year. We can generate reports as per 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 speedy action for the procurement. Store and Purchase is now connected with the main frame Computer of Computer Center. Full communication with every net user is now possible in the campus from Store and Purchase Section. We are also planning to provide web based postal, so that departments 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 of around ten thousand. Being a residential campus with 1034 houses 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 and shopping complexes and such facilities, which are required for day-to-day living.

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

The Institute has various types of residential accommodation, i.e. Type-IA, IB, I, II, III, IV & V out of which Type-III & above are allotted to Faculty members, Scientists, Research Engineers, Group-A Officers, and rest are allotted to other staff. We have mainly four shopping complexes at various locations i.e. one in the heart of campus called the main shopping complex, another at Type-II complex, third one at security crossing & fourth one at Type-I area consisting of various kinds of 98 shops, which fulfill the basic needs of the residents.

Besides the above shopping complexes, we have 9 hostels for students' accommodation out of which seven are for boys and two are for girls. Every hostel has a barbershop, washerman shop, tailoring shop which mainly fulfills the immediate needs of students. As per demand, we have already started the operation of PCOs in most of the hostels.

The construction of twelve residences for visiting faculty has been completed and is used for providing accommodation.

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

Besides, the estate office is managing all types of activities related to the estate successfully and cautiously by way of taking all the precautions to solve all types of problems. During the financial year 2007-08, the office has realized about **Rs. 61,38,685/-** from different sources.

CAMPUS SCHOOL

Physical Panorama

School Strength :

367 students are served by a team of 23 highly qualified teachers (including 5 on contract basis), 11 supporting staff and the Principal.

Infra - structure:

Infra - structure of the school is very strong. The school is well equipped with open shelf library , Computer Lab, well maintained music & dance room , Science room , Art room , P.T. room for indoor games and a big playground for Basket ball , Volley Ball , Foot Ball , Cricket , Kho-Kho, Swings etc.

We planned to have at least two general body P.T.A. meetings every year . The Principal held few P.T.A. meetings gradewise with the parents concerned, teachers & students. Specific observations & remarks of the teachers & parents along with suggestive measures were discussed in detail. The aim of such meetings was to provide a platform for the teachers, parents & students to help students in their allround development of personality.

Activities :

To uphold socio - cultural heritage of our country the school provides wide range of exposure to the kids. Our cultural secretary Mrs. S. Yadav chalked out the the programmes at the beginning of the session.

- A. Morning assembly programmes were designed and organised by Mr. Mewa Lal & presented nicely on the stage giving enough time for exposure of the skills & talents of the kids in News reading , story telling , poetry recitation , general knowledge etc.

- B. Glimpses of different festivals & functions such as Milad-un-Nabi , Ram Naumi , Mahavir Jayanti , X ' mas , Raksha Bandhan , Id ul - Fitr etc. were presented by the students in the morning assembly .
- C. The teachers and invitees such as Dr. Mrs. Mamta Vyas , Mr. Mc. Donald etc. addressed the morning assembly on different occasions such as Budh Purnima, Moharram , Good Friday , Ravi Das Jayanti , Childrens Day .
- D. For students an arrangement was made for local visits such as Air Strip, N.W.Tunnel , Nursery , P.O. etc. Students of grade IV & V made a trip to water park on Sept. 07, 2007 under the guidance of Mr. Victor and Mrs. N.Agnihotri.
- E. Our **Annual Sports Day** was celebrated on Feb.02, 2008 . Prof. Kripa Shanker Deputy Director of the Institute was the Chief Guest of the day. The day's activities were geared round our young & dynamic P.T.I. , Mr. Vikas Victor . It was a very successful event . Tug of war for gents , musical chair race for ladies, passing through a burning circle, making wonderful pyramids etc. were very attractive & adventurous events that were appreciated & applauded by all .
- F. Mr. N.L. Sonkar, Science incharge made very good efforts to provide a platform to the budding young scientists on the occasion of our **Annual Science Exhibition**: They exhibited their talents & skills in the field of science. Prof. M.K.Harbola was the Chief Guest on the occasion. He encouraged our mini - scientists with his valuable remarks.

Independence Day : Aug.15, 2007-Main programmes were held in the Institute Stadium.

Republic Day : Jan. 26, 2008 -Fruit distribution after a short programme in the school.

Teachers Day : Sept.5 , 2007- Prof. Rahul Varman was the Chief Guest on the occasion. The Institute recognised the services of teachers & presented token gifts to them and hosted lunch .

Children's Day : Nov.14 , 2007-Art competition and gift distribution to the kids.

Inter - school competition :

- A. Our kids participated in the Wild Life Week celebrations and brought many laurels to the school. They competed with grade VIII students of the city schools in Group discussion , Group Song, Group Dance & Mono Acting and stood **FIRST** in each of the said competitions. The performance of the kids was appreciated and applauded by all including the Director of the Zoo and the local daily news papers.

- B. Inter school Kho - Kho Tournament was organised on 12.11.2007 and 13 .11.2007 in which Campus School IIT/K was the **winner** and D.S.Public School, Kalyanpur , Kanpur , the **runner up**.
- C. A three day 'Workshop' on ' **combined evening activities** ' (of the schools on the campus) was successfully arranged & organised by Prof. H.C.Verma, as its Convenor. Active participation of community volunteers & teachers was highly appreciative & fruitful. Registration and participation of large number of students, their zeal & enthusiasm in activities was quite encouraging one.
- D. I am thankful to the Campus School News Letter Team - the volunteers and teachers concerned for bringing out the first issue of the magazine. The pain and initiative taken by the volunteers are appreciated & applauded, I express my sincere thanks to the Institute authorities for encouraging and providing financial support.

Special Events

- A. Four of our teachers Mrs. Pawan Srivastava, Mr. Mewa Lal, Mr. Om Prakash and Mr. N.L.Sonkar were honoured by the Director of the Institute for their long and satisfactory services rendered to the Institute on the eve of Republic Day. I extend my heartiest congratulations to them with a hope that they would continue to give their best to the students.
- B. Mrs. Geeta Asthana, Teacher Grd.-I and Mr. Prahlad Tiwari, Helper, retired from their services by virtue of superannuation. I put on record their sincere valuable & exemplary services rendered to the school.

HEALTH CENTRE

Health Centre had been established with the objective of addressing health needs of the Institute Community. Health Centre provides services round the clock to meet out this objective. Health Centre is manned by 9 Medical Officers and a Medical Advisor of the Institute. Apart from Medical Officers, it is equipped with a Pathology & Biochemistry lab, X-Ray Unit, Dressing Unit, Pharmacy and Nursing Station.

The details of the Health Centre services provided for the period with effect from 01.04.2007 to 31.03.2008 are as follows:

Sl.No.	Particulars	Number
1.	Number of patients treated in OPD	53230
2.	Number of students treated	12220

3.	Number of patients manually registered	619
3.	Number of patients treated in Indoor	939
4.	Number of patients treated in Homeopathy	3649
5.	Number of Surgical Operations (Minor)	NIL
6.	Number of Tubectomy	NIL
7.	Number of D&C	6
8.	Number of Deliveries	6
9.	Number of Plastering	74
10.	Number of Surgical Dressing	6517
11.	Number of Injections	70650
12.	Number of Tetvac	856
13.	Number of Copper T	20
14.	Number of Hematology and Biochemistry Tests	43676
15.	Number of E.C.G.	578
16.	Number of Babies attended in Well baby Clinic	808
17.	Number of X-Ray done	2786
18.	Number of babies attended - National Pulse Polio Programme	412
19.	Number of Anti Rabies Injections	193

Immunizations are 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
- Outreach 69 & 80 building, IIT Kanpur

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.

Accommodation:

Visitors' Hostel has been equipped with 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.

Dining Facility:

VH provides dining facilities to in-house guests staying in VH and Visiting Faculty Apartment and for 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.

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

7	Outreach Auditorium,	210
8	Outreach, Seminar Room -1	40
9	Outreach, Video-Conferencing Room	30

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 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. Currently 10 deluxe rooms and 40 standard AC rooms have been equipped with Color TV facility.
- All the deluxe AC rooms have a small pantry and a small refrigerator.
- Intimation of confirmation of bookings through e-mail.
- Acceptance of payment through Credit/ Debit Cards.
- For detailed information, website of Visitors' hostel can be accessed at www.iitk.ac.in/vh.

Renovation Work:

- Renovation and expansion of Front Office is under progress.
- 15 Non-AC rooms have been converted into Standard AC rooms.

On the Anvil:

- Provision of colour television in all guest rooms.
- Empanelment of Catering services.
- Refurbishing of standard and deluxe rooms.
- Maintaining an online Wait-list for allotment of facilities at VH & Allied Services.

Management of day-to-day hospitality service has been outsourced to a private agency. An increase in facilities and 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.

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Humanities and Social Sciences

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Chemistry

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Physics

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SEMINAR PRESENTED

Aerospace

1. Shape Optimization for low Reynolds Number Flows, 14th International Conference on Finite Elements in Flow Problems, FEF07, Santa Fe, New Mexico, USA, March 26-28, 2007, D.N. Srinath, and S Mittal.
2. Mittal, Instabilities in flow past half a cylinder I 14th International Conference on Finite Elements in Flow Problems, FEF07, Santa Fe, New Mexico, USA, March 26-28, 2007, B. Kumar, J. J. Kottaram, A.K. Singh, and S.
3. Hysteretic behavior of circular cylinder undergoing vortex-induced vibration at low Reynolds, International Conference on Computational Methods 2007 (ICCM2007), Hiroshima, Japan, April 4-6, 2007, TK Prasanth, and Sanjay Mittal.
4. Finite Element Methods in Fluid Flows , invited lecture at Civil Engineering, Chuo University, Tokyo, April 2, 2007, Sanjay Mittal.
5. Finite Element Methods in Fluid Flows, Aerospace Technologist, Meet; February 1-2, IIT Madras, Chennai, 2007, Sanjay Mittal.
6. Effect of a trip wire on flow past a bluff body, Proceedings of the IUTAM Symposium on Unsteady Separated Flows and their Control, Cnrfu , Greece, 18-22 June, 2007, Suresh Behara and Sanjay Mittal.
7. Effect of a trip wire on flow past a bluff body, the Proceedings of the National Conference on Wind Tunnel Testing (NCWT-2007), IIT Kanpur, India, July 12-14, 2007, Sanjay Mittal, Ashis Nandy and Kamal Poddar.
8. Hysteresis in vortex-induced vibration of a circular cylinder in the laminar regime, in the Proceedings of SAROD 2007- 3, d Symposium on Applied Aerodynamics and Design of Aerospace Vehicles, Hotel Mascot, Thiruvananthapuram, India, November 22-23, 2007, TK Prasanth, and Sanjay Mittal.
9. Finite element simulation of transition in the wake of a stationary circular cylinder, in the Proceedings of SAROD 2007- 3rd Symposium on Applied Aerodynamics and Design of Aerospace Vehicles, Hotel Mascot , Thiruvananthapuram, India, November 22-23, 2007, Suresh Behara, and Sanjay Mittal.
10. Aerodynamics of Mixed Compression Air Intake, in the Proceedings of SAROD 2007- 3Td Symposium on Applied Aerodynamics and Design of Aerospace Vehicles, Hotel Mascot , Thiruvananthapuram, India, November 22-23, 2007, Sanjay Mittal and Vivek P.

11. Flow-induced oscillations of two circular cylinders in tandem arrangement at low Re , in the Proceedings of the 7th Asian CFD Conference, Indian Institute of Science, Bangalore, India, November 26-30, 2007, TK Prasanth, and Sanjay Mittal.
12. Parallel computation on a Linux cluster: scalability study, in the Proceedings of the 7th Asian CFD Conference, Indian Institute of Science, Bangalore, India, November 26-30, 2007, Suresh Behara, and Sanjay Mittal.
13. Secondary instability in the wake of a bluff body, in the Proceedings of the 7th Asian CFD Conference, Indian Institute of Science, Bangalore, India, November 26-30, 2007, Sanjay Mittal, Tariq Haque and Dhawal Buaria.
14. Global Instabilities in Non Parallel Flows, in the Proceedings of the 7th Asian CFD Conference, Indian Institute of Science, Bangalore, India, November 26-30, 2007, Sanjay Mittal.
15. VIV of two cylinders in tandem arrangement at low Re , in Book of Papers of the 5th Conference on Bluff Body Wakes and Vortex-Induced Vibrations - BBVIV5, 12-15 December, Costa do Sauipe, Brazil, 2007, TK Prasanth, and Sanjay Mittal.
16. Hysteresis in VIV at low Re : effect of blockage & m^* , in Book of Papers of the 5th Conference on Bluff Body Wakes and Vortex-Induced Vibrations - BBVIV5, 12-15 December, Costa do Sauipe, Brazil, 2007, Sanjay Mittal and TK Prasanth.
17. Controlled Atomization: Needs and Challenges, International Workshop on Advances in Combustion Science and Technology, Dec. 31st 2007- Jan. 2nd 2008, IIT Kanpur, A. Kushari.
18. Gas Turbine Combustion and Power Generation, IIT Kanpur Reach Symposium, March 2008. Khajuraho, A. Kushari.
19. Seminar on Aeroelasticity in Helicopters, Department of Aerospace Engineering, PARK College of Engineering and Technology, Coimbatore, August 2007, Dr. C. Venkatesan.
20. Seminar on Experimental studies on autonomous mini helicopter, Strategic Application of Lighter than Air vehicles, SASE, DRDO, Manali, Oct. 2007, Dr. C. Venkatesan.

Biological Science and Bio-engineering

21. The Indian Institute of Technology Network. Opening talk at the meeting 2008 Annual Symposium: Exploring Collaborations with India, University of Nottingham, UK, 18th March 2008, Prof. Pradip Sinha.
22. Genome-wide analysis and homology modeling of major intrinsic proteins in plants: Conservation in helix interface and diversity in selectivity filter.

- Invited talk, Indo-French Bioinformatics Meeting, Montpellier, France, 19th to 21st November, 2007, Dr. R. Sankararamakrishnah.
23. MD simulations of Bcl-2 apoptotic proteins: Functional significance of conformationally flexible regions, Invited talk, Indo-US Workshop on Spatial Kinematics and Protein Conformations. Indian Institute of Science, Bangalore, 10th to 11th December, 2007, Dr. R. Sankararamakrishnah
 24. Bacterial adaptation to stress: uncovering structure-function relationships in Rel proteins. Invited speaker at the meeting 2008 Annual Symposium: Exploring Collaborations with India, University of Nottingham, 18th March 2008, Dr. Balaji Prakash
 25. A Charge Reversal Differentiates (p)ppGpp Synthesis by Monofunctional and Bifunctional Rel Proteins. Invited speaker at First Annual Protein/Peptide Conference Pepcon 2008, BIT Life Sciences, Shenzhen, China, 23rd April 2008, Dr. Balaji Prakash.
 26. Genetic diagnosis in Lafora disease: promises, challenges and pitfalls. Invited talk delivered in the International Conference on Genetic and Molecular Diagnosis in Modern Medicine, Kamineni Educational Society, Hyderabad, January 7-9, 2008, Dr. S. Ganesh.
 27. Ubiquitin proteasome dysfunction in Lafora disease, Invited talk delivered in the BSI Forum, RIKEN Brain Science Institute, Wako-shi, Japan, December 19, 2007, Dr. S. Ganesh.
 28. Advances in molecular genetics of neurological disorders, Distinguished Seminar Series, Department of Biotechnology, Alagappa University, Karaikudi, July 14, 2007, Dr. S. Ganesh.
 29. Development of plant-parasitic nematodes, Centre for Biomolecular Studies, Univ. of Nottingham, UK, March 18, 2008, Dr. K. Subramaniam.
 30. Biomechanical study of human stomach: gastric motility vs. drug design, Annual Symposium of Centre for Biomolecular Sciences, Univ. of Nottingham, UK, March 18th 2008, Dr. Anupam Pal.
 31. Biomechanics of transport through the GI Tract, Golden Jubilee Celebration Symposium, Central Mechanical Engineering Research Institute, Durgapur, July 2007, Dr. Anupam Pal.
 32. Computational Biomechanical Analysis Leads to New Diagnostic Procedure for Dysphagia, Symposium on Assistive Technology, IIT Kanpur, February 2007, Dr. Anupam Pal.

Chemical

33. Invited Lecture on Pressure driven membrane processes for Effluent Treatment at Dairy Australian Industries Ltd. (DAIL) at Melbourne, Australia on 19th February, 2008, P.K. Bhattacharya.
34. Invited Lecture on Pressure driven membrane processes: Principles and Applications at Department of Chemical Engineering and Bio-molecular Engineering, University of Melbourne, Australia on 19th February, 2008, P.K. Bhattacharya.
35. Invited Lecture on Pressure driven membrane processes: viable unit operations for effluent treatment in National Seminar on Recent Advances in Chemical Engineering Operation and Process in Chemical and Allied Industries, at Institute of Technology, Guru Ghasidas University, February 5-6, 2008, P.K. Bhattacharya.
36. Invited Lecture on Pressure Driven Membrane Processes for Effluent Treatment, in All India Seminar on Zero effluent discharge- latest development In recycling during 22-23 December, 2007; Organized By The Institute of Engineers (India) West Bengal State Centre Chemical Engineering Division at Kolkata, P.K. Bhattacharya.
37. Invited Lecture on Pressure Driven Membrane Processes: Phenomena and Design during 10-14 December 2007 in QIP Short-Term Course at Department of Chemical Engineering, Indian Institute of Technology Guwahati, P.K. Bhattacharya.
38. Keynote Lecture on Pervaporation: an emerging separation technique for liquid mixtures, during 12-14 December 2007 in National Conference on Frontiers of Chemical Engineering at Department of Chemical Engineering, Indian Institute of Technology, Guwahati , P.K. Bhattacharya.
39. Department of Chemical Engineering, Cornell University, USA, 10th March, 2008, A. Ghatak.
40. Department of Chemical Engineering, University of Akron, USA, 7th March, 2008, A. Ghatak.
41. Department of Mechanical Engineering, University of Alberta, Canada, 5th March, 2008, A. Ghatak.
42. National Chemical Laboratory, Pune, 20th February, 2008, A. Ghatak.
43. Template Assisted Generation of Complex 3D Microchannels for Fabricating Microfluidic Channels. Unilever Research Center, Bangalore, 8th February, 2008, A. Ghatak.
44. Bhopal Gas Tragedy Revisited Invited talk delivered at (1)Petronas, Malaysia, Kerteh Integrated Petrochemicals Complex (KIPC), Kerteh, March

- 26, 2008 (2) Petronas, Malaysia, Petronas Towers, Kuala Lumpur, March 27, 2008, J.P. Gupta.
45. Rheological study of aging soft glasses of laponite, 18th Mid-Year Meeting of Indian Academy of Sciences, Bangalore, July 2007, Yogesh M. Joshi.
 46. Ageing Dynamics in Soft Materials, National Chemical Laboratory-Pune, July 2007, Yogesh M. Joshi.
 47. Ageing Dynamics in Soft Materials, Department of Physics, Indian Institute of Technology-Kanpur, September 2007, Yogesh M. Joshi.
 48. Time-stress superposition in soft glassy materials, 4th complex fluids symposium, Indian Institute of Technology Bombay , 2008, Yogesh M. Joshi, Reddy G. R. K.
 49. Inhibition of Coke Formation During Pyrolysis of Hydrocarbons, Dept. of Petroleum Chemical Engineering, Aligarh Muslim University, March 7, 2008, D. Kunzru.
 50. Chemical Sensors - In Summer Course on Organic Electronics, 2007, Organized by Samtel Centre for Display Technologies, June 25-July 20, 2007, IIT Kanpur, S. Panda.
 51. Plasma Etch of Silicon Deep Trench -- In a short course, Plasma - Basics and Industrial Applications, Organized by the Department of Chemical Engineering, November 3-4, 2007, IIT Kanpur, S. Panda.
 52. Stability of viscoelastic shear flows past deformable solid media, Invited lecture at the Fluid Dynamics Colloquium, Jawaharlal Nehru Center for Advanced Scientific Research, Bangalore, April 2007, V. Shankar.
 53. Stability of fluid flow in neo-Hookean tubes and channels, Invited talk, Fourth National Symposium on Rheology of Complex Fluids, IIT Bombay, February 2008, V. Shankar.
 54. Stability of fluid flow past deformable solids, Invited seminar, Mechanical Engineering Department, IIT Kanpur, March 2008, V. Shankar.
 55. University of Erlangen-Nuernberg, Germany, A. Sharma.
 56. National Institute of Standards and Technology (NIST, Maryland) , A. Sharma.
 57. Northwestern University, A. Sharma.
 58. Proctor & Gamble (Cincinnati) , A. Sharma.
 59. Multi-scale simulation of Cluster formation and Self Assembly, Indo-US workshop, IIT K, 2007, Jayant K. Singh.
 60. Surface phase morphological transitions on functional surfaces, REACH 2008, Jayant K. Singh.

Civil

61. Visited Bhartiya Vidya Bhavans Sardar Patel College of Engineering, Andheri (West), Mumbai during August 24-26, 2007 as NBA expert for accreditation of their BE Civil Engineering Programme.
62. Visited National Institute of Technology, Tiruchirappalli, Tamilnadu during March 28-30, 2008 as NBA expert for accreditation of their M.Tech.Structural Engineering Programme.
63. Design of bituminous pavements for airports, CRRI-SHELL workshop on Future Technologies in Bituminous Construction for Highways and Airfield Pavements, October 27, 2007, New Delhi, Das Animesh.
64. Principles of bituminous pavement design and the recent trends, Short term course on Pavement Engineering with Geosynthetics : Looking Ahead, April 25, 2007, IIT Delhi, Das Animesh.
65. Seismic Bearing Capacity using Pseudo-Dynamic Approach in the Dept. of Civil Engineering, IIT, Kharagpur, 2007, Ghosh, Priyanka.
66. Integrated approaches for runoff forecasting, REACH2008 Symposium, 15-18 March 2008, Khajuraho, M.P, Organized by IIT Kanpur, India. f) Jain Ashu, Water resources: Challenges and possible solutions, 5 May 2007, Water Resources Day Celebrations of the Institution of Engineers (India) Ltd., HBTL, Kanpur, Jain Ashu.
67. Invited Speaker, World Housing Encyclopedia : A Global Earthquake Housing Safety Initiative of EERI & IAEE, Proceedings of the International Workshop on Information Platforms for Disaster Reduction, 3-4 October 2007, Tsukuba, Japan, Murty, C.V.R..
68. Invited Speaker, Vision 2020: Disaster Education as a Component of Higher Engineering Education- Structural Engineering, National Round Table of INAE Fellows and Others, Vellore, 9-10 January 2008, Murty, C.V.R.
69. Keynote Speaker, Role of Architects in Ensuring Earthquake Safe Built Environment, International Workshop of the South-Asian Association for Regional Cooperation of Architects (SAARCH), 12-14 March 2008, New Delhi, Murty, C.V.R.

Computer Science

70. Determinant versus Permanent. Invited talk at Theory and Applications of Models of Computation, Shanghai, May 2007, Manindra Agrawal.
71. Determinant versus Permanent. Invited talk at Algebraic Algorithms and Error Correcting Codes, Bangalore, Dec 2007, Manindra Agrawal.

72. Automorphisms of Finite Rings and Their Role in Computer Science. ISI Bangalore, Feb 2008, Manindra Agrawal.
73. Fermats Last Theorem: From Integers to Elliptic Curves. TCS TACTiCS meeting, Thiruvananthapuram, Feb 2008, Manindra Agrawal.
74. Identity Testing for Depth Four Circuits. IMSc Chennai, Mar 2008, Manindra Agrawal.
75. Polynomial Time Recognition of Insertion Languages, IMSc Chennai, Mar 2008, Somenath Biswas.

Electrical

76. Nonsystematic turbo codes, Department of Electronics Engineering, Cheng-Shiu University, Kaohsiang, Taiwan, July 2007, Adrish Banerjee.
77. PAPR reduction for OFDM signals, National Conference on Wireless and Optical Communication (WOC-2007), Chandigarh, December 2007, Adrish Banerjee.
78. Cognitive radio: A physical layer communication perspective, National Workshop on Signal Processing and its Application to Software Defined Radio, Kolkata, January 2008, Adrish Banerjee.
79. Communication over Relay Channels, Tutorial talk in Fourteenth National Conference on Communications, Mumbai, February 2008, Adrish Banerjee.
80. Optical networks: protection and restoration, Invited talk at NIT Hamirpur, Himanchal Pradesh, 15 March 2008, Y. N. Singh.
81. Future of learning management and support system, invited talk in Elearn-2007, 14 December 2007, CDAC Noida, UP, Y. N. Singh.
82. Brihaspati Learning Management System: An open source initiative, Rakshpal Bahadur Management Institute, Bareilly, 6 October 2007, Y. N. Singh.
83. Demystifying Next Generation Networks, Institute of Engineering and Technology, Rohilkhand University, Bareilly, 5 October 2007, Y. N. Singh.
84. Learning Management System: How to use it effectively? MIT School of Telecommunication, Pune, 30 August 2007, Y. N. Singh.
85. Introduction to Switching Systems, MIT School of Telecommunications, Pune, 29 August 2007, Y. N. Singh.
86. Next generation networks: Basics, TEQIP short course on Signal processing and control, Electrical Engineering Department, NIT Hamirpur, Himanchal Pradesh, 12 July 2007, Y. N. Singh.
87. Routing in Networks: Basics, TEQIP short course on Signal processing and control, Electrical Engineering Department, NIT Hamirpur, Himanchal Pradesh, 11 July 2007, Y. N. Singh.

88. Machine Vision Applications in Navigation, Surveillance and more, CITICOMS 2007, Coimbatore, 27-29 August 2007, K. S. Venkatesh.
89. Vision Everywhere: the Rising Role of Artificial Vision, KRIYA08, An International Techno-Management Festival: Feb 1, 2 & 3, K. S. Venkatesh.
90. Visual Inspection, Metrology and Surveillance, Division Lecture at DRHR, BARC Mumbai, Feb 25th, 2008, K. S. Venkatesh.
91. History and Prospects of Electronic Surveillance, HBTI Kanpur TechERA 2008 1st and 2nd of March, 2008, K. S. Venkatesh.
92. Engineering Solutions Using Artificial Vision, Azad Institute of Technology, Lucknow: March 19th, 2008, K. S. Venkatesh.
93. The 2007 International Conference on Machine Learning; Models, Technologies and Applications, Las Vegas, Nevada, USA, June 25-28, 2007, R. M. K. Sinha.
94. Workshop on Technologies and Corpora for Asia-Pacific Speech Translation, 3rd IJCNLP, Hyderabad, Jan 11, 2008, R. M. K. Sinha.
95. Fabrication of Semiconductor Lasers, , Seminar, IIT Bombay, Oct. 08, 2007, U. Das.
96. Refractive Index and Absorption in Interdiffused Nano-Structures, International conference-cum-workshop on Nanoscience and Nanotechnology, AIT, Gurgaon, 17-21 Dec. 2007, R. K. Sonkar, T. Bhowmick and U. Das.
97. Quantum Well Intermixed Lateral Grating Assisted Weighted Directional Coupler, Department of Electronics Engineering, Institute of Technology, Banaras Hindu University (IT-BHU), Varanasi, Dec. 27-29, 2007, A. Barve, U. Das, and R. Nag.
98. An experimental investigation of the effects of environmental and fog condensation nuclei parameters on fog visibility Poster presentation, IASTA-2007, NPL, N. Delhi, India, 14-16 Nov., 2007, V. Pratap, V. Bharat, N. Tripathi, S. N. Tripathi, T. Gupta, A. Mishra, and U. Das.
99. Presentation on New Neuron Models and Applications, 23rd December, 2007, MAIT, Delhi, India, Dr P.K.Kalra.
100. Lecture on Model Based Audio Source Separation, December, 2007, DD Course, Electrical Engineering Department, IIT Kanpur, India, Dr P.K.Kalra.
101. Lecture on Video Compression, December, 2007, DD Course, Electrical Engineering Department, IIT Kanpur, India, Dr P.K.Kalra.
102. Presentation on Agriculture Power Demands and Management, 1-2 Oct. 2007, USAID workshop, Pune, India, Dr P.K.Kalra.
103. Delivered an invited lecture on Fossil and Bio-fuels: Energy and Environment in Indian Perspective at the International Conference

- organized by IIT Europe Alumni at Paris, France on 12th May 2007, Dr S.C.Srivastava.
104. Delivered an invited lecture on Technologies that will Change the Future at IIT London Alumni workshop at London, U.K. on 14th May 2007, Dr. S.C. Srivastava.
 105. Delivered an invited lecture on Secure Operation of Power System in Electricity Markets in a one day workshop organized at IIT Khargpur on 4th August, 2007, Dr.S.C.Srivastava.
 106. Delivered an invited lecture in a short term training course on Best Practices in Distribution organized at IIT Kanpur during 27-29 November, 2007, Dr. S. C. Srivastava.
 107. Delivered an invited talk on Emerging Technologies in Power Sector at EMCO Mumbai on 23rd January 2008, Dr.S.C.Srivastava.
 108. Delivered an invited lecture on Reactive Power Concepts and its Management in Power Systems at a workshop organized by Powergrid in Kanpur 30th January 2008, Dr.S.C.Srivastava.
 109. Short-term course on Power System Control, Stability and Operation, Andhra University College of Engineering, Vishakhapatnam, October 25-27, 2007, (Guest Lectures), Dr S.N.Singh.
 110. 2nd Workshop on Laboratory Teaching in Electrical Engineering (LTEE-08), KNIT Sultanpur, India, Feb 28-29, 2008 (Key Note speaker), Dr. S.N.Singh.
 111. Democritus Univ. Xanthi, Greece during May 2007, Dr. S.N. Singh.
 112. Seminar on Power Electronic Applications in Power Systems and Power Quality, Vasavi College of Engineering, Hyderabad, March 10, 2008, Dr.P. Sensarma.
 113. Invited Lecture on Kinetic modelling of plasma discharges, Short Term Course on Plasma Basics and Industrial Applications, IIT Kanpur, Nov 2007, Dr.N.Gupta.
 114. Seminar on Surface Degradation characteristics on nano-composites, INSA Lyon, France, July, 2007, Dr.N.Gupta.
 115. Delivered the IEEE sponsored seminar entitled Design and Implementation of an Optimum Power Quality Conditioner (UPQC) with Minimum VA Loading in CDAC, Trivandrum, June 27, 2007, Dr. S.P.Das.
 116. Delivered an invited talk entitled Harmonics and Power Quality Standards in Power Q: National Seminar Cum Exposition on Power Quality and Reliability, 15-16 October 2007, New Delhi, Organised by CII - LM Thapar Centre for Competitiveness, Chandigarh, Dr. S. P.Das.
 117. Delivered an invited talk entitled Power Quality Problems and Solutions Lohia Starlinger, Kanpur, May 10, 2007, Dr. S. P.Das.

118. Delivered an invited seminar on Electric Drives during the National Workshop Development in Power, Power Electronics, and Drives in Vasavi College of Engineering, Hyderabad, March 10, 2008, Dr. S. P. Das.
119. Antennas Research at IIT Kanpur, Presented at University of Kansas, Lawrence, USA, Dr. A.R.Harish.
120. Passive and active RFID and location technology research - an overview, Presented at Boeing, St. Louis, USA, Dr. A. R. Harish.

Industrial & Management

121. Combinatorial Optimization Problems Learning Manual for workshop on Mathematical Modeling optimization and their applications 23-27 April ,2007 Delhi, Ashok K. Mittal.
122. Operations management a view from patents literature Operations management seminar, SCMHRD Pune Aug12,2007, Ashok K. Mittal.
123. Productivity for sustainable development HAL lucknow Feb,2008, Ashok K. Mittal.
124. (Inaugura Address) Are the Five Factors in the FFM the Quarks of Personality? , National Conference-cum-Workshop on Advances in Five-Factor Model of Personality and Factor Analytic Methodology, Department of Psychology, University of Pune, January 30-31, 2008, Sharma, N. K..
125. Research Methodology, MIT, Ghaziabad, July 11, 2007, Sharma, N. K.
126. Factor Analytic Methodology, Department of Psychology, University of Pune, January 31, 2008, Sharma, N. K. .
127. Bankers Institute of Rural Development, Lucknow, Training Session on Applications of ICT for rural development, April, 2007, Sarkar, Runa.
128. Workshop to Critique 11th Five year Plan, 3i Network, New Delhi, Focus on Environmental Policies, May 2007, Sarkar, Runa.
129. European Commission Review Panel, Brussels, Overview of activities conducted under the AEGIS of OPAALs project by IIT Kanpur, September 2007, Sarkar, Runa.
130. Infovision 2007, The Knowledge Summit, Mumbai, Panelist for Social Networks and the Semantic Web, December 2007, Sarkar, Runa.
131. The Strategy Academy, New Delhi, Training session on Application of Macroeconomics to everyday Business for executives all across the country through video conferencing, March 2008, Sarkar, Runa.
132. The Future of Energy Markets in India: Structure and its Regulation, IITK REACH Symposium, Khajuraho Mar. 15-18, 2008, Singh, Anoop.
133. The role of integrated gasification combined cycle in clean coal, Clean Coal Asia 2007 Conference, Singapore, 17-18 Oct. 2007, Singh, Anoop.

134. Retention in the times of downsizing and restructuring: end of HRM? , NIPM UP chapter Kanpur, 27th October 2007, Varman, Rahul.
135. Measurement of Bullwhip Effect in a Supply Chain, Joint Work in Mechanical Aerospace and Industrial Engineering, IIT Kanpur and NTU, Singapore [10th July, 2007], K.Shanker, S.Agrawal and R.N.Sengupta.
136. DEAL as a Model for Participatory Social Innovation, Sciences & the Humanities in the Knowledge Society: Indo-German Deliberations on Research Policy, NISTADS & German Centre for Research in Higher Education, New Delhi, April 3- 4 2007, Jayanta Chatterjee.
137. Retail Marketing in the Networked Society - Seeking Some New Meanings, Keynote Address, Seminar on Retail Management, Jagran Institute of Management, Kanpur, April 14 2007, Jayanta Chatterjee.
138. The Digital Ecosystem Framework and the Web 2.0 as a Knowledge Co-Creation Process - What we learnt form the DEAL Project, Keynote Address, Info Vision 2007: Knowledge Summit, International School of Information Management and rediff.com. Mumbai, December 17-18 2007, Jayanta Chatterjee.
139. Social Marketing Strategy for Agricultural Innovation - The Digital Eco-System Model, Tenth National Conference on e-Governance, Chandigarh, February 2-3, 2008, Jayanta Chatterjee.
140. Marketing Rural Digital Services in India - Design Challenges for SST, International Conference on Services Marketing & Technology Applications, TAPMI, Manipal, February 15-16, 2008, Jayanta Chatterjee.
141. Creating Value Through Collaboration: The New Mantra in Global Business, Lal Bahadur Shastri Institute of Management & Development Studies, Lucknow. March 1, 2008, Jayanta Chatterjee.
142. Genealogy of Sub-Prime crises and its impact on the Indian markets, American Express, Gurgaon, 19th November 2007, B.V.Phani.
143. Differences in Management for Different Types of IT-Based Enterprises Conference on India & Other Emerging Economies (BRIC) - A Comparative Study, SAS Institute of Information Technology, Mohali, 24 Oct 2007, Sinha, Arun P.
144. Innovation & Management Lecture at Dr. IT Planets Institute of Technology & Management, near Chandigarh, 24 Oct 2007, Sinha, Arun P. .
145. Managing Innovation and Change in Public Situations Half Day Training Session to Conservators of Forests, National Forest Academy, Dehradun, 25 Oct 2007, Sinha, Arun P.
146. Two way clustering of Gene Expression Data Analysis invited speaker at the workshop on Bio Informatics organized held at Tirupathi on Feb 22 2008, B. Chandra.

147. Data Mining and its Applications, IMR College, Ghaziabad, February 14, 2008, B. Chandra.
148. Database Management Systems and its Applications, Amity University, Noida, March 7, 2008, B. Chandra.

Materials and Metallurgical

149. Galvanic corrosion of light metal couples for automotives, Florida International University, Miami 15 May 2007, R. Balasubramaniam.
150. Galvanic corrosion of light metal couples for automotives, Arizona State University, Tempe 17 May 2007, R. Balasubramaniam.
151. New Insights on Indian Wootz Steel, Salem Steel Plant, Salem 09 June 2007, R. Balasubramaniam.
152. Marvels of Indian Iron Through the Ages, Indian Institute of Technology, Kanpur, 19 August 2007, R. Balasubramaniam.
153. Marvels of Indian Iron Through the Ages, National Science Museum, Lucknow, 07 Sep 07, R. Balasubramaniam.
154. Story of the Delhi Iron Pillar, Indian Institute of Technology, Bombay, 14 September 2007, R. Balasubramaniam.
155. Y-TZP Ceramics: Toughness tailoring and Tribological Properties, Department of Materials and Metallurgical Engineering, University Polytechnica Catalunya (UPC), Barcelona, Spain on 28th May, 2007 (Invited talk), B. Basu.
156. Microstructure and Properties of WC-based Nanocomposites and Hap-containing Biocomposites at MTM, Katholieke Universiteit Leuven, Belgium on 31st May, 2007. (Invited talk), B. Basu.
157. Microstructure and Properties of WC-based Nanocomposites and Hap-containing Biocomposite at CIRIMAT, ENSIACET, Toulouse, France on 4th June, 2007. (Invited talk), B. Basu.
158. How to design Hap-based Biocomposites? at Fourth Research Conference of the European School of Materials Science and Engineering, held at UPC, Barcelona on 7-8th June, 2007. (Invited talk), B. Basu.
159. Spark Plasma Sintering Process and opportunities to develop of Nanoceramics/Nanocomposites using SPS at Focussed Workshop on Sintering at Coorg, India, 2-6th December, 2007. (Invited talk), B. Basu.
160. Designing Biomaterials for Hard Tissue Replacement Applications at Indo-US workshop on Ceramics for Medical Applications, 10-12th December, 2007, Chennai, India. (Invited talk). B. Basu Friction and Wear properties of self-mated Alumina and Zirconia in Cryogenic Environment at ALUMINA-2008, CGCRI, Kolkata, India on 28th February, 2008. (Invited talk), B. Basu.

162. Opportunities to develop Nanoceramics and ceramic Nanocomposites using spark plasma sintering Secure Materials Center, Materials & Structures Laboratory, Tokyo Institute of Technology, Japan on 4th March, 2008. (Invited talk), B. Basu.
163. Understanding the deformation of high purity metals (Ti, Cu) during cryogenic sliding conditions presented at 11th Lightweight Alloys Seminar - National Institute of Materials Science (NIMS), Tsukuba, Japan, 5th March, 2008. (Invited talk), B. Basu.
164. Densification and Properties of spark plasma sintered Y-TZP Nanoceramics and WC-ZrO₂ Nanocomposites, Extreme Energy-Density Research Institute, Nagaoka University of Technology, Japan, 6th March, 2008. (Invited talk), B. Basu.
165. Opportunities to develop Nanoceramics and ceramic Nanocomposites using spark plasma sintering COE talk at Institute for Materials Research/Deputy Director, Tohoku University, 7th March, 2008 (Invited talk), B. Basu.
166. Fundamental process engineering in steelmaking: From laboratory to steel melt shop, NMD ATM, 2007, Mumbai, D. Mazumdar.
167. Yield improvement in steel melt shop through reduction in tundish skull, NMD ATM, 2007, Mumbai, D. Mazumdar.
168. Activated Sintering of Stainless Steels, at International Symposium on Advances in Stainless Steels (ISAS 2007) (April 2007), A. Upadhyaya.
169. Microwave Sintering at DMRL, Hyderabad on January 26, 2008, A. Upadhyaya.
170. Process Cost Optimization through Sintering Time Compression, at Kanpur Institute of Engineering and Technology (KIET) on March 1, 2008, A. Upadhyaya.
171. Alloy Design through PM Route for ITER, at the Institute of Plasma Research (IPR), Gandhinagar on April 30, 2008, A. Upadhyaya.

Mechanical

172. Delivered a seminar in the 2nd Joint IIT Kanpur-NTU Singapore workshop in Mechanical, Aerospace and Industrial Engineering, IIT Kanpur, 5th -6th April 2008, P.K. Panigrahi.
173. Delivered a series of lectures (9 hours) on Optimization theory in IIIT Hyderabad, Dec 2007, B. Dasgupta.
174. Lecture, Micro-heaters, Micro-pumps and PCR micro-reactors for biological applications, NUT-IITK symposium, Indian Institute of Technology, Kanpur, Apr. 2008, S. Bhattacharya.

175. Lecture, Lab on chip analysis of Nucliec acids, Workshop on environmental science and engineering, Indian Institute of Technology, Kanpur, Jan. 2008, S. Bhattacharya.
176. Institute Lecture Miniaturized Nucliec acid analysis using micro-chips, Samtel Center for Display Technologies, Indian Institute of Technology-Kanpur, September 2007, S. Bhattacharya.
177. Institute Lecture BioMEMS and Lab on chip approaches for analysis of nucleic acids, Biosciences and Bioengineering department, Indian Institute of Technology-Kanpur, August 2007, S. Bhattacharya.
178. Invited lecture Bio Micro Electro Mechanical Systems, Meghnad Shaha Institute of Technology, Techno India Group, Kolkata, August 2007, S. Bhattacharya.
179. Invited Talk on Modeling of Free Surface Flows and Bubble Formation in Film Boiling, National Workshop CFD Approach on Fluid Flow, Heat and Mass Transfer, IIT Roorkee, April 12-13, 2007, G. Tomar and G. Biswas.
180. Delivered a series of lectures (9 hours) on Optimization theory in IIIT Hyderabad, Dec 2007, B. Dasgupta.
181. Invited talk (CMERI Golden Jubilee Lecture Series, lecture only) Mathematical Analysis of Turbulent Flows for Practical Applications, CMERI, Durgapur, December 3, 2007, G. Biswas.
182. Modeling of Free Surface Flows with a Focus on the Analysis of Bubble Formation in Film Boiling, Bhatnagar Memorial Lecture (lecture only) at the Congress of Indian Society of Theoretical and Applied Mechanics (ISTAM), BNM Institute of Technology, Bangalore, December 14-16, 2007, G. Biswas.
183. Prediction of bubble growth in film boiling using a variant of coupled level-set and volume-of-fluid method, 2nd Joint Workshop NTUS-IITK Workshop in mechanical, Aerospace, Industrial and Management Engineering, IIT Kanpur, April 5-6, 2008, G. Tomar, G. Biswas and A. Sharma.
184. Introduction to Experiments; Schlieren and Shadowgraph; Inverse Techniques; three lectures given during the QIP course entitled Modern Measurement Techniques in Solid and Fluid Mechanics, held during 7-12 May 2007 at IIT Kanpur (coordinators: P. Venkitanarayanan and S. Khandekar), K. Muralidhar.
185. Using lasers in micromachining, lecture given during the QIP course entitled Micromachining during 18-15 June 2007 at IIT Kanpur, coordinator: V.K. Jain, K. Muralidhar.
186. Generalized modeling of flow and transport in porous media, presented at the Joint IIT Kanpur - NTU Singapore symposium on Mechanical, Aerospace, and Industrial Engineering held at NTU Singapore during 10-11 July 2007, K. Muralidhar.

187. Laser measurements in Fluid and Thermal Sciences, Keynote lecture delivered at the International Conference on Recent Trends in Mechanical Engineering, College of Engineering, Ujjain, KN 46-52, October 2007, K. Muralidhar.
188. Reconstruction of Time-dependent Concentration Gradients around a KDP crystal growing from its aqueous solution, Subir Kar Memorial Lecture delivered at the 37th Fluid Mechanics and Fluid Power Conference, BIT Mesra (Ranchi), during 10-12 December 2007; also see pp 195-208 in the conference proceedings, K. Muralidhar.
189. Growth of YAG crystals in a Czochralski Process, presented at the INAE Annual Convention held during 7-8 December 2008 at RCI Hyderabad, K. Muralidhar.
190. Exploitation of gas hydrates as an energy source, presented at the second REACH symposium of IIT Kanpur at Khajuraho held during 15-18 March 2008, K. Muralidhar.
191. 7th Asian Computational Fluid Dynamics Conference, held in Bangalore, 26-30th Nov07, Dr. S. Sarkar.
192. University Institute of Chemical Technology, Mumbai, UICT- Alkyl Amine Foundation Day Young Scientist Award Lecture, 4th August 2007, A.K. Agarwal.
193. Presented seminar in Rajiv Gandhi Technical University, Bhopal, 2007, A.K. Agarwal.
194. Incremental Sheet Metal Forming at Multi Scales. Northwestel11 University. Evanston. USA, Indo-US workshop on Advanced and Futuristic Manufacturing, June 20-21, 2007, N.V. Reddy.
195. Rapid Manufacturing, University of Waterloo, Waterloo, Canada, July 17, 2007, N.V. Reddy.
196. Flexibility in Manufacturing Processes. CMERI, Durgapur. December 14, 2007, N.V. Reddy.
197. Incremental Sheet Metal Forming, DMRL, Hyderabad, December 2007, N.V. Reddy.
198. Optimization problems in elementary geometry - lecture delivered in Department of Mathematics, University of Alabama at Huntsville, U.S.A, June 21, 2007, A. K. Mallik.
199. From natural numbers to numbers and curves in nature, lecture delivered at Mechanical Engineering Department, Vanderbilt University, Nashville, U.S.A, June 22, 2007, A.K. Mallik.
200. Mathemagical Black Holes, lecture delivered at IISER, Mohali, December 5, 2007, A.K. Mallik.

201. The Puzzling Primes, lecture delivered at IIIT, Hyderabad, January 10, 2008, A.K. Mallik.
202. Sir Alfred Bray Kempe – An Amateur Kinematician. Lecture delivered at IIT Delhi, March 07, 2008, A.K. Mallik.
203. From Natural Numbers to Numbers and Curves in Nature. Lecture delivered at IIT Delhi, March 07, 2008, A.K. Mallik.
204. Invited lecture on Smart Materials & Design of Intelligent Systems during a two day refresher course on Advances in Materials & Material Selection in Design in Department of Mechanical Engineering, Harcourt Butler Technological Institute during March 10-11, 2007, B. Bhattacharya.
205. Invited lecture on Health Monitoring of Composite Structures with Smart Sensors during a two day refresher course on Composite Materials: Potential & Challenges in Department of Mechanical Engineering, Harcourt Butler Technological Institute during December 28-29, 2007, B. Bhattacharya.
206. Invited Talk on Finite Element Modeling of Metal Forming Processes : Issues and Challenges on the occasion of the inauguration of the R & D Centre of Sandvik Asia Ltd, Pune on February 27, 2008, P.M. Dixit.
207. Phase-Change Thermal Management Technology, invited in-house lecture series delivered at Mumbai and Delhi to industry participants, February, 2008, S. Khandekar.
208. Properties of Pendant Drops on Textured Surfaces, lecture delivered during 1st Joint NTUS-IITK Workshop in Mechanical, Aerospace and Industrial Engineering, Singapore, July 2007, S. Khandekar.
209. Remote Access Real Time Laboratory via Internet, lecture delivered during QIP short-term course titled Modern Experimental Techniques in Mechanics of Fluids and Solids, IIT Kanpur, May 2007, S. Khandekar.
210. Non-Intrusive Temperature Measurement Techniques, lecture delivered during QIP short-term course titled Modern Experimental Techniques in Mechanics of Fluids and Solids, IIT Kanpur, May 2007, S. Khandekar.
211. World Energy Resources: Status and Perspectives, lecture delivered during QIP short term course titled Advances in Vehicle Emission Control Technology, IIT Kanpur, May 2007, S. Khandekar.
212. Fuel Cell Technology in the background of World Energy Resource Perspective, lecture delivered in National Workshop titled Fuel Cell Technology: Progress and Prospects, IIT Kanpur (supported by Shastri Indo-Canadian Institute, New Delhi), Kanpur (UP), 2007, S. Khandekar.

Humanities and Social Sciences

213. Presented Reports of Vulnerability Mapping and District Situation Analysis for HIV/AIDS in Six Districts of UP, based on studies sponsored by UNICEF Lucknow, UPSACS, Lucknow, 19 July 2007, A.K. Sharma.
214. Lectures on Research Methods, Department of Political Science, Christ Church College, Kanpur, 12-14 January 2008, A.K. Sharma.
215. Lectures on Research Methods, Department of Sociology, Banaras Hindu University, Banaras, 24-25 January 2008, A.K. Sharma.
216. Grammar of Conceptual Space, Plenary Lecture, International Conference of South Asian Languages (ICOSAL-8), Aligarh Muslim University, Aligarh, India, 2008, Achla M. Raina.
217. Semantics of Events, Invited Lecture, Department of Linguistics, BHU, Varanasi, India, 2008, Achla M. Raina.
218. Human Development: Whats Rights Got to do With It? Invited Lecture. Third Refresher Course in Economics: Macro Economic Issues of the Indian Economy: Theory and Practice, UGC-Academic Staff College, Benaras Hindu University, Varanasi, 8 September 2007, Munmun Jha.
219. Terrorism and Human Rights. Invited Lecture. Human Rights Training and Sensitization Workshop for Jail Officials. Centre for Human Rights, Bihar Institute of Public Administration and Rural Development, 26 April 2007, Munmun Jha.
220. Human Rights Concepts. Invited Lecture. Human Rights Training and Sensitization Workshop for Jail Officials. Centre for Human Rights, Bihar Institute of Public Administration and Rural Development, 25 April 2007, Munmun Jha.
221. Presented a paper on Towards a Self-Reliant Indian Consumer: Problems in Perspective in the National Seminar on Consumer Protection in India: Problems and Prospects at G. B. Pant Social Science Institute, Allahabad, during 25-26, February 2008, T. Ravichandran.
222. Delivered an Invited and Sponsored Lecture on Postmodern Textual Complexities and Advocated Curatives at Kogakuin University, Tokyo, Japan on 3 November 2007, T. Ravichandran.
223. The Mind and the Body Matrix in Cyberpunk, in the 6th International Symposium on Advanced Technology (ISAT) on Kansei: Developments and Applications held from 4 to 6 November, 2007 at Kogakuin University (Tokyo Urban Tech), Tokyo, Japan. First Plenary Paper Presentation, T. Ravichandran.
224. Delivered an invited lecture on Qualitative Research Tools during the training session organized at IIT Kanpur on September 28, 2007 on District

- Situation Analysis of HIV/AIDS amongst the adolescents in Vaishali and Muzaffarpur districts of Bihar, Kumar Ravi Priya.
225. Presented the paper entitled, Experiencing Our True and Transcendental Self: What Recent Developments in Qualitative Research has to Offer to Researchers and Participants at the National Seminar on Indian Psychology: Theories and Models at SVAYASA, Bangalore on 26-28 December, 2007, Kumar Ravi Priya.
 226. Delivered invited talk (Partially funded by the Russian Academy of Sciences to visit, IHNST, RAS, Saint Petersburg, Russia) entitled: Current Problems of Science and the Public Understanding of the Role of Science and Technology in Developing Countries, in the XXIII, Session entitled, Fundamental Problems of Sociology and Economy of science: Past and Present, of the International School of Science and Technology Sociology, during Oct. 15-1 2007, IHNST, Russian Academy of Sciences, Saint Petersburg, Russia, 2007, Binay K Pattnaik.
 227. Delivered the key note address as the chief speaker to the UGC funded National Seminar organized by the DAV College Kanpur, on the theme Environment and Development, on 19th February 2007 Title of the Key Note Address: Indigenous Vision for Ecologically Sound Development, Binay K Pattnaik.
 228. Presented an invited paper entitled: Globalization and the Scientific Technological regime in India: Aspects of Change, at the UGC and UNDP sponsored international seminar entitled: Globalization: Potentialities and Predicaments, Organized by the Department of Sociology, University of Calcutta, Kolkata, during January 16-17, 2007, Binay K Pattnaik.
 229. Participated as discussant in Science Teaching Conference, Eklavya, Indore, 1-2, December, 2007, A. Madan.
 230. Participated as discussant in National Seminar on Field Studies in the Sociology of Education in India, NCERT, New Delhi, 22-24 November, 2007, A. Madan.
 231. Mahatma Gandhi Yuva Samvad Yatra: Dialogues with Youths in selected Districts of Uttar Pradesh, National Seminar on Youths, Banwasi Seva Ashram, Sonbhadra, 20-21 March 2008, A. K. Sharma.
 232. Presented a paper entitled, Developing the Rural Poor: Experiences of Banwasi Seva Ashram, Sonbhadra, National Seminar on Revitalization of Rural Institutes: Problems and Prognosis, Gandhi Smriti & Darshan Samiti, New Delhi, 15-16 March 2008, A. K. Sharma.
 233. Towards a rethinking of merit and meritocracy, invited paper presented at National Seminar organized by Centre for Social Empowerment, B.R. Ambedkar Open University, Hyderabad, 5-6 July 2007, A. Madan.

234. Human factor research in psychology: Some findings and concern. UGC National Seminar on Applied Cognitive Psychology, DDU Gorakhpur University, March 27-28, 2008, B. Bhushan.
235. Psychology of Meditation and Health: Present Status and Future Directions. International seminar on Health Psychology, Agra, February 21-23, 2008, D. Hussain & B. Bhushan.

Chemistry

236. Invitation from ICAM-2007 for a short Lecture on hybrid materials to be held at Bangalore, from Oct. 8-13, 2007, Dr. G. Anantharaman.
237. Invitation from MTIC-XII for a short Lecture to be held at IIT-Madras, from Dec. 5-7, 2007, Dr. G. Anantharaman.
238. Charge defects in hydrogen bonded systems: Ab initio molecular Dynamics studies, IIT Guwahati, May 08, 2007, Dr. A. Chandra.
239. Vibrational spectral diffusion in water and aqueous solutions, Bhabha Atomic Research Centre, Mumbai, June 21, 2007, Dr. A. Chandra.
240. Hydrogen bond dynamics in liquid water, Department of Chemistry, University of Kalyani, December 14, 2007, Dr. A. Chandra.
241. Inside water: A molecular view, Burdwan Raj College, Burdwan, January 04, 2008, Dr. A. Chandra.
242. Quantum simulations of charge defects in hydrogen bonded clusters and chains, Department of Chemistry, University of Burdwan, February 08, 2008, Dr. A. Chandra.
243. Synthetic Nucleases: Recyclable hybrid Polymeric/Dendrimeric catalysts for phosphate ester hydrolysis and plasmid cleavage, Invited Talk at IUMRS-ICAM Conference held in Bangalore, 8-13 2007, Dr. V. Chandrasekhar.
244. Synthetic Nucleases: Recyclable hybrid Polymeric/Dendrimeric catalysts for phosphate ester hydrolysis and plasmid cleavage, An Invited talk at Bio-Inorganic Winter School, IIT Bombay, November 30 2007, Dr. V. Chandrasekhar.
245. Chairman, International Conference on the Applications of Mossbauer Spectroscopy, ICAME-2007, October 14-19, 2007, I.I.T. Kanpur, INDIA, Dr. N.S. Gajbhiye.
246. Advanced Materials: Past, present and Future, National Conference on Advanced Materials, March 6-8, 2008, U.P.-College Varanasi, Dr. N.S. Gajbhiye.
247. FASCINATING WORLD OF ADVANCED MATERIALS AND THE ROLE OF CHEMISTRY, 26th Annual Conf. Indian Council of Chemists,

- Department of Chemistry, H S Gaur University, Sagar, March 25-27 2008, Dr. N.S. Gajbhiye.
248. What do we at IIT Kanpur Ultrafast Pulse Shaping Laboratory, Debabrata Goswami, Department of Chemistry and Center for Molecular and Biomolecular Imaging Seminar, French Center for Molecular and Biomolecular Imaging Duke University 2220 French Family Science Center, 124 Science Drive, Durham, NC 27708, USA, June 10 (2007), Dr. D. Goswami.
 249. Ultrafast Pulse Shaping – From Quantum Computing to Medical Imaging, Debabrata Goswami, Physics Colloquium, Dept. of Physics, IIT Kanpur, Aug. 9 (2007) , Dr. D. Goswami.
 250. Department of Chemistry, IIT Madras Jan 2007, Dr. B.D. Gupta.
 251. Imidazolin-5-ones as biodegradable optoelectronic materials – TIFR, Mumbai June 2007, Dr. R. Gurunath.
 252. Modelling the green fluorescent protein -Intriguing results and applications - IISER Mohali, Chandigarh February 2008, Dr. R. Gurunath.
 253. Invited Lecture at NOST Symposium during July 07-10, 2007, Goa, Dr. F.A. Khan.
 254. Invited Lecture at the annual meeting of Indo-French Center for Organic Synthesis (IFCOS) held at Manoir de la Vicomté, close to Rennes and Dinard, France during September 12-13, 2007, Dr. F.A. Khan.
 255. Medal lecture at CRSI meeting during February 1-3, 2008 at IISc, Bangalore, Dr. F.A. Khan.
 256. Plenary lecture in a National conference on Recent Advances in Drug Discovery Research held during March 15-16, 2008 at Poona College, Pune, Dr. F.A. Khan.
 257. Guest of Honor, and Inaugural address on Nano Science and Nano Technology at Manomaniam Sundranar University, held at Sarah Tucker College, Tirunelveli, October 11 2007, Dr. S. Sundar Manoharan, Dr. F.A. Khan.
 258. Guest of Honor, and Inaugural address on Nano Science and Nano Technology at the National seminar on Current Trends in Chemistry, at Bishop Heber College, Tiruchirapalli, held on October 12, 2007, Dr. S. Sundar Manoharan.
 259. Invited talk at the Indo-NUS symposium on current trends in Physics, held at IIT Chennai, Topic: XPS studies on Ruthenates and Manganites. A novel redox chemistry, Feb 27-March 01, 2008, Dr. S. Sundar Manoharan.
 260. Materials chemistry conference organized at Munnar by Professor CNR Rao and JNCASR, Bangalore, Sept 29-October 1st 2007, Topic: While light emission in organic molecules, Dr. S. Sundar Manoharan.

261. Invited talk in International Conference on Materials for Advanced Technologies (ICMAT) held at Singapore by IUMRS, Topic: Sonochemical synthesis of Nanomaterials., June 29th to July 02, 2007, Dr. S. Sundar Manoharan.
262. Special symposium on Spintronics at Techkriti IIT K, Chemistry of Spintronic Manganites, February 16th 2008, Dr. S. Sundar Manoharan.
263. Control of Molecular Organization and Development of Organic Functional Materials, Dr. J.N. Moorthy.
264. NSC (National Seminar on Crystallography), Kolkota, March 05-08, 2008, Dr. J.N. Moorthy.
265. National Institute of Technology, Durgapur, West Bengal (February 28, 2008), Dr. R.N. Mukherjee.
266. 8th Refresher Course in Chemistry, UGC-Academic Staff College, Banaras Hindu University, Varanasi (January 22, 2008), Dr. R.N. Mukherjee.
267. Guru Nanak Dev University, Department of Chemistry, Amritsar (October 24-26, 2007) , Dr. R.N. Mukherjee.
268. Bimala Churn Law Memorial Lecture, Indian Association for the Cultivation of Science, Kolkata (February 29, 2008) , Dr. R.N. Mukherjee.
269. Technische Universität-Kaiserslautern, Fachbereich Chemie, Germany (July 13, 2007), Dr. R.N. Mukherjee.
270. Technische Universität-Berlin, Institut für Chemie, Germany (July 12, 2007) , Dr. R.N. Mukherjee.
271. Technische Universität-Braunschweig, Institut für Anorganische und Analytische Chemie, Germany (July 11, 2007) , Dr. R.N. Mukherjee.
272. Georg-August-Universität Göttingen, Institut für Anorganische Chemie, Germany (July 10, 2007) , Dr. R.N. Mukherjee.
273. Universität Paderborn, Department Chemie, Anorganische und Analytische Chemie, Germany (July 9, 2007) , Dr. R.N. Mukherjee.
274. Freie Universität-Berlin, Institut für Chemie und Biochemie, (July 5, 2007) , Dr. R.N. Mukherjee.
275. Philipps-Universität Marburg, Anorganische Chemie, Germany (July 4, 2007) , Dr. R.N. Mukherjee.
276. Justus-Liebig-Universität Gießen, Institut für Anorganische und Analytische Chemie, Germany (July 3, 2007) , Dr. R.N. Mukherjee.
277. Max-Planck Institute für Bioanorganische Chemie, Mülheim an der Ruhr, Germany , (July 2, 2007) , Dr. R.N. Mukherjee.
278. Chemical Center, Lund University, Sweden (April 16, 2007) , Dr. R.N. Mukherjee.
279. Elastic Effects in Thin Films, Department of Mechanical Engineering, IIT Kanpur, 27-03-08, Dr. Madhav Ranganathan.

280. Gerhard Ertl: Nobel Prize in Chemistry 2007, Physics Society, IIT Kanpur, 27-03-08, Dr. Madhav Ranganathan.
281. Recent advances in cross-coupling reactions for organic synthesis, 8th Refresher course in chemistry, Academic staff college, Banaras Hindu University, Varanasi, January 28, 2008, Dr. M.L.N. Rao.
282. New atom-efficient organometallic reagents for cross-coupling reactions in organic synthesis, 8th Refresher course in chemistry, Academic staff college, Banaras Hindu University, Varanasi, January 28, 2008, Dr. M.L.N. Rao.
283. Organobismuths for C-C bond formations in organic synthesis, School of Chemistry, University of Hyderabad, Hyderabad, Feb 4, 2008, Dr. M.L.N. Rao.
284. Invited Talk during ACS meeting, August 18-24, 2007, Boston, Dr. V.K. Singh.
285. Invited talk during September 23-28, 2007 for Indo-Russian visit at Moscow, Dr. V.K. Singh.
286. Invited lecture at the national conference on quantum chemistry, soft computing and optimization titled Quantum control by creating local phase space barriers?, Prof. S. P. Bhattacharya festschrift, IACS (Kolkata), April 2008, Dr. K. Srihari.
287. Invited lecture at the fifth discussion meet on spectroscopy and dynamics of molecules and clusters titled Dynamical assignment of quantum states; recent advances and challenges, Mamallapuram, February 2008, Dr. K. Srihari.
288. Invited lecture at the CRSI-RSC joint symposium titled Dynamical tunneling: Mechanism and Control, Bangalore, January 2008, Dr. K. Srihari.
289. Invited lecture at the Trombay Symposium on Radiation and Photochemistry titled On the nature of vibrational energy flow in the molecular state space, Pune, January 2008, Dr. K. Srihari.
290. Invited lecture at the Workshop on coherent control of optical phenomena titled Bichromatically driven double well: parametric perspective of the control landscape, IITK, India, July 2007, Dr. K. Srihari.
291. Modern Reagents in Organic Chemistry at Department of Chemistry, D.D.U. Gorakhpur University, Gorakhpur on June 21st, 2007, Dr. Y.D. Vankar.
292. Design and Synthesis of Newer Glycosidase Inhibitors at Department of Chemistry, IIT Madras, Chennai November 30, 2007, Dr. Y.D. Vankar.
293. Delivered two lectures entitled (a) Modern Reagents in Organic Chemistry (b) Carbohydrates: much more than mere sources of energy at the Department of Chemistry, NIIT Jallanadhar on February 15 and 16, 2008, Dr. Y.D. Vankar.

294. Delivered a lecture entitled Synthesis of Glycosidase Inhibitors: Molecules of Potential Therapeutic Importance at the R & D Centre of Nagarjuna Fertilizers, Hyderabad on February 18, 2008, Dr. Y.D. Vankar.
295. Stimuli-Responsive Soft Structures, JNC Conference on Advanced Materials, Munnar, Kerala (October 2007), Dr. Sandeep Verma.
296. Bioinspired Paradigms for Metal-Nucleobase Frameworks, Thiruvananthapuram, Kerala, (January 2008), Dr. Sandeep Verma.
297. Deen Dayal Upadhyaya University, Gorakhpur 2007, Dr. V.K. Yadav.
298. Indian Institute of Chemical Technology 2007, Dr. V.K. Yadav.
299. Emerging Areas in Chemical Sciences (Refresher Course), Gorakhpur University 2007 (a series of 4 lectures), Dr. V.K. Yadav.

Mathematics and Statistics

300. 12 lectures delivered in Sponsored Training Program, Uttaranchal Council of Science and Technology, Puari, June 3-16, 2007, D. Bahuguna
301. Talk on Logics from Rough Sets, IRIT, Universite Paul Sabatier, France, May 2007, M. Banerjee.
302. Talk talk On Orlicz Spaces of Entire Functions, Department of Mathematics, Jammu University, Jammu, September 2007, M. Gupta.
303. Two invited talks at Department of Mathematics And Computer Science, Sri Satys Sai Institute of Higher Learning, Puttaparthi, September, 2007, M. K. Kadalbajoo.
304. Two invited talks at Centre of Advanced Study, Department of Mathematics, Punjab University, Chandigarh, December 7-11, 2007, M. K. Kadalbajoo.
305. Invited talk Fractal Modeling: Simulation and Prediction, at Systems Science Centre, Portland State University, Portland, USA, June 8, 2007. G. P. Kapoor.
306. Prof. Ramnath Mohanty Memorial Lecture on Carlesons Theorem, at Orissa Mathematical Society, Cuttack, January 2008, S. Madan.
307. Invited talk, The Poisson Summation Formula, Ravenshaw University, Orissa, March 2008, S. Madan.
308. Talk, on Fugledes Conjecture for Three Intervals, IMSc, Chennai, March 2008, S. Madan.
309. Talk on Bilinear Multipliers, at Institute of Mathematics and Application, Bhubaneshwar, November 7, 2007, P. Mohanty.
310. Talk on e is transcendental at Institute of Mathematics and Application, Bhubaneshwar, November 8, 2007, P. Mohanty.

311. Talk on Wavelets in PDES, at LTI, CRP-HT-Research Center, 29 J. F. Kennedy Av, Luxembourg, June 11, 2007, B. V. Rathish Kumar.
312. Talk on An overview of Finite Element Analysis in ADSS at ISFM, Loius Pasteur University, Strasbourg, France, June 14, 2007, B. V. Rathish Kumar.
313. Talk On Parallel Computations in Conjugate Problem in Thermo-Hydraulic Analysis of window based ADSS, at Universit'e de Marne-La-Vall'ee, Paris, December 6, 2007, B. V. Rathish Kumar.
314. Three lectures on Geometric applications of Sturm Comparison theorem and its modern generalizations, Department of Pure Mathematics, Calcutta University, March 16-22, 2008, G. Santhanam.
315. Talk on The Fourier Algebra of a Locally Compact Group, at Department of Mathematics, University of Jammu, Jammu, December 7, 2007, U. B. Tewari.

Physics

316. Presented a Physics Colloquium: Quantum phase transition in YbIr_2Si_2 and excitonic mass enhancement in Pr-compound, at Dept. Physics, I.I.T. Kanpur, August (2007), Dr. Z. Hossain.
317. Presented a Lecture series on Non-local Quantum Field Theory at IOP Bhubaneswar on 17/3/08, 20/3/08, 24/3/08, 26/3/08, Prof. S.D. Joglekar.
318. Seminar entitled STM studies of Electronically Inhomogeneous Surfaces, Mar 2008, at Physics Department, Pondicherry University, Ponicherry, India, Dr. Anjan K. Gupta.
319. Colloquium entitled STM studies of Electronically Inhomogeneous Surfaces, Aug 2007, Colloquium at IITK, Physics Department, Dr. Anjan K. Gupta.
320. Seminar entitled STM Study of Strain-Induced Nano-Scale Electronic Patterns on Graphite Surface at CRTBT, Grenoble, France in May 2007, Dr. Anjan K. Gupta.
321. Invited talk entitled Spin Polarized Scanning Tunneling Microscopy (SP-STM), in Spintronics session organized at IITK Techkriti-08 in Feb-08, Dr. Anjan K. Gupta.
322. Four lectures entitled Scanning Probe Microscopy, in a Summer School on Condensed Matter Physics at HRI, Allahabad in June 2007, Dr. Anjan K. Gupta.
323. Invited Talk U-Controlled Frustration in the Triangular-Lattice Antiferromagnet in Workshop on Correlated Electrons and Frustrated Magnetism (CEFM07) in Goa from Nov 25 - Dec 5 2007, organized under the

- auspices of the newly set up `Centre for Theoretical Sciences (CTS) of TIFR, Dr. Avinas Singh.
324. Invited talks (4 nos.) Lecture Series on Superconductivity, at a School Organized on Condensed Matter Physics, at Harish Chandra Research Institute Allahabad, 5th June 2007, Dr. S. Banerjee.
 325. Invited talk on Advances in Magneto-optical Imaging; Institute Colloquium Presented at the Tata Institute of Fundamental Research, July 18, 2007, Dr. S. Banerjee.
 326. Invited talk on Advances in magneto-optical imaging and imaging instabilities in vortex matter; East Asia symposium on Superconducting Electronics, IIT Delhi 14th December, 2007, Dr. S. Banerjee.
 327. Invited talk on Instabilities in superconductors and giant magnetic fields associated with plasmas; Department of Atomic Energy, Solid State Physics Symposium, Mysore, 27th to 31st Dec. Mangalore, 2007, Dr. S. Banerjee.
 328. Invited talk on Plasma based nanoscale science and technology with multielemental focused ion beams, Organization: Special invited lecture, Center of Excellence (COE) Advanced Research Seminar, Research and Education Center of Nano Vision Science, Shizuoka University, Hamamatsu, Japan Date: December 19, 2007, Dr. S. Bhattacharjee.
 329. Invited talk on Subnanosecond electron transport in polarized electromagnetic waves and the quasi steady state interpulse plasma, Organization: 22nd National Symposium on Plasma Science and Technology (PLASMA 2007), Institute for Plasma Research (IPR) and Plasma Science Society of India (PSSI), Gandhinagar, India, Date: December 6, 2007, Dr. S. Bhattacharjee.
 330. Invited talk on Microwave plasma sources for focused ion beams, Organization: Short Term Course on Plasma - Basics and Industrial Applications, Department of Chemical Engineering, Indian Institute of Technology - Kanpur, India, Date: November 3, 2007, Dr. S. Bhattacharjee.
 331. Invited talk on Multielemental Focused Ion Beams ,Organization: National Symposium on Ion Beam Technology and Applications (SIBTA 2007), Bhabha Atomic Research Center (BARC) and BRNS, Department of Atomic Energy, Government of India, Mumbai, India, Date: September 20, 2007, Dr. S. Bhattacharjee.
 332. Invited talk on Development of a microwave plasma based negative ion source and study of plasma dynamics through a transverse magnetic filter in the negative ion source Organization: Board of Research in Fusion Sciences, National Fusion Programme, NFP Experts Committee meeting, Institute for Plasma Research, Gandhinagar, India, Date: April 4, 2007, Dr. S. Bhattacharjee.

333. Two talks on (i) Ion Beams for materials engineering and analysis; (ii) Rutherford backscattering and channeling at Solid State Physics Laboratory, Delhi on Aug 20, 2007, Dr. V.N. Kulkarni.
334. Focused ion beams for application in nano technology at Ansal Institute of Technology on December 19, 2007, Dr. V.N. Kulkarni.
335. Talk on Large-scale behaviour of turbulent convection governed by low-dimensional fixed-points, in European Turbulence Conference ETC-11, held at Porto, 2007 (work with J. J. Niemela, K. Kumar, S. Pal, and D. Carati), Dr. M.K. Verma.
336. Talk on Magnetic field generation and critical Reynolds and Prandtl numbers, in Statphys 23, held at Genova, 2007 (work with D. Carati, I. Sarris, T. Lessinnes, and K. Kumar), Dr. M.K. Verma.
337. Talk on Universal scaling laws for large events in driven nonequilibrium systems, in Physics of Fluctuations Far From Equilibrium, held at MPI-PKS, Dresden 2007 (work with S. Ghosh, J. Banerjee, S. Manna) , Dr. M.K. Verma.
338. Seminars on Dynamo at (a) ETH, Zurich; (b) University of Volos, Volos, Greece; (c) Notre Dame University, USA; (d) University of Delhi, Delhi; (e) IIT Kanpur, Dr. M.K. Verma.
339. Invited talk on Strained Epitaxy of Giant Coercivity Cobalt-Platinum Nanodots Indo-Brazil Meeting on Nanomaterials, NCL Pune, October 2007, Dr. R.C. Budhani.
340. Invited talk on Superconductor-ferromagnet heterostructures South Asia Applied Superconductivity Conference, IIT Delhi September 2007, Dr. R.C. Budhani.
341. Invited talk on Antagonistic orders in epitaxial thin film heterostructures IUMRS-ICAM, Bangalore 2007, Dr. R.C. Budhani.
342. Invited talk on Competing orders in hole doped perovskite oxides of the manganite family 3rd Indo-Japan conference on ferroics and multiferroics, February 2008 IACS Kolkata, Dr. R.C. Budhani.
343. Invited talk on Physics on the Moon, delivered at the Discussion Meeting in Experiments in Future Lunar Missions, Physical Research Laboratory, Ahmedabad (Sep 13-14, 2007), Dr. S. Raychaudhuri.
344. Invited talk on Identifying Graviton Signals at the LHC : a discussion, delivered at the Workshop on the Physics of Warped Extra Dimensions, IIT Kharagpur (Feb 21-23, 2008) , Dr. S. Raychaudhuri.
345. Invited talk on Extra Dimensions and the LHC, delivered at the Discussion Meeting on BSM Physics: Modern Developments in SUSY breaking, Extra Dimensional Theories and Unparticles, Centre for High Energy Physics, Indian Institute of Science, Mar 27-29, 2008, Dr. S. Raychaudhuri.

346. Lecture Series at CCMT School on Condensed Matter, I.I.Sc., Bagalore, March 2008, Dr. D. Chowdhury.

CONFERENCES ATTENDED OUTSIDE IIT KANPUR

Aerospace

1. International Conference on IC Engine and Combustion, Hyderabad 2007, Dr. D. P. Mishra.
2. International Biomedical Modeling School and Workshop Organized by : TIFR's Cent for Applicable Mathematics (TI FR- CAM) , TIFR's National Center for Biological Sciences (NCBS) and Mathematics and Medical Physiology Group, The Institute for Mathematics and Scientific Computing, University of Graz, TIFR S Nat ional Center for Biological Science s (NCBS), Bangalore, India, Feb 27 t o March 2, 2008, Dr. Brijest Eshpuniyani.
3. 31st Indian Social Science Congress, SNDT Womens University, Mumbai, 26-31, Dec. 2007, Dr. Kunal Ghosh.
4. Symposium on Applied Aerodynamics & Design of Aerospace Vehicles (SAROD2007), Thiruvanthapuram, Nov. 22-023, 2007, Dr. Kunal Ghosh.
5. XV-National Seminar on Aerospace Structures, Coimbatore, Oct. 2007, C. Venkatesan.
6. 21-st National Convention of Aerospace Engineers, IIT Kanpur, Nov. 2007, C. Venkatesan.
7. American Helicopter Society Aeromechanics Specialists Conference, San Francisco, USA, Jan. 2008, C. Venkatesan.
8. Design, Development and Concurrent Flight Testing of Aerospace Vehicles and Systems, ASTE Air Force, Bangalore, Feb. 2008

Biological Science and Bio-engineering

9. Annual Drosophila Research Conference, Town and Country Resort, San Diego, 3rd -5th April, 2008, Prof. Pradip Sinha.
10. Conference: Indian Society of Developmental Biology Annual Meeting 2007, Hotel Holiday Inn, Agra, October 18th-19th, 2007, Convener of conference/Talk presentation, Prof. Pradip Sinha.
11. Conference: 10th International Conference on Advanced Materials (IUMRS ICAM 2007), Title of Talk: Supermacroporous Cryogels for Biomedical and Bioengineering Applications. International Conference on Advanced Materials (IUMRS-ICAM 2007), Bangalore, India, 8-13th October, 2007
12. Invited talk & chairing session, Dr. Ashok Kumar.

13. Conference: Stem cell and tissue engineering symposium, Title: Bioengineering Applications of Supermacroporous Cryogels. Plastic, Reconstructive and Aesthetic Surgery, Hacettepe University, Ankara-TURKEY, May 11-15th, 2007, Type of Presentation: Invited talk & chairing session, Dr. Ashok Kumar.
14. Conference: Exploring collaboration with India, Title: New generation of biomaterials for bioengineering applications, CBS, Nottingham University, UK, March 18th, 2008, Invited talk, Dr. Ashok Kumar.
15. Conference: Exploring collaboration with India, New generation of biomaterials for bioengineering applications, CBS, Nottingham University, UK, March 18th, 2008, Invited participant, Dr. R. Sankararamakrishnan.
16. Conference: Indian Society of Developmental Biology Annual Meeting 2007, Hotel Holiday Inn, Agra, October 18th-19th, 2007, Talk presentation, Dr. J. Sen.
17. Conference: Discussion meeting on Mechanisms of pattern formation, Organized by the Indian Academy of Sciences Orange County Resorts, Coorg, Karnataka, December 6th-9th, 2007, Talk presentation, Dr. J. Sen.
18. Conference: International conference on Model Organisms and Stem cells in development, regeneration and disease, National Center for Biological Sciences, TIFR, Bangalore, February 23rd-25th, 2008, Talk presentation, Dr. J. Sen.
19. Conference: Annual Scientific Symposium, The University of Nottingham, U.K., 17th March 2008 to 20th March 2008, Type of Participation - Invited speaker, Dr. Balaji Prakash.
20. Conference: First Annual Protein/Peptide Conference (PepCon 2008), Shenzhen, China, 22nd April 2008 to 24th April 2008, Invited speaker, Dr. Balaji Prakash.
21. Conference: International Conference on Genetic and Molecular Diagnosis in Modern Medicine, Title: Genetic diagnosis in Lafora disease: promises, challenges and pitfalls: Kamineni Educational Society, Hyderabad (January 7-9, 2008), Invited talk, Dr. S. Ganesh.
22. Conference: 16th International C. elegans meeting, Title: Binding of maternal RNA-binding proteins to the 3' UTR is essential for the translational control of nos-2, University of California at Los Angeles, June 27-July 1, 2007, Contributed paper, Dr. K. Subramaniam
23. Conference: Trends in Human Genetics, Toshali Sands, Puri, August 20-22, 2007, Invited speaker, A. Bandopadhyay.

24. Conference: Indian Society of Developmental Biology Annual Meeting 2007, Hotel Holiday Inn, Agra, October 18th-19th, 2007, Invited speaker, A. Bandopadhyay.
25. Conference: Discussion meeting on Mechanisms of pattern formation, Organized by the Indian Academy of Sciences, Orange County Resorts, Coorg, Karnataka, Dates: December 6th-9th, 2007, Invited speaker, A. Bandopadhyay.
26. Conference: Indian Society of Developmental Biology Annual Meeting 2007, Hotel Holiday Inn, Agra, Dates: October 18th-19th, 2007, Invited speaker, Dr. D.S. Katti.
27. Conference: Exploring collaboration with India, New generation of biomaterials for bioengineering applications, CBS, Nottingham University, UK, March 18th, 2008, Invited participant, Dr. D.S. Katti.
28. Conference: National Workshop on Mathematical Modeling in Biology, Title: Mathematical model of GI motility, Titupati, India, February 2008, Invited presentation, Dr. Anupam Pal
29. Conference: 4th Congress of Federation of Indian Physiological Societies, Role of gastric flow in mixing, emptying and drug release analyzed using computer simulation, New Delhi, India, January 2007, Invited presentation, Dr. Anupam Pal

Chemical

30. National Seminar on Recent Advances in Chemical Engineering Operation and Process in Chemical and Allied Industries, at Institute of Technology, Guru Ghasidas University, February 5-6, 2008, P.K. Bhattacharya.
31. All India Seminar on Zero effluent discharge- latest development In recycling during 22-23 December, 2007; Organized By The Institute of Engineers (India) West Bengal State Centre Chemical Engineering Division at Kolkata, P.K. Bhattacharya.
32. National Conference on Frontiers of Chemical Engineering at Department of Chemical Engineering, Indian Institute of Technology, Guwahati during 12-14 December 2007, P.K. Bhattacharya.
33. Invited speaker at Indo-US Frontiers of Engineering Symposium (IAFOE) - 27th Feb-1st March 2008 held at IRVINE, USA, A. Ghatak.
34. Invited speaker at Symposium on complex fluids at Indian Institute of technology, Bombay, 21st-22nd Feb, 2008, A. Ghatak.

35. Presented poster at Gordon Research Conference on Physics and Chemistry of Microfluidics at NH, USA, July, 2007, A. Ghatak.
36. World Congress on Safety of Oil and Gas Industry 2007, April, 2007, Gyeongju, South Korea; paper presented, J.P. Gupta.
37. 2007 International Seminar against Disaster, Yecheon City, Korea, July, 2007: Invited talk, J.P. Gupta.
38. Seventh IIASA - DPRI Forum on Integrated Disaster Risk Management, Stresa, Lake Maggoire, Italy, September 19-21, 2007: Invited lecture, J.P. Gupta.
39. 2007 4th International Conference on Environmental Disaster and Emergency Response, October 2, 2007, Douliou, Taiwan.; Keynote address, J.P. Gupta.
40. Mary Kay OConnor Process Safety Center 2007 Symposium Beyond Regulatory Compliance, Making Safety Second Nature, College Station, Texas, USA, October, 2007. Paper presented. (by a substitute since I could not go.), J.P. Gupta.
41. Gas & Oil Exposition & Conference, Oct. 31-Nov. 2, 2007, New Delhi: Paper presented, J.P. Gupta.
42. All Sites Energy Conservation and CDM - Meet - 2007, Reliance Industries Ltd., Hazira Complex, Surat, November 21, 2007: Keynote lecture, J.P. Gupta.
43. Technical Seminar on Industrial Process Safety Management, Federation of Indian Chambers of Commerce and Industry, New Delhi, November 23, 2007, Invited talk, J.P. Gupta.
44. Indian Institute of Chemical Engineers Diamond Jubilee Conference, Kolkata, Dec. 27-30, 2007 - IPCL Award Lecture. J.P. Gupta.
45. R&D Conclave II of Petroleum Industry, 9th-11th January 2008, Goa: Participant, J.P. Gupta.
46. 8th ASEE - MEC Professional Development Conference and Exhibition, Baharain, February 16-20, 2008: Paper presented, J.P. Gupta.
47. 79th annual meeting of Society of Rheology, Salt Lake City, 2008, Yogesh M. Joshi.
48. 4th complex fluids symposium, Indian Institute of Technology Bombay, 2008, Yogesh M. Joshi.
49. 2nd ISSS Conference on MEMS, Microsensors, Smart Materials, Structures and Systems, November 16-17, 2007, Pilani, S. Panda.
50. Indo-US workshop on Science and Technology at the Nano-Bio Interface, February 19-22, 2008, Bhubaneswar, S. Panda.

51. Self-organized patterning of soft solids, National Workshop on Nanomaterials and Nanotechnology, University of Lucknow (Materials Research Society of India), Lucknow, March 2007, A. Sharma.
52. Self-organized materials and interfaces, Recent Developments in Nanomaterials, Benaras Hindu University, March 2007, A. Sharma.
53. Soft nanosciences and patterning, IITK-NUS Symposium, April 2007, A. Sharma.
54. Self-organized manufacturing, National Review and Coordination Meeting on Nanoscience and Nanotechnology, Hyderabad, February 2007, A. Sharma.
55. Meso-fabrication and functionalities in soft materials, Bangalore Nano 2007, Bangalore, December 2007, A. Sharma.
56. Novel self-organized meso-fabrication and functionalities on small scales in soft materials. Indo-US Workshop on Advanced Manufacturing, IIT Kanpur, October 2007, A. Sharma.
57. Novel self-organized meso-fabrication, Indo-Australia Symposium MNNA, New Delhi, December 2007, A. Sharma.
58. Self-organizing soft materials: Wetting, adhesion and surface interactions, Symposium on Chemical Engineering-an evolving arena, Bangalore, December 2007, A. Sharma.
59. Self-organized meso-fabrication and functionalities on small scales in soft materials, Indo-US Advanced Studies Institute on Nanoscale Science and Engineering, Chennai, January 2008, A. Sharma.
60. Self-organized meso-fabrication and functionalities on small scales, International Conference on Nano Science and Technology (ICONSAT 2008), Chennai, February 2008, A. Sharma.
61. National Conference on Frontiers in Chemical Engineering 2007 held in IIT Guwahati, December 12-14, 2007, Chair of Nanotechnology session, Jayant K. Singh.
62. Complex fluid symposium, Feb 20-22, 2008, IIT Bombay, Jayant K. Singh.

Civil

63. Poster presentation: Rajbongshi, P. and Das, A. Reliability based automated design of flexible pavements, January 15, 2008, 87th TRB annual meeting, Washington, D. C.
64. Invited participant and poster presentation: Das, A., Pavement Engineering research at IIT Kanpur, Indo-US Frontiers of Engineering Symposium, February 28- March 1, Irvine, California.

65. International Conference on Civil Engineering in the New Millennium: Opportunities and Challenges (CENeM-2007) 11-14 January, Bengal Engineering and Science University, Shibpur, Howrah, India, Ghosh, P.
66. 3rd Indian International Conference on Artificial Intelligence (IICAI2007), December 17-19, 2007, Pune, Jain, Ashu.
67. National Workshop on Science and Technology in Disaster Management - Earthquake, Land Slide and Tsunami, New Delhi, 02 - 03 April 2007, Jain, Sudhir K.,.
68. UL INDIA FIRE ADVISORY COUNCIL MEET at New Delhi, 24-25 APRIL 2007, Jain, Sudhir K..
69. Global IIT Alumni Conference, Santa Clara, USA, July 2007, Jain, Sudhir K.,
70. Structural Engineers World Conference (SEWC 2007), Bangalore, Nov 2-7, 2007, Jain, Sudhir K.,
71. 8th Pacific Conference on Earthquake Engineering, Singapore, December 5 - 7, 2007, Jain, Sudhir K.,.
72. International Workshop on Active Fault in Kutch and its Implications Towards Seismic Microzonation, Bhuj, January 18-19, 2008, Jain, Sudhir K.,.
73. International Conference & Exhibition on Gaseous Fuells from 3-6, Feb. 2008, Goa, Jain, Sudhir, K.,.
74. International Workshop on Information Platforms for Disaster Reduction, 3-4 October 2007, Tsukuba, Japan, Murty, C.V.R.,
75. Vision 2020: Disaster Education as a Component of Higher Engineering Education, National Round Table of INAE Fellows and Others, Vellore, 9-10 January 2008, Murty, C.V.R.,
76. 2007 Australian Earthquake Engineering Society Conference, 23-25 November 2007, Wollongong, Australia, Murty, C.V.R.
77. International Conference on Construction - Managing Earthquake Risk, New Delhi, 30-31 January 2008, Murty, C.V.R.
78. National Workshop on Structural Health Monitoring, Non-destructive Evaluation and Retrofitting of Structures, New Delhi, 07-08 March 2008, Murty, C.V.R.
79. Role of Architects in Ensuring Earthquake Safe Built Environment, Proceedings of the South-Asian Association for Regional Cooperation of Architects (SAARCH), 12-14 March 2008, New Delhi, Murty, C.V.R.
80. Attended 18th Engineering Mechanics Division Conference at the Inn at Virginia Tech and Skelton Conference Center in Blacksburg, Virginia, USA, ASCE, Patra, N.R.

81. Fifth International Symposium on Environmental Hydraulics, Tempe, Arizona, USA, December 4-7, 2007, Presented contributed paper, Patra, N.R.
82. Hydro-2007 National conference, Surat, Gujarat, India, December 21-22, 2007. Chaired a session Patra, N.R..
83. Attended Indian Aerosol Science and Technology Association Biannual meeting held in New Delhi from 14-16 November, Tripathi, S.N..

Computer Science

84. Theory and Applications of Models of Computation. Shanghai, May 2007, Manindra Agrawal.
85. Algebraic Algorithms and Error Correcting Codes, Bangalore, Dec 2007, Manindra Agrawal.
86. ICDCIT 2007 at Bangalore, Dec 17-20, 2008, Ratan K. Ghosh.
87. ICUICM 2008 at Suwon, South Korea, Jan 30-Feb 1st, 2008, as invited speaker, Ratan K. Ghosh.
88. The 2007 International Conference on Machine Learning; Models, Technologies and Applications, Las Vegas, Nevada, USA, June 25-28, 2007, R.M.K. Sinha.
89. Workshop on Technologies and Corpora for Asia-Pacific Speech Translation, 3rd IJCNLP, Hyderabad, Jan 11, 2008, R.M.K. Sinha.
90. Third International Conference on Advances in Computer Science and Technology, Thailand, April 2007, Sanjeev K. Aggarwal.
91. Requirement Engineering 2007, October 2007, Sanjeev K. Aggarwal.
92. Intels Asia Academic Forum, New Delhi, October 2007, Sanjeev K. Aggarwal.
93. International Conference on Distributed Computing and Internet Technologies, 2007, Bangalore, Dec 2007, Sanjeev K. Aggarwal.
94. High Performance Computing 2007, Goa, Dec 2007, Sanjeev K. Aggarwal.
95. India Software Engineering Conference 2008, Hyderabad, Feb 2008, Sanjeev K. Aggarwal.
96. 26th International Conference on Applied Informatics, Software Engineering 2008 (SE 2008) Innsbruck, Austria, Feb 2008, Sanjeev K. Aggarwal.
97. 2nd REACH Symposium, Khajuraho, India, March 15-17, 2008, Sanjeev K. Aggarwal.
98. 16th Asian Test Symposium, Beijing (P.R. China), 2007, for presenting contributed paper, Shashank K. Mehta.

99. International Symposium on Combinatorics, Algorithms, Probability and Experimental Methodologies (ESCAPE), Hangzhou, China, April 7-9 2007, for presenting a contributed paper, Sumit Ganguly.
100. Approximation, Randomization, and Combinatorial Optimization. Algorithms and Techniques, 10th International Workshop, APPROX 2007, and 11th International Workshop, RANDOM 2007, Princeton, USA, August 20-22, 2007, for presenting a contributed paper, Sumit Ganguly.
101. Second Workshop on Scalable Streams Processing Systems (SSPS) 2008, Nantes, France, March 29, 2008, for presenting a contributed paper, Sumit Ganguly.
102. SIGCHI 2008, Florence Italy, for presenting a contributed paper, T.V. Prabhakar.
103. ISEC 2008, Hyderabad, as Chair for the tutorials and workshop, T.V. Prabhakar.

Electrical

104. Interspeech-2007, August 27-31, 2007, Antwerp, Belgium (contributed paper), S. Umesh.
105. Fourteenth National Conference on Communications, Mumbai, February 2008 (delivered a tutorial and chaired a session), R. K. Bansal.
106. The 10th International Symposium on Wireless Personal Multimedia Communications (WPMC 2007), December 2007, at Jaipur, India (contributed paper and chaired a session), Adrish Banerjee.
107. National Conference on Wireless and Optical Communication (WOC-2007), Chandigarh, December 2007 (invited talk and chaired a session) , Adrish Banerjee.
108. National Workshop on Signal Processing and its Application to Software Defined Radio, Kolkata, January 2008 (invited talk) , Adrish Banerjee.
109. Fourteenth National Conference on Communications, Mumbai, February 2008 (delivered a tutorial and chaired a session) , Adrish Banerjee.
110. XII International Conference on Speech and Computer (SPECOM2007), Moscow, Russia, October 15th-18th, 2007 (contributed paper), Pradip Sircar.
111. IEEE International Conference on Communications, ICC 2007, 24-28 June at Glasgow, UK (contributed paper), A. K. Chaturvedi.
112. Pan IIT Summit with Motorola, 1st Nov at New Delhi (invited attendee) , A. K. Chaturvedi.

113. Wireless World Research Forum (WWRF), 5-7 Nov at Chennai (contributed paper) , A. K. Chaturvedi.
114. National Conference on Communications, NCC 2007, 1-3 Feb at Mumbai (contributed papers and chaired a session) , A. K. Chaturvedi.
115. IEEE TENCON 2007, Taipei, Taiwan (contributed paper and co-chaired a session), Y. N. Singh.
116. IEEE Multi-conference on Systems and Control (MSC-2007), Oct 1-3, 2007, Singapore (contributed paper), K. S. Venkatesh.
117. IEEE Tencon, 2007 .Taipei, Taiwan - 29 October 2007. Paper presentation, Dr. P. K. Kalra.
118. IJCNN 2007. Orlando, Florida, USA. August 2007. Paper presentation, Dr P.K.Kalra.
119. IEEE-ISIC-07 (International Symposium on Intelligent Control) Singapore. 1-3 Oct, 2007, Dr P.K.Kalra.
120. IEEE Power Engineering Society General Meeting 2007, Tampa, USA, June 24-28, 2007. Presented contributed papers and also served as one of the panelists, Dr. S. C. Srivastava.
121. International Roundtable on Lightning Protection, May 22-25, 2007, Colombo, Srilanka organized by NAM S&T Centre New Delhi. Presented a paper and Chaired a Session, Dr. R. Arora.
122. 14th International Conference on Intelligent System Applications to Power Systems (ISAP07), 5 - 8 November, 2007, Kaohsiung, Taiwan, pp. 63-70 (Best Paper Award), Dr S.N.Singh.
123. Dr S.N.Singh, 2nd International Conference on Power Systems (ICPS2007), CPRI Bangalore, 12-14 December 2007 (Session Chairman) , Dr S.N.Singh.
124. International Conference on Power Electronics (ICPE 07) at Daegu, S. Korea, Oct 30 - Nov 1, 2008, Session Chair, Dr. P. Sensarma.
125. National Power Electronics Conference (NPEC 2007) at Bangalore, Dec 17 - Dec 19, 2008, Session Chair, Dr. P. Sensarma.
126. Dr Nandini Gupta, International conference on Polymeric Materials in Power Engineering, CPRI Bangalore, Oct 2007, presenting paper.
127. A Model-Free Redundancy Resolution Technique for Visual Motor Coordination of a 6 DOF Robot Manipulator, IEEE MSC, 2007 Singapore, Swagat Kumar, Amit Shukla, Ashish Dutta and Laxmidhar Behera
128. Direct Adaptive Control using Single Network Adaptive Critic, IEEE Int Conference on SoSE, San Antonio, USA, April 2007, Swagat Kumar, Radhakant Padhi and Laxmidhar Behera.
129. Workshop on Recent Advances on Control & Learning (January 07 - 09, 2008), TCS, Hyderabad, Dr R.Potluri.

130. National Power Electronics Conference (NPEC 2007), IISc Bangalore, during Dec. 17-19, 2007. Presented a technical paper and chaired the technical session entitled Matrix Converters during the conference, Dr.S.P.Das.
131. IEEE Antennas and Propagation Symposium, Honolulu, Hawaii, June 2007, Dr.A.R.Harish.
132. IEEE Applied Electromagnetics Conference 2007, University College of Technology, Calcutta, 19-20 Dec 2007, Dr.A.R.Harish.
133. SPIE Optics and Photonics, San Diego, CA, Aug 2007, Dr.A.Ghosh.

Industrial & Management

134. ORSI 2007 Delhi Dec, 2007, Ashok K Mittal.
135. Second National conference on Management Science and Practice IIM Ahemdabad, March21-23, 2008, Ashok K Mittal.
136. National Convention Quality Circle Forum of India Kolkatta Dec27-30, 2007, NWCT-2007 IIT Kanpur July13-14,2007, Ashok K Mittal.
137. Operational research in IT and SCM Madurai Sep6-8 ,2007, Ashok K Mittal.
138. 2nd National convention on seamless engineering Vadodara May31,2007, Ashok K Mittal.
139. 18th Kanpur chapter convention of quality circles Kanpur 6-7 October 2007, Ashok K Mittal.
140. National conference on mathematical Modeling Delhi 28-29 april,2007, Ashok K Mittal.
141. Web2for Dev, Participatory Web for Development Conference at Rome, as participant and to socialize the DEAL and AGROPEDIA projects, Sarkar, September, 2007, Runa.
142. Second IEEE International Conference on Digital Ecosystems and technologies, Phitsanulok, Thailand, Two papers presented, February, 2008, Sarkar, Runa.
143. National Conference on the Emerging Trends in the Photovoltaic Energy Generation and Utilization, Indian Institute of Technology Kanpur, 27-29 Mar., 2008, Singh, Anoop.
144. National Seminar on UP Economy at the Cross Road, Giri Institute of Development Studies, Lucknow, 25-26 Mar. 2008, Singh, Anoop.
145. Singh, Anoop. IITK REACH Symposium, Khajuraho Mar. 15-18, 2008, Singh, Anoop.

146. World Energy Congress, Rome, Italy, 11-15 November 2007, Singh, Anoop.
147. Clean Coal Asia 2007 Conference, Singapore, 17-18 Oct. 2007, Singh, Anoop.
148. Energy Technology Conclave, 13-14th Mar., 2008, New Delhi, Singh, Anoop.
149. International Conference on Power Exchange, 20th Feb., 2008, New Delhi, Singh, Anoop.
150. Workshop on Integrated Gasification Combine Cycle Technology (IGCC), 20th Feb., 2008, New Delhi, Singh, Anoop.
151. Global Energy Markets Program, SARI/Energy, 25-29th , 2008, New Delhi, Singh, Anoop.
152. International Workshop on New Forms of Enterprises: Actionable Knowledge and Grassroots Innovation, NISTADS, New Delhi, November 14-16, 2007, Varman, Rahul.
153. Notes from Small Industry Clusters: Making sense of knowledge and barriers to innovation. Reliability based Portfolio Optimization, 22nd European Conference on Operational Research, Prague, Czech Republic [8th - 11th July, 2007], K.Agrawal and R.N.Sengupta.
154. Reliability based Dynamic Portfolio Optimization, 22nd European Conference on Operational Research, Prague, Czech Republic [8th - 11th July, 2007], R.N.Sengupta.
155. Indo-China Workshop on Role of SSMEs in the Post-Industrial Society, Organized by the Soft Science & Technology Council of the Shaanxi Province, China at Xian., May 23 - 24, 2007, Contributed Paper & Panelist, Jayanta Chatterjee.
156. Service Science Management & Engineering Conference, Organised by ACM & IBM, Bangalore, June 2007, Invited Speaker & Session Chair, Jayanta Chatterjee.
157. OPAALS Conference, Organised by European Commission, FP 6, DBE Research Group, Brussels, September, 10 - 13, 2007, Panelist, Jayanta Chatterjee.
158. Agricultural Ontology Service Conference (AOS 8), Organised by FAO, Rome, September 20 - 22, 2007, Lead Discussant, Jayanta Chatterjee.
159. Expert Consultation Group Workshop on International Information System for Agriculture, Organised by CGIAR, CABI, FAO & NAL, Rome, September, 23 - 24, 2007, Country Presentation, Jayanta Chatterjee.

160. Web 2 for Dev - Participatory Web for Development, First Global Conference, Organised by CTA, DIFD & FAO, Rome, September, 24 - 27, 2007, Contributed Paper & Panelist, Jayanta Chatterjee.
161. International Workshop on New Forms of Enterprises, Organised by NISTADS, New Delhi, November, 14 - 16, 2007, Invited Paper, Jayanta Chatterjee.
162. 1st Joint Workshop in Mechanical, Aerospace and Industrial Engineering, Nanyang Technological University, Singapore, July 10-11, 2007, Paper Presentation, Peeyush Mehta.
163. 11th Annual International Conference of Society of Operations Management, Symbiosis Institute of Operations Management, Nashik, December 21-23, 2007, Session Chair on Supply Chain Management and Paper Presentation, Peeyush Mehta.
164. 3rd Japan-India Joint Seminar in Production/Quality Control and Micro/Nano Manufacturing Science, University of Electro-Communications, Tokyo, March 10-14, Paper Presentation, Peeyush Mehta.
165. Workshop on Entrepreneurship Education: Skills, Concepts and Pedagogy, NEN-STVP, July 3-5,2007, Bangalore, B.V.Phani.
166. Workshop on New Venture Creation - Developing a Business Plan, NEN-STVP, October 3-5,2007, Bangalore, B.V.Phani.
167. Workshop on Outside the box - Experiential Learning Methods, NEN-Stanford-IIMB, January 14-16,2008, Bangalore, B.V.Phani.
168. Entrepreneurship Educator Development Course, Wadhvani Foundation-ISB, Dec 16-April 21,07-08, Hyderabad, B.V.Phani.

Materials and Metallurgical

169. Corrosion Behavior of Novel Phosphoric Irons and Commercial Grade Steels in Simulated Concrete Pore Solutions, at ASTM International Symposium on Advances in Electrochemical Techniques for Corrosion Monitoring and Measurement 22 -23 May 2007, Norfolk, Virginia, USA, G. Sahoo and R. Balasubramaniam.
170. Environmental Degradation of Aeroengine Components and Remedies, National Seminar on Emerging Trends in Repair and Reclamation Technology of Aeroengine Components (EMTECH 2007), Air Force Station, Chakeri, Kanpur, 29-30 October 2007, R. Balasubramaniam.
171. How to design Hap-based Biocomposites?, at Fourth Research Conference of the European School of Materials Science and Engineering, held at UPC, Barcelona on 7-8th June, 2007, B. Basu.

172. Spark Plasma Sintering Process and opportunities to develop of Nanoceramics/Nanocomposites using SPS, at Focussed Workshop on Sintering at Coorg, India, 2-6th December, 2007, B. Basu.
173. Designing Biomaterials for Hard Tissue Replacement Applications, at Indo-US workshop on Ceramics for Medical Applications, 10-12th December, 2007, Chennai, India, B. Basu.
174. Friction and Wear properties of self-mated Alumina and Zirconia in Cryogenic Environment at ALUMINA-2008, CGCRI, Kolkata, India, 28 February, 2008, B. Basu.

Mechanical

175. COPEN 20087 attended at Engineering College Trivendrum (Keral), chaired one session on Non-traditional Manufacturing Processes, V.K. Jain.
176. Indo-Germany symposium on Nano Manufacturing Technology organized by CMTI Bangalore, V.K. Jain.
177. Invited Lecture, Microfluidics and Bio MEMS, Central Mechanical Engineering Research Institute, Durgapur. (Directors invitation) December, 2007, S. Bhattacharya.
178. Invited Lecture, Miniaturized Nucleic acid analysis, Indian Institute of Chemical Biology, Kolkata, (Directors Invitation) January 2008, S. Bhattacharya.
179. Lecture Biomimetic designs of Microfluidic Systems, Reach Symposium, 2008, Kajuraho, March 2008, S. Bhattacharya.
180. Educational Environment in India: A review Invited talk (coauthored with S.G. Dhande) at the 10th KAST International Symposium on Interdisciplinary Education for Science and Technology Innovation, September 13-14, 2007 in Seoul, Korea.
181. Modeling of Free Surface Flows with a Focus on the Analysis of Bubble Formation in Film Boiling, Bhatnagar Memorial Lecture (lecture only) at the Congress of Indian Society of Theoretical and Applied Mechanics (ISTAM), BNM Institute of Technology, Bangalore, December 14-16, 2007, G. Biswas.
182. Analysis of Formation of Vapor Columns in Flim Boiling (IMECE2007-41124), Proceedings of IMECE 2007, 2007 ASME International Mechanical Engineering Congress and Exposition, November 11-15, Seattle, USA, 2007, G. Tomar, G. Biswas and A. Sharma.
183. Educational Environment in India, A review Iinvited talk (coauthored with S.G. Dhande) at the 10th KAST International Symposium on

- Interdisciplinary Education for Science and Technology Innovation, September 13-14, 2007 in Seoul, Korea
184. SAE INDIA International Mobility Conference-2008, January 2008, New Delhi, India, A.K. Agarwal.
 185. ASME Internal Combustion Engine Division Fall Technical Conference-2007, October 14-17, 2007, Charleston, SC, USA, A.K. Agarwal.
 186. Sir Alfred Bray Kempe - an amateur kinematician - an invited talk delivered at IFToMM Workshop on History of Mechanisms and Machines, Bangalore Dec. 14, 2007, A. K. Mallik.
 187. Research and Challenges (REACH) Symposium, Khajuraho (MP), India, March 2008, S. Khandekar.
 188. 8th ASME/ISHMT International Heat and Mass Transfer Conference, Hyderabad, India, 2008, S. Khandekar.
 189. International Workshop on Nuclear Thermal-Hydraulics, BARC, Mumbai, 2008, S. Khandekar.
 190. Joint NTUS-IITK Workshop in Mechanical, Aerospace and Industrial Engineering, Singapore, July 2007, S. Khandekar.
 191. 14th International Heat Pipe Conference, Florianopolis, Brazil, April 2007, S. Khandekar.
 192. Fifteenth National Seminar on Aerospace Structures (NASAS-2007), Coimbatore, October 15-16, 2007 - Presented a paper, P. Venkitanarayanan.
 193. 19th National and 8th ISHMT-ASME Heat and Mass Transfer Conference, Hyderabad, January 3-5, 2008: presenting contributed paper, A.K. Saha.
 194. SICE International Conference on Instrumentation Control and Information Technology, Kagawa, Japan, Paper presentation. Sept. 17-20, 2007, A. Dutta.
 195. Indo-US workshop on Advanced and Futuristic Manufacturing, June 20-21, 2007, N.V. Reddy.
 196. 23rd National Convention of Mechanical Engineers, Theme: Emerging Trends in Manufacturing Systems and technologies, September 10-12, 2007, Hyderabad, N.V. Reddy.
 197. International Symposium on Automotive Sheet Metal Forming. (Invited Paper) December 17-18, 2007, Tata Nagar, N.V. Reddy.
 198. Visits to DMRL, Hyderabad, December 24, 2007, N.V. Reddy.
 199. SICE International Conference on Instrumentation Control and Information Technology, Kagawa, Japan, Paper presentation. Sept. 17-20, 2007, A. Dutta.

Humanities and Social Sciences

200. Event Representations in the Conceptual Space, International Conference of South Asian Languages (ICOSAL-8), Aligarh Muslim University, Aligarh, India, 2008. Achla M. Raina.
201. Semantics of the Co-eventual Verb in Hindi, International Conference of South Asian Languages (ICOSAL-8), Aligarh Muslim University, Aligarh, India, 2008. Kiran Pandey and Achla M. Raina.
202. Semantic Structure of the Indian Sign Language, International Conference of South Asian Languages (ICOSAL-8), Aligarh Muslim University, Aligarh, India, 2008. Purushottam Kar and Achla M. Raina.
203. Multiword Expressions in the Concept Space, International Conference of South Asian Languages (ICOSAL-8), Aligarh Muslim University, Aligarh, India, 2008. Somsukla Banerjee, Achla M. Raina and Harish Karnick.
204. Locating India in Minority Dislocations: Representations of Hindu-Muslim Power Flux in Asif Currimbhoys Refugee and Girish Karnads Tughlaq in the IACLALS International Conference on Performing the Post-Colonial: Imaging/Imagining India through Film, Theatre, Music and Dance held at the Department of English, Mohanlal Sukhadia University, Udaipur, 28-30 January 2008, T. Ravichandran.
205. De/Reterritorialising of Inner/Outer Ecosphere in Anita Desais Voices in the City and Kiran Desais Inheritance of Loss in the Tenth International Conference of the Forum on Contemporary Theory: Thinking Territory: Affect and Attachment towards Land in South Asia, held in Goa in collaboration with the Department of English, Goa University, 16-19 December 2007, T. Ravichandran.
206. Why a cultural psychology of trauma reactions and healing: The case of Kachchh earthquake at the International Conference on Psychology in Mental Health at the National Institute of Mental Health and Neuro Sciences (NIMHANS), Bangalore, India on 26-28 July, 2007, Kumar Ravi Priya.
207. Self growth along with the survivors of trauma: My experiences of constructing grounded theory of post-earthquake suffering and healing at the 8th Advances in Qualitative Methods Conference at Banff, Alberta, Canada from September 21-24, 2007, Kumar Ravi Priya.
208. Issues in Human Values for Ultimate Global Success, Seminar on Gross National Human Values - GNV: The Determining Factor for the Global Status of any Nation, Amity University, NOIDA, 20 April 2007, A.K. Sharma.

209. Socio-ecology of Domestic Water Consumption in India: A Comparative Study of Scarcity and Contamination Regions, German Environmental Sociology Summit 2007, Leuphana University of Luneburg, Germany, 8-10 November 2007, Pradip Swarnakar and A. K. Sharma.
210. Not post in Translation: Chemmeen on Alien Shores, National Seminar on Nation and Translation organized by Department of English, Pondicherry University and Central Institute of Indian Languages, Mysore at Pondicherry University: February 2008, Mini Chandran.
211. Of Centres and Peripheries: Cultural Subversion in VKNs Short Stories, National Conference on Postcolonial Discourse in Bhasha Literatures organized by Faculty of Arts, Benares Hindu University in Varanasi: September 2007, Mini Chandran.
212. The Democratization of Censorship: Books and the Indian Public, International Conference on A World Elsewhere: Orality, Manuscript and Print in Colonial and Postcolonial Cultures jointly organized by Rhodes University and Centre for the Book in Cape Town, South Africa: April 2 - 4, 2007, Mini Chandran.
213. Presented a contributed paper entitled Performing Postcoloniality in the Global Marketplace: Indian Popular Culture and Science Fiction/Fantasy in the 21st Century, by Suchitra Mathur, at the Annual IACLALS national conference held at Udaipur, India, from Jan. 28-30, 2008.
214. Presented a contributed paper entitled Capes Transformed to Snakes: The Indianisation of the American Comic Superhero, by Suchitra Mathur, at Comics as a Nexus of Culture, an international conference organised at Pfalz Akademie, Lambrecht, Germany, May 25-27, 2007.
215. Nations Security and the Environment: A Case Study of Intensive Military Training Activities in India, The International Symposium on Society and Resource Management 2007 (ISSRM 2007), during 17-21 June, 2007 at Park City, Utah, USA, P.M. Prasad and K.N. Narasimha.
216. Consumerism and the Liability Rules: An Economics Perspective, National Seminar on Consumers Protection in India: Problems and Prospects, February 25-26, 2008, G. B. Pant Social Science Institute, Allahabad, P. M. Prasad.
217. The National Conference on Applied Cognitive Psychology, ISI, Kolkata, 29-30 November, 2007, Contributed paper, Effect of Cognitive Load, Actual Duration and Paradigm on Time Estimation, Khan, A., Dixit, S., & Sharma, N.K.
218. The 12th International and 43rd National Conference of the Indian Academy of Applied Psychology, Department of Applied Psychology, University of Calcutta, Kolkata, 7-9 February, 2008, Contributed paper,

Trends in Coping with Cancer: A Study of Male and Female Patients, Mehrotra, A. & Dixit, S.

Chemistry

219. International Conference on Advanced Materials, ICAM-2007 held at Bangalore, from Oct. 8-13, 2007, Dr. G. Anantharaman.
220. Modern Trends in Inorganic Chemistry, MTIC-XII, held at IIT-Madras between Dec. 5-12, , Dr. G. Anantharaman.
221. Chemical Research Society of India CRSI, held at Bangalore between Feb. 1 - 3, 2008 at IISc Bangalore, Dr. G. Anantharaman.
222. Asian Conference on Coordination Chemistry in Okazaki, Japan on 29th July to 2nd August. Invited talk on the topic titled Organometallic Chemistry of the $[\text{Ru}_2(\text{CO})_4]^{2+}$ Core, Dr. J.K. Bera.
223. International Conference on Advanced Materials in Bangalore, India on October 8-13. Invited talk on the topic titled 1,8-Naphthyridine Based Hybrid Materials: Structural Diversity and Intramolecular Electron Transfer , Dr. J.K. Bera.
224. Chemical Research Society of India - Mid Year Meeting in Gwahati, India on May 21, 2007. Invited talk on the topic titled Intra-ligand electronic coupling mediated through dimetal bridge: Dependence on metal ions and ancillary ligands , Dr. J.K. Bera.
225. 30th International Conference on Solution Chemistry, held at Murdoch University, Perth, Australia, July 16-20 (Invited lecture), Dr. A. Chandra.
226. 16th Canadian Symposium on Theoretical Chemistry, held at Memorial University, St. Johns, Newfoundland and Labrador, Canada, August 4-9, 2007, (Invited Lecture), Dr. A. Chandra.
227. National Conference on Windows of Chemistry, held at Bankura Sammilani College, February 8-10, 2008 (Invited Lecture) , Dr. A. Chandra.
228. Fifth Discussion Meeting on Spectroscopy and Dynamics of Molecules and Clusters, held at Mahabalipuram, February 22-24, 2008 (Session Chair) , Dr. A. Chandra.
229. India-UK Frontiers of Science Symposium, held at Hyderabad, March 4-7, 2008 (Invited Participant) , Dr. A. Chandra.
230. IUMRS-ICAM Conference held in Bangalore, 8-13 2007, V. Chandrasekhar.

231. National Symposium and conference on solid state chemistry and allied areas, ISCAS-2007, Nagpur, 28-30 Nov, (2007), Chaired the session and invited as Guest of Honour, Dr. N.S. Gajbhiye.
232. National Conference on Advanced Materials, March 6-8, 2008, U.P.- College Varanasi, Key note Speaker, Dr. N.S. Gajbhiye.
233. 26th Annual Conf. Indian Council of Chemists, Department of Chemistry, H S Gaur University, Sagar, March 25-27 2008, Key note speaker, Dr. N.S. Gajbhiye.
234. Al-Azhahar International Science Conference, March 24-26, 2008, Cairo, Egypt, Invited talk, Dr. N.S. Gajbhiye.
235. The Power of Coherence, D. Goswami, Symposium on Quantum Computing, Dayalbag Educational Institute, Agra, December 22, 2007.
236. Femtosecond Chirped Pulse Adiabatic Control of Condensed Phase Multiphoton Processes, Debabrata Goswami, Brijuni Conference on Laser Pulse Shaping and Coherent Control of Molecules, Brijuni Islands, Croatia, Aug. 26 - 31, 2007, Dr. D. Goswami.
237. Laser phase Induced Enhancement of Two-photon Absorption, Amit Nag and Debabrata Goswami, 5th International Workshop on Optimal Control of Quantum Dynamics: Theory and Experiments sponsored by Max-Planck-Gesellschaft (Max-Planck Society), Deutsche Forschungsgemeinschaft (German Research Foundation) and Munich Center for Advanced Photonics held at the Ringberg Castle, Tegernsee, Germany, Nov.28 to Dec.1 (2007) , Dr. D. Goswami.
238. Control of Two-photon Fluorescence by Slow Amplitude Modulation, A.K. De, D. Goswami, 5th International Workshop on Optimal Control of Quantum Dynamics: Theory and Experiments sponsored by Max-Planck-Gesellschaft (Max-Planck Society), Deutsche Forschungsgemeinschaft (German Research Foundation) and Munich Center for Advanced Photonics held at the Ringberg Castle, Tegernsee, Germany, Nov.28 to Dec.1 (2007) , Dr. D. Goswami.
239. Laser induced fluorescence spectroscopy of aromatic molecules with large amplitude vibrations, Partha Biswas, Debabrata Goswami, and Tapas Chakraborty, Poster: PC-82, DAE-BRNS Trombay Symposium on Radiation & Photochemistry, Yashada, Pune, January 7-11, 2008, Dr. D. Goswami.
240. Dynamics of Coherence in Femtosecond Induced Nonlinear Processes, Debabrata Goswami, Fifth Asian Conference on Ultrafast Phenomena, National University of Singapore, Jan. 9-12 (2008) , Dr. D. Goswami.
241. Simultaneous TDM,WDM and CDMA with a Femtosecond Laser: Decoding by Non-degenerate Optical Gating, I. Bhattacharyya, S.K.

- Maurya and D. Goswami, 5th Asian Conference on Ultrafast Phenomenon held at NUS, Singapore during Jan.06 to Jan. 09 (2008) , Dr. D. Goswami.
242. Two-photon absorption Cross-section from a Simultaneous absorption and Emission Measurement, 5th Asian Conference on Ultrafast Phenomenon held at NUS, Singapore, Jan. 06 to Jan. 09 (2008) , Dr. D. Goswami.
 243. Towards Spectroscopy of Trapped Macromolecules in Solution, A.K. De and D. Goswami, Spectroscopy and Dynamics of Molecules and Clusters (SDMC) Discussion Meeting 08, Mahabalipuram, Tamil Nadu, February 22-24 (2008) , Dr. D. Goswami.
 244. Shedding some light on quantum computation, D. Goswami, India-UK Frontiers of Science Symposium, Session: Quantum Computing, March 4-7 (2008) , Dr. D. Goswami.
 245. Delivered an invited talk in the international symposium ISCB-2008 at BITS Pilani, Rajasthan, India (22-25 Feb, 2008), Dr. M. K. Ghorai.
 246. 39th Middle Atlantic Regional Meeting of the American Chemical Society, Collegeville, PA, USA, May 16-18, 2007, Dr. B.D. Gupta.
 247. Frontiers in chemistry, Indo-German symposium, IIT Kanpur, Oct 26-28, 2007, Dr. B.D. Gupta.
 248. MTIC, Chemistry Department, IIT Madras, Dec 2007, Dr. B.D. Gupta.
 249. Bidegradation of N, N -Dimethyl formamide by paracoccus species strain DMF in the international Conference on Catalysis and fine chemicals at NAnyang TEchnological University Singapore December 2007, Shiv Swaroop and R. Gurunath.
 250. Guest of Honor, and Inaugural address on Nano Science and Nano Technology at Manomaniam Sundranar University, held at Sarah Tucker College, Tirunelveli, October 11 2007, Dr. S. Sundar Manoharan.
 251. Guest of Honor, and Inaugural address on Nano Science and Nano Technology at the National seminar on Current Trends in Chemistry, at Bishop Heber College, Tiruchirapalli, held on October 12, 2007, Dr. S. Sundar Manoharan.
 252. Invited talk at the Indo-NUS symposium on current trends in Physics, held at IIT Chennai, Topic: XPS studies on Ruthenates and Manganites. A novel redox chemistry, Feb 27-March 01, 2008, Dr. S. Sundar Manoharan.
 253. Materials chemistry conference organized at Munnar by Professor CNR Rao and JNCASR, Bangalore, Sept 29-October 1st 2007, Topic: While light emission in organic molecules, Dr. S. Sundar Manoharan.

254. Invited talk in International Conference on Materials for Advanced Technologies, (ICMAT) held at Singapore by IUMRS, Topic: Sonochemical synthesis of Nanomaterials., June 29th to July 02, 2007, Dr. S. Sundar Manoharan.
255. Advances in Synthetic and Medicinal Chemistry (ASMC 2007), St. Petersburg, Russia, 28th August to 1st September 2007, Dr. J.N. Moorthy.
256. National Symposium on Modern Trends in Inorganic Chemistry (MTIC-XII), Indian Institute of Technology Madras, Madras (December 6-8, 2007), Dr. R.N. Mukherjee.
257. Department of Science & Technology (DST) - Sponsored Winter School in Bioinorganic Chemistry, Department of Chemistry, Indian Institute of Technology Bombay, Mumbai, November 26, 2007, Dr. R.N. Mukherjee.
258. National Convention of Chemistry Teachers and National Conference on Chemistry Vision 2020, Department of Chemistry, Hislop College, Nagpur, October 28, 2007, Dr. R.N. Mukherjee
259. International Conference on Biological Inorganic Chemistry (ICBIC 13), Vienna, Austria, July 15-20, 2007, Dr. R.N. Mukherjee
260. Triarylbismuthanes as atom-efficient organometallic reagents for carbon-carbon bond formations, International Symposium on Advances in Synthetic and Medicinal Chemistry, ASMC 07, Aug 27-31, St. Petersburg, Russia, Dr. M.L.N. Rao.
261. Iron(III) catalyzed Homo- and Cross- aldol reaction for the synthesis of α , β -unsaturated enals, International symposium on catalysis and fine chemicals (C & FC), Dec 16-21, 2007, Nanyang Technological University, Singapore, Dr. M.L.N. Rao.
262. National Symposium on Modern Trends in Inorganic Chemistry (MTIC-XI) held on IIT Madras from Dec. 6-8, 2007, Dr. S.P. Rath
263. ACS meeting, Boston, August 18-24, 2007, Dr. V.K. Singh.
264. Organic Chemistry Conference, May 2007, Goa as Organizer, Dr. V.K. Singh.
265. National conference on quantum chemistry, soft computing and optimization, Kolkata, April 2008, Dr. K. Srihari.
266. Spectroscopy and Dynamics of Molecules and Clusters, V. Mamallapuram, India, February 2008, Dr. K. Srihari.
267. Second CRSI-RSC joint symposium, Bangalore, January 2008, Dr. K. Srihari.
268. Trombay symposium on radiation and photochemistry, Pune, January 2008, Dr. K. Srihari.

269. Delivered a talk on Frontier Areas of Research in Organic Chemistry in a workshop held by DST for Sensitisation of Women Scientists Scheme at Gorakhpur on 21st June, 2007, Dr. Y.D. Vankar.
270. A lecture entitled Synthesis of some useful glycosidase inhibitors and related bioactive molecules was delivered in a National Symposium on Organic Chemistry and Drug Research held at Central Drugs Research Institute, Lucknow on June 28, 2007, Dr. Y.D. Vankar.
271. A lecture entitled Fused and bicyclic heterocycles as glycosidase inhibitors delivered in Indo-French symposium on Organic Synthesis held at Dinard, France, September 12, 2007, Dr. Y.D. Vankar.
272. A lecture entitled Synthetic Approaches towards Glycosidase Inhibitors delivered in Indo-Russian symposium as part of Mendeleev Conference in Moscow on September 24, 2007, Dr. Y.D. Vankar.
273. A lecture entitled Synthesis of Glycosidase Inhibitors: Molecules of Potential, Therapeutic Importance was delivered in an Indo-German conference held at IIT Kanpur on October 28, 2007, Dr. Y.D. Vankar.
274. Singapore International Chemistry Conference-5, Singapore, December 2007; presented an invited paper, Dr. Sandeep Verma.
275. National Organic Symposium Trust-XII, Goa, India 2007, Dr. V.K. Yadav.
276. 13th SIAM Conference on Parallel Processing for Scientific Computing PP08, Atlanta, Georgia, March 12-14, 2008. Presented the poster A Parallel Algorithm for Elliptic Eigenvalue Problems on Polygonal Domains Using Spectral Method, Lokendra Kumar Balyan.
277. Annual Conference of Indian Mathematical Society, University of Pune, Pune, December 27-30, 2008. Chaired a session and organised a symposium on Biomathematics, Peeyush Chandra.
278. National Workshop on Mathematical Modelling in Biology, S. P. Womens University, Tirupati, February 25, 2008 - invited talk on Mathematical Modeling in Epidemiology, Peeyush Chandra.
279. International Conference on Nonlinear and Variational Analysis, University of Limoges, France, June 20-22, 2007, J. Dutta.
280. Annual meeting of the Indian Academy of Sciences, November 2007, Thiruvananthapuram, India, A. K. Ghosh.
281. Great Plains Operator Theory Symposium, University of Nebraska, Lincoln, Nebraska, USA, May 15-20, 2007. Delivered talks Approximation Numbers of Matrix Transformations and Inclusion Maps and Representation Theorems for operators of type $I_{p,q}^{v,w,\psi}$ M. Gupta and L. R. Acharya.
282. Indian Math. Soc. Annual Meeting, University of Pune, Pune, December 27-30, 2007. Chaired a session, M. Gupta.

283. Symposium in Mathematics, Punjab University, Chandigarh, Feb 29-March 1, 2008. Delivered the talk On Certain Type of Modular Sequence Spaces, M. Gupta.
284. 5th International Conference of Dynamic Systems and Applications, Atlanta, Georgia; May30- June 2,2007. invited lecture and chaired a session, M. K. Kadalbajoo.
285. CMMSE-07 conference, Chicago, Illinois, USA, June 19-23, 2007. invited talk in the special session on Numerical Solution of ODEs, M. K. Kadalbajoo.
286. 73rd Annual Conference of the IMS, Pune University, Pune, December 26-29, 2007. Contributed paper M. K. Kadalbajoo.
287. 5th International conference on Dynamic Systems and Applications, Atlanta, Georgia, USA, May30-June2, 2007. Chaired a technical session and delivered the invited talk on Stability of Bivariate Fractal Interpolation Surfaces and Quantification of Tsunami Intensity, G. P. Kapoor.
288. IIT 2007-Global Conference, Santa Clara, California, USA, July 6-8, 2007, G. P. Kapoor.
289. Workshop On Topological Dynamics, Differential Equations and Applications, University of Hyderabad, March 14-15, 2008. Delivered two talks Fractal Interpolation: Theory and Applications, G. P. Kapoor.
290. Hyderabad Symposium of Probability and Statistics, University of Hyderabad, Hyderabad December 17-19, 2007. Invited speaker and presented the talk Texture Modeling, Debasis Kundu.
291. Platinum Jubilee Conference of the Indian Statistical Institute, I.S.I. Kolkata, January 01-04, 2008, Invited speaker and presented the talk Bayesian Optimal Sampling Plan, Debasis Kundu.
292. National Conference on Emerging Trends in Statistical Methods and Optimization Techniques, held at University of Jammu, Jammu, Feb 22 - 23, 2008 Invited speaker and presented the talk On Progressive Censoring, Debasis Kundu.
293. 73rd meeting of the IMS, Pune University, Pune. Delivered the invited talk Graph Structure via its Laplacian Matrix, A. K. Lal.
294. Trends of Harmonic Analysis, Strobl, Austria, June 18-22, 2007. Delivered the talk On Fugledes Conjecture for three intervals, S. Madan.
295. 10th Discussion Meeting in Harmonic Analysis, IISc Bangalore, December 28, 2007- January 1, 2008 S. Madan.
296. Commutative Algebra and Algebraic Geometry 2007, ISI, Bangalore, July 16-20. Delivered the talk Multiplication Modules, A. K. Maloo.

297. Trends of Harmonic Analysis, Strobl, Austria, June 18-22, 2007, P. Mohanty.
298. 10th Discussion Meeting in Harmonic Analysis, IISc Bangalore, December 28, 2007- January 1, 2008, P. Mohanty.
299. Workshop in Commutative Algebra and Algebraic Geometry, IIT Madras, June 10-23, 2007, Anand Parkash.
300. Banach Algebra 2007, Quebec City, Quebec, Canada, July 3-12, 2007. Chaired a session, S. R. Patel.
301. 73rd Annual Conference of the Indian Mathematical Society, University of Pune, Pune, December 27-30, 2007. – paper presentations , S. Pradhan & Jaydev
302. Fifth International Conference on Dynamic Systems and Applications, Atlanta, USA, May 30 - June 2, 2008. invited talk - An Overview of the Oscillation of Implicit Differential Equations. Also chaired a session, V. Raghavendra.
303. 10th Discussion meeting in Harmonic Analysis, Department of Mathematics, Indian Institute of Sciences, Bangalore, December 28, 2007- January 1, 2008, S. K. Ray.
304. 10th Discussion meeting in Harmonic Analysis, Department of Mathematics, Indian Institute of Sciences, Bangalore, December 28, 2007- January 1, 2008, R. Rawat.
305. Workshop on Geometry and Topology, Department of Mathematics, Pune University, Pune, January 2-9, 2008. Gave the course of lectures Introduction to Riemannian Geometry, G. Santhanam.
306. International Conference on Modelling and Computation held at ISI Delhi from 9th to 10th January 2008. Presented the paper A Benders Partitioning Based Heuristic for Solving the Optimal Communications Spanning Tree Problem, P. Sharma.
307. Geometric Modeling and Imaging, Zurich, July 2007. Presented the paper Some Non- Stationary subdivision Schemes, P. Shunmugaraj.
308. 62nd Annual Meeting of the STLE, Philadelphia, PA, USA, May 6-10, 2007. Presented the paper - Thermal and roughness effects in a slider bearing with special reference to load generation in parallel sliders, P. Sinha.
309. The 2007 International Conference on Bioinformatics and Computational Biology (BIOCOMP 07), LAS VEGAS, NV, USA, June 24-28, 2007. Presented the paper - Chemical defense mechanism of two competing species via toxicant emission, P. Sinha.

310. A conference on Harmonic Analysis and Operator Theory, IISC, Bangalore, December 28, 2007-January 1, 2008. Chaired a session, U. B. Tewari.

Physics

311. Attended International Conference on Magnetic Materials held at S.I.N.P, Kolkata during December 11-16, 2007- oral presentation, Z. Hossain.
312. Conference: Non-perturbative gravity and gauge theories; S.N. Bose National centre for Basic Sciences, Kolkata; Dates: January 7-12, 2008; Invited talk by Dr S.D. Joglekar.
313. Conference: Non-perturbative gravity and gauge theories; S.N. Bose National centre for Basic Sciences, Kolkata; Dates: January 8, 2008; Chairing a session by Dr S.D. Joglekar
314. SERC preparatory school in High Energy Physics; BHU, Varanasi 26/11/2008; Chief Guest Dr. S..D. Joglekar
315. SERC preparatory school in High Energy Physics; BHU, Varanasi, 26/11/2008-08/12/2008; (Invited) 12 (1.5 hour) lectures on Quantum Field Theory by Dr. S. .D. Joglekar
316. Invited talk in East Asia symposium on Superconducting Electronics, IIT Delhi 14th December, 2007, Dr S. Banerjee.
317. Invited talk and poster session in Department of Atomic Energy, Solid State Physics Symposium, 27th to 31st Dec. Mysore, 2007. and also was awarded the Young Achievers Award at this conference) , Dr S. Banerjee.
318. Invited oral lecture in Conference: National Symposium on Ion Beam Technology and Applications (SIBTA 2007); BARC, Mumbai; Dates: September 19 - 21 (2007), Dr S. Bhattacharjee.
319. Invited oral lecture in Conference: 22nd National Symposium on Plasma Science and Technology (PLASMA 2007), Institute for Plasma Research (IPR) and Plasma Science Society of India (PSSI); IPR, Ahmedabad; Dates: December 6-10 (2007), Dr S. Bhattacharjee.
320. Presented poster in Conference: XXVIII International Conference on the Phenomena of Ionized Gases (ICPIG 2007); Prague, Czech Republic; Dates: July 15 - 20 (2007), Dr S. Bhattacharjee.
321. Invited talk in 18th International Conference on ION Beam Analysis; University of Hyderabad, Hyderabad, September 23-28 2007, Dr V.N. Kulkarni.

322. Invited talk in 15th International conference on Surface Modification of Materials by Ion Beams; Mumbai , September 30-Oct 5 2007, Dr V.N. Kulkarni.
323. Invited talk in International Conference cum workshop on Nanoscience and Nanotechnology; AIT, Gurgaon December 17-21, 2007, Dr V.N. Kulkarni.
324. Contributed a paper in European Turbulence Conference ETC-11, held at Porto in May 2007, Dr. M.K. Verma.
325. Dr. M.K. Verma contributed a paper Statphys 23, held at Genova in July 2007, Dr. M.K. Verma.
326. Invited talk in Physics of Fluctuations Far From Equilibrium, held at MPI-PKS, Dresden 2007 July 2007, Dr. M.K. Verma.
327. Attended MHD Summer school; Brussels; July 2007, Dr. M.K. Verma.
328. Oral presentation in 18th International Conference on Ion Beam Analysis, Hyderabad, Sept 23rd - 28th 2007, Dr. S. Dhamodaran.
329. Invited talk on Title: Anisotropic & transverse quenching of a a transverse XY chain Conf.: Colloquium at Saha Institute of Nuclear Physics, Kolkata (Jul 2007), Dr. Amit Dutta.
330. Invited talk on Title: Adiabatic Dynamics of Quantum Spin Chains; Conf.: One Day Meeting On The Frontiers Of Theoretical Sciences, Indian Association of the cultivation of Sciences, Kolkata, (August 17, 2007, Dr. Amit Dutta.
331. Invited talk on Title: Effect of discontinuity in threshold distribution on the avalanche size distribution of a random fiber bundle model, Dr. Amit Dutta.
332. Conf.: Statistical Physics Approaches to Multi-Disciplinary Problems, IIT Guwahati, Jan 7 - 13, 2008 , Dr. Amit Dutta.
333. Invited for discussion for collaborative efforts in an Indo-US Agricultural Knowledge Initiative, Joint Workshop on Harnessing the Benefits of Biotechnology at the National Agricultural Science Center Complex, New Delhi on March 27-29, 2008, Dr. Asima Pradhan.
334. Invited talk The Exciting Frontiers of Physics: A tour of some random spots, National Workshop on Innovative Physics Experiments, IIT Kanpur, June 11, 2007, Dr. Y.N. Mohapatra.
335. Transport in Organic Semiconductors: A Primer on Practice and Problems, during One day Tutorial in Summer School on Organic Electronics, SCDT, IIT Kanpur on July 12, 2007 in Short Course on Organic Electronics, SCDT, IIT Kanpur June 25-July 20, 2007, Dr. Y.N. Mohapatra.

336. Lecture on Transport in Organic Semiconductors: A Primer on Practice and Problems, on July 11, 2007 in Short Course on Organic Electronics, SCDT, IIT Kanpur June25-July 20, 2007 , Dr. Y.N. Mohapatra.
337. Conducted a Half Day Tutorial on Organic Semiconductors at TIFR, Mumbai, organized by International Workshop on Physics of Semiconductor Devices, 2007. IWPSD 2007, Dr. Y.N. Mohapatra.
338. Delivered a Lecture on, Liquid Crystal Displays: An Introduction, in Short course on Audio and Video Processing, Coding and Displays held at IIT Kanpur, Nov 26-Dec.06, 2007 , Dr. Y.N. Mohapatra.
339. Delivered an Invited Lecture on ,Evolution of Photo- and electro-luminescence Spectra in Blends of red emitting AVPV Oligomer and PVK, K. Biswas, Awnish Tripathi, A. Ajayaghosh and Y. N. Mohapatra, Invited Oral Presentation in 10th International Conference on Advanced Materials, 9-13 October, IURS-ICAM, Bangalore, 2007
340. Delivered an Invited Lecture on Embedded Nanoscale Heterostructures for Photoelectronic Applications Polymers for Optoelectronic Applications, delivered at Jamia-Millia Islamia, National Nanotechnology Seminar, January 30, 2008 , Dr. Y.N. Mohapatra.
341. Delivered an Delivered an Invited Lecture on Nanotechnology : A tour of some recent developments at L.N.M. IIT, Jaipur, on December 31, 2007 , Dr. Y.N. Mohapatra.
342. Delivered a Meal Lecture on Organic Semiconductors as Electronic Materials: Impact of Defects and Disorder induced DOS, MRSI Medal Lecture , Annual General Meeting of Indian Materials Society Trivandrum, February 18 2008, Dr. Y.N. Mohapatra.
343. Delivered an Engineers Day Theme Lecture on Convergence of Technologies for Rapid Development, Professor Y. N. Mohapatra delivered the talk on this topic during the celebrations organized by the Kanpur Chapter of the Institution of Engineers at IIT Kanpur on September 15, 2007, Dr. Y.N. Mohapatra.
344. Delivered an ICPR Periodical Lecture in Practical and Theoretical Rationality: This lecture, entitled Scientific Rationality, was delivered by Professor Y N Mohapatra, Department of Physics, Indian Institute of Technology, Kanpur, on Friday, 14 March, 2008, Dr. Y.N. Mohapatra.

OTHER ACTIVITIES

(A) TECHNOLOGY DEVELOPED

Aerospace

1. Design of a novel micro-combustor, D. P. Mishra

Biological Science and Bio-engineering

2. Development of cell separation technology using supermacroporous cryogels (process and product ready for transfer), Dr. Ashok Kumar
3. Development of cigarette filter accessory using supermacroporous cryogel (process and product ready for transfer) , Dr. Ashok Kumar
4. Development of bilayer wound dressing scaffold for skin tissue engineering using PVP-Iodine complex (upper layer) and gelatine (bottom layer) from supermacroporous cryogel (proof of the principle established, further development needed) , Dr. Ashok Kumar
5. Development of disposable cell culture bioreactor using supermacroporous cryogels for therapeutic protein production (process ready for transfer) , Dr. Ashok Kumar
6. Development of cryogel filter for leukocyte depletion from blood for safe blood transfusion, Dr. Ashok Kumar
7. Jointly with Hindustan Latex Ltd (proof of principle established, further development needed) , Dr. Ashok Kumar
8. Name of the technology: RNAi-based Method to engineer plants for nematode resistance, Dr. K. Subramaniam
9. Transfer status: Ready for transfer, already one company, Nemgenix, Perth, Australia, is evaluating this technology, Dr. K. Subramaniam
10. Low Cost Visual 3-D modeling with Texture Mapping for Small Objects ready for transfer, K. S. Venkatesh.
11. E-Signboard, a Device-free HCI for Interactive Public Annunciation System further refinement needed, K. S. Venkatesh
12. Language Independent Book Copying Machine with Search Features further refinement needed, K. S. Venkatesh
13. A working prototype developed and tested using UHF RF IDs for automatic Vehicle Identification. Tags using ISO 18000B standard was tested on Coaches for speeds up to 80 kmph. Tags and system employing EPC standard was developed and tested and for speeds up to 50 kmph on trains

and speeds up to 150 kmph on automobiles. Further development required before technology transfer, Joseph John.

14. IGBT Gate Drive Card with integrated short-circuit protection, power isolation, extremely small pulse-width capability and special measures to prevent nuisance tripping; ready for transfer, Dr. P. Sensarma.
15. UHF RFID tag antenna, prototypes are undergoing testing at the partnering organization, Dr.A.R.Harish.
16. Continuous Wireless Monitoring of the Cervical Dilation of a Pregnant Woman, Invention Disclosure Number 07TUL059, filed June 27, 2007, Utility patent application filed under Docket Number 5280.691, University of Oklahoma P. K. Verma, A. K. Ghosh, J.J. Sluss, Jr., S. Cheng, M. Martens, R.C. Huck, S. Chen, and A. Kaul.
17. A Free Space Optics Based Identification and Interrogation System, Invention Disclosure Number 07TUL043, filed May 11, 2007, University of Oklahoma, A.K. Ghosh, P.K. Verma, S. Cheng, A. Venugopalan, R.C. Huck.
18. Functionally graded wide-band polymeric composites for microwave absorbers and method of manufacturing same, Application No.: 737/DEL/2007, 28th March 2007, India (2007), Kamal K. Kar, Ahankari Sandeep Suresh Rao and Animesh Biswas
19. Foil Air Bearing for an air-cycle machine used in cooling the cabin of an aircraft under a Project from HAL. The bearing designed for 70,000 rpm has been fabricated and tested by HAL, S. Sarkar.
20. SMA based Angle Encoder, Work carried out as a part of M Project, Technology is transferred to GM, seeking for industrial partner for mass-production, B. Bhattacharya.
21. Conduit crawling vehicle for health monitoring, Work carried out as a part of M. Tech Thesis and M. Des research, Technology ready to be transferred searching for industrial partner, B. Bhattacharya.
22. SMA based morphing of Antenna and other compliant shapes, Work carried out as a part of ISRO project, Technology is being developed, B. Bhattacharya.
23. A microwave generated subcut-off multicusp plasma source for production of multielemental focused ion beams has been developed. Ready for transfer, Dr. Sudeep Bhattacharjee.
24. A special holder for performing current-voltage (I-V) characteristics of vacuum nano-gaps has been developed. Its application to measure space-charge-limited flows in a nano-gap has been accepted for publication in Applied Physics Letters (April 2008), Dr. Sudeep Bhattacharjee
25. The invention is related to the preparation and scale up process of poly glycolic acid, poly lactic acid and poly (dl-lactide-co-glycolide) (PLG)

thermoplastic polymers that are used as matrices of molded slow-releasing drugs. These polymers are of great interest because of their excellent biocompatibility, biodegradability and mechanical strength. The bio-absorbable and hydrolysable properties have standardized these polymers as potential candidates to be used as a matrix in the form of various molded drugs. The main objective is to identify an in-expensive and convenient process to prepare the PLG polymer indigenously and to further a scale up process to meet the requirements for nano-encapsulation of drugs and proteins for sustained drug release. A project was funded to realize this objective by the Department of Science and Technology with collaboration with an Industry partner, LIFE CARE INNOVATIONS PVT LTD. Gurgaon, Dr. S. Sundar Manoharan, A patent is being filed on this invention.

(B) SOFTWARE DEVELOPED

Biological Science and Bio-engineering

1. KineRoot - software for studying kinematics of plant root growth, further development needed, Dr. Anupal Pal
2. JAVA code for Gene Expression Profiling and Gene Network Analysis, Ready for Transfer (Developed as part of DST funded project), Sanjeev Garg.
3. SCORM module developed in Brihaspati, Brihaspati _sync - live lecture delivery tools completed, Dr. Y. N. Singh.
4. Fingerprint Separation s/w and GUI Interface.StatusSubmitted, Dr. P. K. Kalra.
5. Audio separation s/w and GUI Interface.Status- Submitted, Dr. P. K. Kalra.
6. Image compression s/w and GUI InterfaceStatus Submitted, Dr. P. K. Kalra.
7. Day Ahead Auction Software for power exchange.StatusSubmitted, , Dr. P. K. Kalra.
8. Software for Determination of V-I characteristics of a Shunt Inductor, transferred and successfully deployed in an industry, Dr. P. Sensarma.

Mechanical

9. Developed a LES code for complex geometry using Immersed Boundary method, S. Sarkar.
10. Software code titled Two-phase pressure drop and heat transfer in mini-channels developed for Indian Space Research Organization under the sponsored project ME/ISRO/20050083, S. Khandekar.

Physics

11. A 3D Monte Carlo simulation code for studying electron dynamics in a gas in the presence of electromagnetic waves has been developed. The code includes electron neutral collisions, wave amplitudes and phases. Actual experimental data on collision cross section of the gas with electron energy is taken into account. Further development of the code is in progress, Dr. Sudeep Bhattacharjee.
12. Developed SPECTRAL Method for TURBULENCE simulation, Dr. M.K. Verma.

(C) INDUSTRIES VISITED

1. Visiting Professor, Dept. Biotechnology, Lund University, Sweden and Industry visit: Protista Biotechnology AB, Lund, Sweden, April 07- July, 07, Dr. Ashok Kumar.
2. RIKEN Brain Science Institute, Wako, Japan. December 16-23, 2007. As part of a collaborative research project, Dr. S. Ganesh.
3. University of Melbourne, Australia: from 16th to 23rd February, 2008. Visit was part of collaborative project from DBT (India) & DSIT (Australia) on Milk Nutraceuticals with regard to methodologies to be adopted and executed, P.K. Bhattacharya.
4. Gas Authority of India Ltd., Pata, Auriaya, P. K. Bhattacharya & D. Kunzru.
5. Transpek-Silox Pvt. Ltd., Vadodara, Gujrat, P. K. Bhattacharya.
6. Kaygee Loparex India Pvt. Ltd., Mumbai. Plant visit and discussion in order to explore possible research collaboration, 10-12th December, 2007, A. Ghatak.
7. Unilever Research Center, Bangalore, Invited to present a talk and discussion about possible research collaboration. 7th-9th February, 2008, A. Ghatak.
8. Research Fellow, School of Chemical and Biomedical Engineering, Nanyang Technological University, Singapore, June 2007, Jayant K. Singh.
9. Bokaro Steel Plant for development of a Ladle Identification and Tracking System, K. S. Venkatesh.
10. Visiting Assistant Professor, Department of Electrical Engineering, National Yunlin University of Science & Technology, Taiwan, July-August 2007, Adrish Banerjee.

11. Visit to BSNL Headquarters, New Delhi for research collaboration with IIT Kanpur. Visited BSNL in August and November 2007, Joseph John.
12. Several visits to RDSO Lucknow in connection with field trials and interactions towards the research project on Trackside Bogie Monitoring System, Joseph John.
13. Visiting Assistant Professor, University of Kansas, Lawrence, USA, taught a course on Advanced Antennas, and conducted research on antennas for airborne radar applications, Jan 2007 – May 2008, Dr. A. R. Harish.
14. General Motors, Bangalore, India, Discussion on project proposal titled Prognosis and Diagnosis in Automobile industry, Dr. P. K. Kalra.
15. TVS Motor, Hosur, Bangalore, Data Collection for project titled Condition Monitoring of Engine, Dr. P. K. Kalra.
16. HAL and Hyundai Motors, Kanpur, India, Technical Discussion on Audio based Engine Condition Monitoring, Dr. P. K. Kalra.
17. Visited Centre for Advanced Power Systems (CAPS) at University of Talhasse, Florida, USA on 29th June 2008, Dr. S. C. Srivastava.
18. Visited EMCO Limited, Mumbai to attend their International Advisory Committee Meeting during 23-24 January 2008, Dr. S. C. Srivastava.
19. Visiting Faculty at University of Windsor, Canada, May-June 2007, Dr. Nandini Gupta.
20. Visit to INSA Lyon, France, July 2007, Dr. Nandini Gupta.
21. Visit to CPRI, Bangalore, discussion on collaborative research, Oct 2007, Dr. Nandini Gupta.
22. Visit to IHI, Japan for talks on research collaboration, February 2008, Dr. Nandini Gupta.
23. Visit to EMCO Ltd, Mumbai, for talks on research collaboration, March 2008, Dr. Nandini Gupta.
24. Visit to BARC, Mumbai, research collaboration, March 2008, Dr. Nandini Gupta.
25. Attended IEEE R10 PES Chapter Chairs meeting in Beijing, China, Oct 2007, Dr. Nandini Gupta.
26. C-DAC, Trivandrum in June 2007 as a member of PRC for a Project review of NaMPET, Dr. S. P. Das.
27. SAF Yeast Sandila in Nov. 2007 and in Feb. 2008 for a Consultancy project, Dr. S. P. Das.
28. INT, France from 21-24 Jan. 2008 to take part in International Crossroads and for Research collaboration, Dr. S. P. Das.
29. IHI, Japan, to have a technical collaboration between IHI Japan and IIT Kanpur, during 20-22 Feb. 2008, Dr. S. P. Das.
30. BHEL, Bhopal, Jan 2008, Dr. P. Sensarma.

31. SAF Yeast (India) Pvt. Ltd, Sandilla, Dist Hardoi, U.P, Feb 2008, Dr. P. Sensarma.
32. ISAC, ISRO Satellite Centre, Bangalore, March 2008, Dr. P. Sensarma.
33. Visited Mazandaran University of Science and Technology, Iran, June-July, 2007, N. K. Sharma.
34. Visiting Scholar in the department of Statistik und Ökonometrie at Justus-Liebig-Universität Gießen, Gießen, GERMANY, 1st - 15th July, 2007, R.N. Sengupta.
35. Visiting Faculty at S.P.Jain Centre of Management, Dubai, 21st - 26th July, 2007, R.N. Sengupta.
36. School of Management, Xian Jiao Tong University, China, May 2007, Research Collaboration, Jayanta Chatterjee.
37. Helsinki University of Technology & Helsinki School of Economics, Finland, September, 2007, Teaching & Research Collaboration, Jayanta Chatterjee.
38. Army Management Studies Board & Military College of Engineering, Secunderabad, November, 2007, Research Project, Jayanta Chatterjee.
39. NIT Kurukshetra, Kurukshetra University, December, 2007, Academic Expert Group, Jayanta Chatterjee.
40. International Crops Research Institute for Semi-Arid Tropics, ICRISAT, Hyderabad, January, 2008, Research Collaboration, Jayanta Chatterjee.
41. Attended the DST-SERC school on Texture and Microstructure held at IISc Bangalore between 24-28th March, 2008, Dr. K. Mondal.
42. Visited Vizag steel, Vishakhapatnam; JSPL, Raigarh; JSW, Torangallu; Hospet Steel Hospet; Jindal stainless, Hissar; Kalyani Carpenter special steels limited, Pune, Dr. Mazumdar.
43. Visited HAL. GTRE, NAL, S. Sarkar.
44. Indian Institute of Management, Calcutta, to develop course curriculum for the VLFM program, December, 2007, 2 weeks, B. Bhattacharya.
45. Satellite Application Centre Ahmedabad, to develop antenna morphing technology, November, 2007, B. Bhattacharya.
46. DLN coating facility, Salt Lake, Kolkata, Purpose: Invited Lecture and Capabilities of this facility, August 2007, S. Bhattacharya.
47. National Center for Biological Sciences, Purpose: Research Meeting with Drs. Saudamini, Panicker, December 07, S. Bhattacharya.
48. Spranktronics, Bangalore, Industry visit for product exploration, December 07, S. Bhattacharya.
49. Central Mechanical Engineering Research Institute, Research Council Meeting, December 07, S. Bhattacharya.
50. Indian Institute of Chemical Biology (Directors invitation), Invited Lecture, January 08, S. Bhattacharya.

51. Visited T.I.F.R., Mumbai during 28th Feb- 2nd March for collaborative research, Dr. Z. Hossain.
52. Visited National Centre for Education and Research and Training, New Delhi; Purpose: To develop a book Exemplar Problems in Physics, November 4-7, 2007 and March 2-5, 2008, Dr. S. D. Joglekar.
53. Visited France and Germany for research collaboration with international experimental groups; Neutron scattering group, ILL, Grenoble, France and Magnetism groups, Regensburg and Berlin, Germany, Dr. Avinash Singh.
54. Department of Chemistry and Center for Molecular and Biomolecular Imaging, Duke University, Durham, USA, Collaborative Research with Prof. W.S. Warren, Chair (Chemistry), June 2007, Dr. D. Goswami.
55. Invited Professor, Institut de Recherche en Informatique de Toulouse (IRIT), Universite Paul Sabatier, France, May 1-31, 2007, M. Banerjee.
56. Department of Mathematics, University of New South Wales, Sydney, Australia, 1st May 1-30, 2007, J. Dutta.
57. Department of Mathematics, University of South Australia, Adelaide, May 17-21, 2007, J. Dutta.
58. Department of Mathematics, University of Limoges, France, June 7- July 5, 2007, J. Dutta.
59. Department of Economic Theory, Universidad Autonoma de Barcelona, Spain, July 23-26, 2007, J. Dutta.
60. IIM Lucknow, July 13, 2007, P. Sharma.

(D) PATENTS

1. A Device for Extracting Power from to and fro Wind, Patent Number 212643, Date of Grant: 10 December 2007, Patent Office, New Delhi. (purpose: to extract power from the waves in an Oscillating Water Column Wave Energy Device; A wind turbine of novel design) , Dr. Kunal Ghosh
POSTER DISPLAY
Title: Storm Security Devuce for Savonius Wind Turbine and Saving of Fossil Fuel by using Wing Sails for Ship Propulsion, REACH Symposium, Khajuraho, March 2008.
Conference attended outside Kanpur
31st Indian Social Science Congress, SNDT Womens University, Mumbai, 26-31 Dec. 2007.
2. Symposium on Applied Aerodynamics & Design of Aerospace Vehicles (SAROD2007), Thiruvanthapuram, Nov. 22-023, 2007
Paper in Humanities area

- I . Amend Hindu Code to Annihilate Caste and Brahmanical Privilege, 31, Indian Social Science Congress, SNTD Womens University, Mumbai, 26-31,2007.
2. Estimation of Inertia Tensor through experiment (patent filed), Dr. C. Venkatesan.
3. Mattiasson, Bo; Galaev, Igor Yu; Kumar, Ashok; Dainiak, Maria. Process for adsorption-based separation of bioparticles from an aqueous suspension. PCT/SE 2006/000556.
4. Title: Pathogen resistant transgenic plants, associated nucleic acids and techniques involving the same, US Patent application, Serial number: 11/783,916, April 13, 2007, Granting Agency: US Patents and Trademarks Office, Dr. K. Subramaniam.
5. Generation of Submicron to Macroscopic Patterns and Objects by Successive Miniaturization Using Shrinkable Materials and Articles Formed Thereby, Filed for protection in India, Application File Number: DEL/0522/2007, Inventors: A. Ghatak, A. Sharma, R. Mukherjee, A. L. Das, V. Katiyar and M. Kulkarni.
6. Patent application no. 2706/DEL/2007 - WDM optical packet switch incorporating fiber Bragg grating and circulator.
7. Patent application no. 2707/DEL/2007 - All-optical reflector based WDM optical packet switch.
8. A novel 2/3-Dimensional Soft-lithography technique to formulate micro-channels and evaluation of various associated mechanical and biological phenomena, under the process for filing Indian Patent, R K Singh, S. Bhattacharya and B. Basu.
9. Magnetic Float Levitative Finishing, 833/DEL/2007, J. Ramkumar.
10. A novel viscoelastic media used in nano finishing of materials thro AFM process and method of manufacture thereof, 591/DEL/2007, J. Ramkumar.
11. Butt Joint using Reinforced adhesives, 591/DEL/2007, J. Ramkumar.
12. A novel 3-D soft lithography technique to formulate micro-channels in polymers, Shantanu Bhattacharya, Rajeev Kumar Singh, Bikramjeet Basu., Patent approved the IIT-Kanpur patent office, February, 2008.
13. Agarose nanoplatinum composites, Shantanu Bhattacharya, Shubhra Gangopadhyay., filed at the US patent and Trademark Office on July, 2007, patent pending.
14. IIT Kanpur filed: Optical enhancement of two-photon absorption process, Patent Application No. 704/DEL/2008, Dated: 19-03-2008, Inventors Name: Dr. D. Goswami, Chemistry, and students Sumit Ashtekar, M.Sc. & Amit Nag, Graduate Student, Chemistry Dept.

15. An Improved organic optoelectronic device - Ref. no. 3263/ RQ- DEL 2007, B. K. Rajbhongshi, G. Bhattacharjya, V. Jain, A. Tej. S.S.K. Iyer, and R. Gurunath

(E) AWARDS AND HONOURS

Aerospace

1. Fellow, Indian Academy of Sciences, since 2007, Dr. Sanjay Mittal.
2. Member, Steering Committee, Second Indo-US Frontiers of Engineering Symposium (FOE), 2008, Dr. Sanjay Mittal.
3. Member, Organizing Committee, REACH Symposium, IIT Kanpur, March 7-10, Hotel Timber Trail Heights, Dr. Sanjay Mittal.
4. Associate Editor , International Journal of Aerospace Engineering, Hindawi Publishing Corporation, since 2007, Dr. Sanjay Mittal.
5. Member, Board of Editors, Computer Modeling in Engineering & Sciences (CMES), Tech Science Press, since 2007, Dr. Sanjay Mittal.
6. Scopus Young Scientist in Engineering, Elsevier, 2007, Dr. Sanjay Mittal.

Biological Science and Bio-engineering

1. Editorial board member of the Open Journal of Biotechnology (Bentham Science Publishers), 2007, Dr. Ashok Kumar
2. Assistant editor, Nanoscale Research Letters, Springer New York, 2007, Dr. Ashok Kumar
3. Joy Gill Chair Professor for young faculty at the Department of Biological Sciences and Bioengineering, awarded by Joy and Manmohan Gill Endowment Fund, Dr. R. Sankararamakrishnan.
4. Rajat Puri (PhD student): Prof A.S.Mukerjee Memorial prize for best oral presentation by young scientist at the annual conference of the Indian Society of Cell Biology (Dec 14-16, 2007 - Banaras Hindu University, Varanasi), Dr. S. Ganesh.
5. Deepti Dubey (PhD student) own Dr. D.M. Kar prize for best oral presentation by young neuroscientist at the annual conference of International symposium on advances in Neurosciences and Silver Jubilee Conference of Indian Academy of Neurosciences (Nov 22-25, 2007 - Banaras Hindu University, Varanasi), Dr. S. Ganesh.

6. Rajat Puri (PhD student): International travel award for attending for excellent presentation in the Neuro2007 conference, jointly organized by the Japan Neuroscience society and the Japanese society for neurochemistry and the Japanese neural network society, and held in Yokohama, (Sep 10-12, 2007), Dr. S. Ganesh.
7. Sonali Sengupta (Postdoctoral Fellow): International travel award for attending for excellent presentation in the Neuro2007 conference, jointly organized by the Japan Neuroscience society and the Japanese society for neurochemistry and the Japanese neural network society, and held in Yokohama, (Sep 10-12, 2007), Dr. S. Ganesh.
8. Editorial board member of the journal Journal of Biomedical Nanotechnology published by American Scientific Publishers, USA. Since April 2007, Dr. D. S. Katti.
9. Better Phosphorus Acquisition through Optimal Root Architecture of Common Bean (*Phaseolus vulgaris* L.). Paramita Basu and Anupam Pal—awarded best poster in National Symposium on Legumes for Ecological Sustainability: Emerging Challenges and Opportunities organized by Indian Institute of Pulse Research and Indian Society of Pulses Research and Development, Kanpur, India, 2007, Dr. A. Pal.
10. IChE Golden Jubilee Young Achiever Award (2007), Yogesh M. Joshi.
11. IChE Golden Jubilee Young Achiever Award (2007), A. Ghatak.
12. IChE Golden Jubilee Young Achiever Award (2007), V. Shankar
13. IITK- Research Symposium Research Award, 2007, A. Ghatak.
14. Member of Advisory / Editorial Board (from 2008 -) for International Journal of Chemical Sciences ISSN 0972-768X, P. K. Bhattacharya.
15. Member, Editorial Board, International Journal of Chemical Engineering, D. Kunzru.
16. Chevron Corporation Chair Professor, Dept. of Chemical Engineering, I.I.T. Kanpur (since June 2007), D. Kunzru.
17. IPCL Award for Safety and Hazard Management in Petrochemical Industry, Indian Institute of Chemical Engineers Diamond Jubilee Conference, Kolkata, December, 2007, J.P. Gupta.
18. Member of Editorial Board, Chemical Engineering Science (2007-2010). (http://www.elsevier.com/wps/find/journaldescription.cws_home/215/description#description), A.Sharma.
19. Dow Professor M.M. Sharma Distinguished Visiting Professorship in Chemical Engineering Endowment, University Institute of Chemical Technology (UICET), Mumbai (2007), A.Sharma.
20. IITK- Research Symposium Research Award, 2007, Jayant K. Singh,

21. The Fast Track Project Grant for Young Scientists from Science and Engineering Research Council (SERC), Department of Science and Technology (DST), Govt. of India (2007), Ghosh, P.
22. Second best paper award in IASTA national Conference held in National Physical Laboratory, Delhi, India, November 14-16, 2007, Tripathi, S.N.
23. Member National Technical Advisory Committee of Centre for Development of Advanced Computing (CDAC), R. M. K. Sinha.
24. Member Working Group on Technology Development for Indian Languages (TDIL), MCIT, Govt. of India, R. M. K. Sinha.
25. Member PRSG on OCR and OHR Consortia, MCIT, Govt. of India, R. M. K. Sinha.
26. Member PRSG on English to IL MT Consortia, MCIT, Govt. of India, R. M. K. Sinha.
27. Welliver Faculty Fellowship , Boeing, USA, Dr. P. K. Kalra
28. Member of CII for Skill Development, Education and Power,
29. CII (Confederation of Indian Industries), Dr. P. K. Kalra.
30. Vice Chairperson, Technical Activities of IEEE India Council for the year 2008, Dr. S. C. Srivastava.
31. Member of the International Advisory Committee of EMCO Limited, Mumbai, India (2007-2010) , Dr. S. C. Srivastava.
32. Re-nominated as Member DST-SERC Project Advisory Committee Member on Electrical, Electronics and Computer Engineering for 3 years (2007-2009), Dr. S. C. Srivastava.
33. Prize Paper Award at the International Conference on Power Electronics, ICPE-07, at Daegu, S. Korea, Dr. P. Sensarma.
34. Prize Paper Award at the National Conference on Power Electronics, NPEC 2007, at Bangalore, India, Dr. P. Sensarma.
35. Best Paper Award at the National Conference on Power Electronics, NPEC 2007, at Bangalore, India, Dr. S. P. Das.
36. Listed in Whos Who in Science & Engineering (2007), Dr. S. N. Singh.
37. Listed in Whos Who in World (2007) , Dr. S. N. Singh.
38. 21st Century Award for Achievement by IBC Cambridge, England (2007) , Dr. S. N. Singh.
39. Listed in Leading Engineers of the World 2007, IBC Cambridge, England (2007) , Dr. S. N. Singh.
40. First Prize in a technical paper titled Short-Term Zonal Load Forecasting in PJM Electricity Market Based on Adaptive Wavelet Neural Network, in the IEEE Sponsored Student paper Contest and Technical Symposium (SPCTS-2007) at DA-IICT, Gandhinagar, 28-30 Sept 2007, Dr. S. N. Singh.

41. Best Paper Award of 14th International Conference on Intelligent System Application to Power Systems (ISAP07) held during Nov 4-8, 2007, Kaohsiung, Taiwan, Dr. S. N. Singh.
42. Administrator, IEEE Online Communities (January 2006 to date) , Dr. S. N. Singh.
43. Moderator, IEEE Online Communities (April 2003 to date) , Dr. S. N. Singh.
44. Editorial board member, International Journal of Electrical and Power Engineering , Dr. S. N. Singh.
45. Associate Editor, International Journal of Electrical Energy Systems, Dr. S. N. Singh.
46. Editor of International Journal of Systems Signal Control and Engineering Application, Dr. S. N. Singh.
47. Guest Editor, International Journal of Energy Technology and Policy (2007), Dr. S. N. Singh.
48. UKIERI Standard Research Award of £144,000 for the project on Innovations in Intelligent Assistive Systems, IITK and University Ulster, UK, Dr. L. Behera.
49. Amity Best global HR Faculty award, Ashok K Mittal.
50. President Operational Research Society of India, Ashok K Mittal.
51. Vice President and Director Quality Circle Forum of India Hyderabad, Ashok K Mittal.
52. Member, Bihar Council of Science & Technology, Sinha, Arun P.
53. Reviewer: ACR (American Consumer Research) Doctoral Dissertation Competition, N. K. Sharma.
54. Reviewer: SCP (Society for Consumer Psychology) Doctoral Dissertation Competition, N. K. Sharma.
55. Member, Academic Senate, Indian Institute of Technology Kanpur Roorkee, N. K. Sharma.
56. Member, Board of Governors, International Academy of Business and Economics, USA, R.R.K. Sharma.
57. Member, Board of Governors, Society of Management Science, IIM Ahmedabad, India, R.R.K. Sharma.
58. Reviewer: Handbook of Technology Management: John Wiley, USA; Feb 08, R.R.K. Sharma.
59. Consulting editor, E-Social Sciences, Rahul Varman.
60. Reviewer for the following journals/ conferences: (i) Journal of workplace rights, (ii) Dark Side Case Writing Competition CMS AOM, USA, Rahul Varman.
61. Indo US Science and Technology Forum (IUSSTF) Fellowship 2008, R. N. Sengupta.

62. Member, International Advisory Committee, International Conference on Knowledge Management, ICKM 2008, Columbus, Ohio, Jayanta Chatterjee.
63. Reviewer: Management Review; Eastern Finance Association Annual Meetings; 11th Annual Convention of the Strategic Management Forum, B. V. Phani.
64. Member: Program Committee-2008-EFA Meeting- Florida 44th Annual Meetings, April 9 - 12, 2008; TradeWinds Island Grand Resort; St. Pete Beach, Florida, B. V. Phani.
65. Co-Chair, National Workshop on Intellectual Property Rights, 25th Feb to 29th Feb 2008, IIT Kanpur, B. V. Phani.
66. Reviewer, 44th Annual Meetings of Eastern Finance Association, April 9 - 12, 2008; Trade Winds Island Grand Resort; St. Pete Beach, Florida, B. V. Phani.
67. Reviewer, 43rd Annual Meeting of Eastern Finance Association, April 18 - 21, 2007, New Orleans, Louisiana, B. V. Phani.
68. Member Program Committee- 11th Annual Convention of the Strategic Management Forum; May 10 - 12, 2008, B. V. Phani.
69. Member, Program Committee, National Workshop on Intellectual Property Rights, 31st March to 1st April 2007, IIT Kanpur, B. V. Phani.
70. Reviewer, Management Review, Indian Institute of Management Bangalore, B. V. Phani.
71. Participant, Workshop on Measuring Intangibles in a Knowledge Economy (MIKE), EU-Asia Link Project, 2nd-6th September 2007, Barcelona, Spain, B. V. Phani.
72. Chairman, Innovators workshop on Grass root innovation, 6th April, 2007, 2007-08, B. V. Phani.
73. Member, Management Committee of Endowment Fund-IIT Kanpur, 2007-08, B. V. Phani.
74. Poster paper titled Sinter-Bonding of Stainless Steel Substrate with Boride Based
75. Cermets (B. Palanisamy and A. Upadhyaya) was awarded the Best Poster Award in the International Symposium on Advances in Stainless Steels (ISAS 2007) held between 9-11 April 2007 at Chennai.
76. Paper titled: Mathematical Modeling of Post-Combustion in a EAF by D. Mazumdar (coauthors: A.S Mujumdar and Wu Xonghua) received the Best oral paper presentation award at NMD ATM 2007 held at Mumbai in November 2007.
77. nominated on the panel of foreign reviewers, Austrian Science Foundation (FWF), 2007-present, Dr. B. Basu.

78. Nominated as member of the editorial board of Materials Science and Engineering: C - Materials for Biological Applications (Elsevier Journal), Dr. B. Basu.
79. International Coble Award from the American Ceramic Society. The award shall be presented in the Department of Atomic energy (DAE) Solid State Physics Symposium on October 6, 2008 in Pittsburgh, USA, the Award by the Department of Atomic energy (DAE) Solid State Physics Symposium. This award honors late Professor R. L. Coble (Emeritus Professor, MIT, USA). Since the inception of this award in 1996, Dr. Bikramjit Basu will be the first Indian from India and second from Asia to receive this award.
80. INSA Scientist of the Year 2008 Award by The Indian National Science Academy, Dr. Ashish Garg.
81. DAE Young Scientist Award for the Year 2008, Dr. J. Ramkumar.
82. President of the Indian Society of Theoretical and Applied Mechanics (ISTAM) for the year 2008, Dr. Gautam Biswas.
83. 2008 SAE Ralph R. Teetor Educational Award recipient. The award is given to young engineering educators in automotive engineering, Dr. Avinash Agarwal.
84. Chair the Automobile Technology Park under the Board for Smart Materials Research & Technology (B_SMART) of the National Program on Smart Materials, Dr. N. S. Vyas.
85. Chair a session entitled Digital Empowerment-Outcome of Desktop Revolution as a part of the International Conference on Engineering Education and Research (ICEER) 2007, to be held in Victoria (Australia) in December 2007, Dr. A. Chatterjee.
86. Indian National Science Academy's INSA Young scientist award for the year 2007 on December 23rd 2007, Dr. Avinash Agarwal.
87. Member of the Editorial Board of ISurfSE: International Journal of Surface Science and Engineering published by Inderscience, UK, Dr. V. K. Jain.
88. Chosen for the Young Scientist Award (2007-08) - Engineering Sciences given by the Indian Science Congress Association, Dr. J. Ramkumar.
89. Elected Fellow of the National Academy of Sciences, India. He has also been elected as the Indian Representative to the apex body for promotion of research in Mechanics, International Union of Theoretical and Applied Mechanics (IUTAM) for four years wef January 2008, Dr. Gautam Biswas.
90. Invited by the Editor of Journal of Clinical Rehabilitative Tissue Engineering Research (CRTER) to be a member of the International Reviewer Board, Dr. Kamal Kar
91. Fellows of Indian Academy of Engineering, Professors P. Munshi and V. Eswaran.

92. The doctoral work of Atul Srivastava (PhD-2006) has been given the best thesis award of INAE. The title of his thesis: Optical imaging and control of convection around a KDP crystal growing from its aqueous solution.
93. The Korean Academy of Science and Technology (KAST) has invited [Dr. Gautam Biswas](#) to deliver an invited talk on Educational Environment in India: A review at the symposium. The 10th KAST International Symposium on Interdisciplinary Education for Science and Technology Innovation scheduled to take place from September 13-14, 2007 in Seoul, Korea
94. Honored with the prestigious [Shanti Swarup Bhatnagar prize](#) in Engineering Sciences, [Dr. Kalyanmoy Deb](#).
95. Invited to join the Editorial Advisory board of Recent Patents on Mechanical Engineering, a publication of Bentham Science Publishers Ltd., Dr. Avinash Agarwal.
96. Conferred for the Alkyl Amines UICT Foundation Day Young Scientist Award for the year 2007, Dr. Avinash Agarwal.
97. Chosen to receive the Grover Medal for Young Scientist by the International Heat Pipe Committee, Dr. Sameer Khandekar.
98. Invited to join the review board of International Journal of Computational Science, Dr. Bhaskar Dasgupta.
99. Invited to join the editorial board of IJMTM - International Journal of Machine Tools and Manufacture, Dr V.K. Jain.
100. The PhD work entitled Optical imaging of convection around a KDP crystal growing from its aqueous solution by Atul Srivastava has been chosen for the [best-PhD thesis award \(2006\)](#) during the National Laser Symposium held at RRCAT Indore.
101. Invited by the IEEE Industrial Electronics Society to be on their panel of reviewers (on papers related to Thermal management/modeling and experimentation/applications), [Dr. Sameer Khandekar](#).
102. Delivered a keynote address entitled Mathematical Modelling of Turbulence at the National Conference on CFD Applications in Power and Industry Sectors organized by the Corporate R&D of BHEL Hyderabad during 17-18 November 2006. Further, he chaired a session on Applications of CFD in Power Plant Accessories, [Dr. Gautam Biswas](#).
103. Invited to join the editorial board of International Review of Mechanical Engineering (IREME), [Dr. P. K. Panigrahi](#).
104. Selected for the Young Scientists award for the year 2006 by the Systems Society of India. The award will be presented on 2nd November 2006 in the inaugural session of the National Systems Conference, [Dr. Bishakh Bhattacharya](#).

105. Elected Fellow, [American Society of Mechanical Engineers \(ASME\)](#), [Dr. Gautam Biswas](#).
106. Delivered a Keynote lecture at the [Third Asian Vehicle Emission Control Conference \(AVECC 2006\)](#) held at Jaipur during 20th- 22nd September 2006. The title of his talk: 2/3 Wheeler Vehicular Emissions: New technologies available and impact on air quality from 2-wheeler industry, [Dr. B. P. Pundir](#).
107. Selected for Innovative students project Award-2006 (based on the M.Tech. Thesis) by Indian National Academy of Engineering, New Delhi, Mr. Prabhat Agnihotri.
108. [Honored for his citations](#), Dr Kalyanmoy Deb.
109. has been elected Fellow of the Indian Academy of Sciences, Bangalore, [Dr. Kalyanmoy Deb](#).
110. [Dr V.K. Jain](#) has been appointed to the Editorial Board of International Journal of Advanced Manufacturing, a Springer-Verlag publication.
111. [Dr. Sameer Khandekar](#) has been granted the DAE Young Scientist Award of BRNS, DAE to work on the research project entitled, Development of a Novel Pulsating Heat Pipe-based Compact Heat Exchanger.
112. [Dr. Anupam Saxena](#) has been granted the [AICTE](#) Career Award for Young Teachers for a period of three years.
113. Biography published in Marquis Whos Who in the World, 25th Silver Anniversary Edition, 2008, B. Bhushan.
114. Included in the online database of The Asia Pacific Directory of Academics (previously The Australian Directory of Academics), 2007, B. Bhushan, S. Mathur.
115. Membership of International Association of University Professors of English, Switzerland, G. Neelakantan.
116. Guest Editorship for Creative Forum: Special Number on Cyberpunk Literature, No. 1, January 2009, T. Ravichandran.
117. Included in the online database of The Australian Directory of Academic & Research Associations, 2008, P. Murali Prasad.
118. Rated as outstanding teacher for the course PHY624-Magnetism in materials, Dr. Z. Hossain.
119. Young Achievers award, 2007 -08, awarded by the Department of Atomic Energy (DAE) at the Solid State Physics Symposium, Mysore 27th - 31st Dec. 2007, Dr. Satyajit Banerjee.
120. Center of Excellence (COE) award for travel, stay and special invited lecture at the Advanced Research and Education Center of Nano Vision Science, Shizuoka University, Hamamatsu, Japan (December 14 - 20, 2007), Dr. Sudeep Bhattacharjee

121. Swarnajayanti fellowship 2006. Awarded by Department of Science and Technology, India, Dr. M.K. Verma.
122. Best Poster Award to the student of Dr. R.C. Budhani for the poster Pulsed laser deposition of epitaxial CrN films on (100) MgO Gyanendra Singh, N. K. Pandey and R. C. Budhani, Presented at IUMRS-ICAM 2007. [RCB]
123. IRCC Research & Industrial Consultancy Awards for 2006 - IIT Bombay Research Paper Award for 2006, Dr. T. Sarkar.
124. Ramanna Fellowship, DST, Dr. J. K. Bera.
125. Shanti Swarup Bhatnagar Prize in Chemical Sciences, Council of Scientific and Industrial Research, Government of India, 2007, Dr. A. Chandra.
127. Fellow, Indian National Science Academy, New Delhi, Dr. V. Chandrasekhar.
128. Fellow, National Academy of Sciences, Allahabad, Dr. V. Chandrasekhar.
129. Prof. J N Mukherjee, Award (2008), Indian Chemical Society, Kolkata, Dr. N. S. Gajbhiye.
130. AVRA Young Scientist Award 2006 (2007), Dr. F.A. Khan.
131. Awarded Chemical Research Society of India (CRSI) Bronze Medal 2008, Dr. R.N. Mukherjee.
132. Vice President, Chemical Research Society of India, Bangalore (2008 - 2011), , Dr. R.N. Mukherjee.
133. Member, Editorial Board, Research Letters in Inorganic Chemistry (2008 -) , Dr. R.N. Mukherjee.
134. Fellow, Indian National Science Academy (2008) , Dr. R.N. Mukherjee.
135. J C Bose Fellowship by the Department of Science & Technology, New Delhi, 2008, Dr. R.N. Mukherjee.
136. Member, Advisory Board of Dalton Transactions (RSC) (2008 - 2009), Dr. R. N. Mukherjee.
137. Awarded a collaborative joint research project with Prof. I. Fritsky, by India and Ukraine Joint Science & Technology Committee, (University of Kiev, Ukraine) (2008 - 2011) , Dr. R.N. Mukherjee.
138. Awarded a collaborative joint research project with Prof. Ebbe Nordlander, (University of Lund, Sweden) (2007-2011), Dr. R.N. Mukherjee.
139. Vigyan Ratna Samman of U.P., Dr. V. K. Singh.
140. Bhagyatara Award of Panjab Univ, Dr. V. K. Singh.
141. FASc, Ramanna Fellow, Dr. V. K. Yadav.
142. Member, Steering Committee, Association for Logic in India, M. Banerjee.
143. Won the Kishore Vaigyanik Protsahan Yojna Fellowship, 2007, Ankur Jain (Y7072).

144. Elected as an associate of the Indian Academy of Sciences, 2007, A. K. Ghosh.
145. Senior Associate Editor, Applied Mathematics and Computation, M. K. Kadalbajoo.
146. Editorial Board Member of (1) Journal of Modern Applied Statistical Methods, (2) Journal Statistics and Its Applications, (3) Journal Communications in Statistics - Theory and Methods and (4) Journal Communications in Statistics - Simulation and Computation, Debasis Kundu.

(F) CONTINUING EDUCATION ACTIVITIES

Aerospace

1. Coordinator, Combustion and Spray, QIP short-term course, December 2007, D. P. Mishra.

Biological Science and Bio-engineering

2. ChIP-on-chip workshop, Sponsored from DBT Project, IIT Kanpur, 11th - 13th March 2008, Number attended from academic, Industry: Academic: 2, Industry: 3, Pradip Sinha.

Chemical

3. Got sanction for DST SERC School on Newer Optimization Techniques for Chemical Engineering Applications to be conducted during June 09-14, 2008, Sanjeev Garg.
4. Coordinator of a Short course - Plasma - Basics and Industrial Applications, November 3-4, 2007, IIT Kanpur, S. Panda.

Civil

5. Self-sponsored Short course: Principles of Pavement and Traffic Engineering, March 12-14, 2008, IIT Kanpur, co-coordinator: Dr. P. Chakroborty, 51 participants from academia and industry, Das, Animesh.
6. Experimental Methods in Earthquake Engineering at IIT Kanpur in March 2008, Durgesh C Rai, C.V.R. Murty and Sudhir K. Jain.

7. Seismic Design of Steel Structures at IIT Kanpur in October 2006, Murty, C.V.R., Durgesh C. Rai and Sudhir K. Jain.
8. 2 Lectures at AirForce Administrative College, Coimbatore, Tripathi, S.N.,.

Computer Science

9. Program Optimization for Multi-core Architectures, CDTE course for faculty from Engineering Institutes, July 2-7, 2008, Sanjeev K. Aggarwal.

Electrical

10. A short course on Principles and Practices in Radio Frequency Identification (RFID), Nov.10-15, 2007, I.I.T. Kanpur, Dr.A.R.Harish.
11. A short course on Audio & Video: Processing, Transmission, Coding and Display, Nov.-Dec. 2007, I.I.T. Kanpur, Dr.A.Banerjee & Dr.K.S.Venkatesh.
12. Coordinator of Short-term Training course On Recent Practices in Electric Power Distribution at IIT Kanpur, November 27-29, 2007, Dr. S. N. Singh.
13. Application of MATLAB® in Engineering, 3 weeks quality improvement Program for Faculties, Number attended - 60 faculties from local colleges, Venue-MAIT, Rohini, New Delhi, Organized By- MAIT and IIT Kanpur, December, 2007, Dr. P. K. Kalra.
14. Short Term Course on Recent Advances in Testing and Design of Insulation for QIP and industry participants, Dec 2007, Dr. Nandini Gupta.

Industrial & Management

15. National Workshop on Project Financing for Energy and Infrastructure Sector from 19-22 April, 2007 at IIT Kanpur. About 30 participants from academic and industry, Singh, Anoop.
16. Organized a QIP and Self-sponsored course on Supply Chain Management at IIT Kanpur, Sep 30- Oct 5, 2007. 30 QIP candidates and 10 industry candidates, Peeyush Mehta.
17. Organized a Self-sponsored course on Supply Chain Management at IIT Kanpur through SIIC, Jan-Feb, 2008. 55 industry candidates, Peeyush Mehta.

Materials and Metallurgical

18. A short course on Modeling in Metals Processing: concept , theory and application, organized by Dr. D. Mazumdar was held at IIT Kanpur between 21 to 24 December, 2007. The course was attended by 19 participants from academia and industries and research institutes.
19. The course co-ordinator for Materials for Biomedical Applications (BIOMAT-2007), 7-11th May, 2007, sponsored by Centre for Development of Technical Education (CDTE), IIT-K. More than 10 participants from Academic Institutes and R & D Laboratories across the country took part, Dr. B. Basu.
20. Organized a short-term course on Ultrafine grained materials and Nanocomposites (NANOMAT-2007), 12-16th March 2007, sponsored by Centre for Development of Technical Education (CDTE), IIT-K. More than 10 participants from Academic Institutes and R & D Laboratories across the country took part, Dr. B. Basu and Dr. Gouthama.

Mechanical

21. Delivered series of lectures in the QIP course Modern Experimental techniques in mechanics of fluids and solids at IIT Kanpur from May 7-11, 2007, P.K. Panigrahi.
22. Inaugural Joint IITK - Ntu Singapore Workshop In Mechanical, Aerospace, And Industrial Engineering, 10-11th July 2007, organized at the Department of Mechanical and Aerospace Engineering, NTU Singapore in the areas of computational mechanics, multi-scale modeling, micro-scale transport, energy, and supply chain management. Coordinators: K. Muralidhar and M. Damodaran.
23. Coordinated, 2nd National Workshop on Smart Materials for Design of Intelligent Systems & Industrial Applications (SMDISA 2007), 23-24 March 2007, 42 participants from industry and academic institutes, B. Bhattacharya.
24. Conducted International Conference on advance materials and composite at IIT Kanpur from Dec 12th - 14th, 2007- INCCOM-06, J. Ramkumar.
25. A one-week short course sponsored by Research Designs and Standards Organization, Indian Railway for engineers from Engine Development Directorate Fundamentals of Internal Combustion Engines from 23rd - 27th March 2007. (Coordinator: Dr Avinash Kumar Agarwal).
26. A one-week short course sponsored by Research Designs and Standards Organization, Indian Railway for engineers from Engine Development Directorate Advanced Internal Combustion Engine Technology from 13th - 17th September 2007. (Coordinator: Dr Avinash Kumar Agarwal).

27. Course Coordinator - QIP Short Term course titled Modern Experimental Techniques in Mechanics of Fluids and Solids, IIT Kanpur, May 07-11, 2007 (in association with Dr. V. Venkitanarayanan, Department of Mechanical Engineering), 40 participants, S. Khandekar.
28. Workshop Coordinator - National Workshop titled Fuel Cell Technology: Progress and Prospects, IIT Kanpur (supported by Shastri Indo-Canadian Institute, New Delhi), Kanpur (UP), 2007 (about 40 participants including international speakers), S. Khandekar.
29. International and INCCOM-6 Conference on Future Trends in Composite Materials and Processing, Innovations in Composites for the New Century, IIT-Kanpur, 12-14th December 2007, K.K. Kar.

Humanities and Social Sciences

30. A Lecture on Success in Interviews on 11 August 2007 during the Workshop on Interview Skills organised by the Department of Mathematics and Statistics, IIT Kanpur, T. Ravichandran.
31. Lectures on Listening Skills, Reading Skills, Telephone Skills Netiquettes, Oral Presentation, Successful Interviews to the Korean participants of the Summer Course on Organic Electronics 2007 held between 25 June and 20 July 2007 organised by Samtel Centre for Display Technologies, IIT Kanpur, T. Ravichandran.
32. Conducted a Workshop: For CA trainees of Institute of Chartered Accountants of India, Kanpur, L. Krishnan. Two sessions: Aug 2007 1) Team Building 2) Interpersonal Communication, Two sessions: Feb. 3, 2008 1) Team Building 2) Interpersonal Communication
33. Convener (Co-Convener Prof. A.K. Sinha, HSS Department): The 17th Annual Conference of National Academy of Psychology (NAoP), India - Dec. 17 to 19, 2007 at IIT Kanpur. Theme: Psychology, Technology and Society. L. Krishnan.
34. Conducted a 1-day Workshop at NABARD, NBSC, Lucknow, October 6, 2007: Personality assessment with Cattells 16 PF (Training session), L. Krishnan.

Mathematics and Statistics

35. Co-ordinator, 2nd Indian Winter School on Logic, January 14-26, 2008, IIT Kanpur, M. Banerjee.

36. 2. Organized DST National Meet of Research Scholars in Mathematical Sciences (NMRSMS - 2007), October 30 - November 4, 2007, A. K. Lal.
37. 3. Organised Fourth Annual Foundation School (NBHM), December 3-27, 2007, S.Madan, S. K. Ray and P. Mohanty.

(G) PARTICIPATION IN HIGH LEVEL INDUSTRY ACADEMIA INDUSTRY INTERACTION PROGRAMME DURING SUMMER

Aerospace

1. Elected as an executive member of the combustion institute (India Section) for 2007-2009.
2. Chaired a technical session in the International Conference on IC Engine and Combustion, Hyderabad 2007.

Chemical

3. Reviewed two papers for Journal of Chemical Physics (a journal published by American Institute of Physics), P. A. Apte.
4. Chairman of 2nd Technical Session in National Seminar on Recent Advances in Chemical Engineering Operation and Process in Chemical and Allied Industries, at Institute of Technology, Guru Ghasidas University, February 5-6, 2008, P.K. Bhattacharya.
5. Chairman, Plenary Session during Overview of Membrane based Effluent Treatment at IIT-Kanpur, in All India Seminar on Zero effluent discharge- latest development In recycling during 22-23 December, 2007; Organized By The Institute of Engineers (India) West Bengal State Centre Chemical Engineering Division at Kolkata, P.K. Bhattacharya.
6. Chairman, Technical Session during National Conference on Frontiers of Chemical Engineering at Department of Chemical Engineering, Indian Institute of Technology Guwahati during 12-14 December 2007, P.K. Bhattacharya.
7. Member, PAC (Chemical Engineering), DST, N. Delhi, D. Kunzru.
8. Member, Board of Governors, Rajiv Gandhi Institute of Petroleum Technology, Rai Bareilly, U.P., D. Kunzru.
9. Designed, fabricated and operated a Spinning Disc Reactor as part of Process Intensification efforts. Cost approx. Rs. 70,000/- Imported one costs about Rs. 55 lacs (It has better instrumentation). Cooperative efforts of Students

- Anuj Kumar, Aviral Chopra, K Malayaz, fabricated by Mr. Visvakarma in Chemical Engineering Department workshop, J. P. Gupta.
10. Council Member (Engineering & Materials), Indo-French Centre for the Promotion of Advanced Research (IFCPAR), New Delhi, 2008-2010. A. Sharma
 11. Member, Board of Governors, Indian Institute of Science Education and Research (IISER), Mohali (2007-2009), A. Sharma.
 12. Member, Research Council, National Institute for Interdisciplinary Science and Technology (NIST-CSIR), Trivendrum (2007-09), A. Sharma.
 13. Member, Research Advisory Committee, Indian Association for the Cultivation of Science, Kolkata (2007-09), A. Sharma.
 14. Member, Sectional Committee for Engineering and Technology, Indian Academy of Sciences (2007-2008), A. Sharma.
 15. Member, Sectional Committee for Engineering and Technology, Indian National Science Academy (2006-2008), A. Sharma.
 16. Member, Sectional Committee on Chemical Engineering and Biotechnology, Indian National Academy of Engineering (2005-2008), A. Sharma.
 17. Member, Program Advisory Committee for Chemical Engineering Program (PAC-ChE), Department of Science and Technology, New Delhi (2007-1010), A. Sharma.
 18. Member, The Nano Applications and Technology Advisory Group (NATAG), Department of Science & Technology, New Delhi (2008-2010), A. Sharma.
 19. Member, Platinum Jubilee Advisory Group of the Indian Academy of Sciences, Bangalore (2008), A. Sharma.
 20. Member, External Review Committee, School of Computational Sciences, Korea Institute of Advanced Studies (KIAS), Seoul (ten yearly review; 2007), A. Sharma.
 21. Member (UGC Nominee), Advisory Committee, Center for Advanced Studies, Phase VII at University Institute of Chemical technology, Mumbai (2007-), A. Sharma.
 22. Member (UGC Nominee), Advisory Committee, Center for Advanced Studies, Department of Chemical Engineering, Benaras Hindu University Institute of Technology (2007-), A. Sharma.
 23. Member, SSB Prize Advisory Committee in Engineering Sciences (2007), A. Sharma.
 24. Project granted by DRDO (Rs. 80 lacs approx) on Metal impregnated activated carbon fibers for the control of chemical warfare agents, N. Verma.
 25. Reviewed manuscript of J. Catal., Catalysis Today, Appld. Catal. Gen A; G. Deo

Electrical

26. Submitted a joint research proposal in collaboration with Telecom Management sudParis to IFCPAR, Dr.Y. N. Singh.

Materials and Metallurgical

27. Attended the Discussion Meeting on Processing of ODS Alloys for Clad Tubings in Fast-Breeder Reactor held at IGCAR, Kalpakkam on May 21, 2007, Dr. A. Upadhyaya.
28. Attended the Discussion Meeting on Material Requirements for ITER Project held on September 14, 2007 at IGCAR Kalpakkam, Dr. A. Upadhyaya.

(H) ANY OTHER IMPORTANT ACTIVITY NOT SPECIFIED IN ABOVE COLUMNS

Aerospace

29. Elected as an executive member of The combustion institute (India Section) for 2007-2009, D. P. Mishra.
30. Chaired a technical session in the International Conference on IC Engine and Combustion, Hyderabad 2007, D. P. Mishra.

Biological Science and Bio-engineering

31. Received a major World Bank-funded project (Rs.5.5 crores) through Indian Council of Agricultural Research (ICAR), for a period of five years. This has been awarded to a consortium led by Dr. K. Subramaniam to apply the RNAi-based technology to investigate plant-nematode interactions. Other members of this consortium are National Research Centre of Plant Biotechnology, Indian Agricultural Research Institute and Indian Institute of Pulses Research.

32. Received Extramural Grants, Title of the research program - Creating a BMP-responsive reporter cell line, Granting agency - CSIR, Amount - Rs. 11,06,000, Date of commencement: April, 2007, Dr. A. Bandopadhyay.
33. Title of the research program - Identification and Functional characterization of
34. BMP target genes in Osteogenesis. Granting agency: DST, Amount: Rs. 22,86,000, Date of commencement - 30 May, 2007 Dr. A. Bandopadhyay.
35. Joined editorial board of Indian Journal of Biomechanics published by Indian Society of Biomechanics, 2008, Dr. A. Pal

Computer Science

36. Fellow of Indian National Science Academy, October 2007, Manindra Agrawal.
37. Fellow of National Academy of Sciences, August 2007, Manindra Agrawal.
38. TPC member for: ISCC 2008, ICDCN 2008, ICDCIT 2007, ICDCIT 2008, IC3 2008, IEEE Mass2008, IFIP Network 2008. ACM Compute 2008, WoM 2008, Ratan K. Ghosh.
39. Program Committee Member, FSTTCS 2007, Sumit Ganguly.
40. Member national Technical Advisory Committee of Centre for Development of Advanced Computing (CDAC), R.M.K. Sinha.
41. Member Working Group on Technology Development for Indian Languages (TDIL), MCIT, Govt. of India, Member PRSG on OCR and OHR Consortia, MCIT, Govt. of India, R.M.K. Sinha.
42. Member PRSG on English to IL MT Consortia, MCIT, Govt. of India, R.M.K. Sinha.
43. Chair for tutorial and workshop during 1st India Software Engineering Conference (ISEC), Hyderabad, Feb 19-22, 2008, T.V. Prabhakar.

Industrial & Management

44. Member, Working Group on Power for the 11th Five-Year Plan (Sub-groups on Policy, and Regulatory Issues and Financial Issues), Planning Commission, Government of India, Singh, Anoop.
45. Guest Editor, International Journal of Energy Sector Management (special issue related to India and China), Emerald, Singh, Anoop.
46. Reviewer - (i) Energy: The International Journal, Elsevier; (ii) IEEE Transactions on Power Systems, Singh, Anoop.

47. Case Studies on Industrial Clusters: A Study of Kanpur Leather & Footwear, Varanasi Silk Saree and Moradabad Brassware Clusters. Report submitted to DSIR, N Delhi, IIT Kanpur, Dec. 2007, Rahul Varman & Manali Chakrabarti.
48. Critiquing Globalisation. Review of Questioning Globalization by Kavaljit Singh. Madhyam Books, Delhi & Zed Books, London and New York, 2005. Economic and Political Weekly, 42, 9, 3012-3014, 2007, Rahul Varman.
49. National conference on Intellectual property rights, Feb28-March, 2008 IIT Kanpur, Ashok K Mittal/B.V. Phani/ P.M. Prasad .
50. IPR cell (Chair) MHRD New Delhi, Ashok K Mittal.
51. Development of Power Sector in UP. Agency: Giri Institute of Development Studies for a Study Group formed by Planning Commission to Prepare a Road Map for Rapid Economic Development of UP, Singh, Anoop.
52. The Institutional Framework for Rural Energy Service from Renewables Agency: Dept. of Economics, University of Cambridge, Cambridge (UK). (with Dr. Karsten Neuhoff and Mr. James Cust of Dept. of Economics, University of Cambridge, UK), Singh, Anoop.
53. Principal Investigator, NAIP, National Agriculture Innovation Project. Govt. of India, ICAR & World Bank,, (NAIP/IME/20070258), Jayanta Chatterjee & Runa Sarkar.
54. Principal Investigator, WP7, OPAALS, sponsored by European Commission, (EC/IME/20060101), Jayanta Chatterjee.
55. Co-Investigator, WP6 & 10, OPAALS, sponsored by European Commission, (EC/IME/20060100) , Jayanta Chatterjee.
56. Knowledge Integration in a Research Network, RCI, Defence Research & Development Organisation (Ongoing since 2005) , Jayanta Chatterjee.
57. Principal Investigator, Technology Seed Fund Support (Technology Development Board), 2007-08, B. V. Phani.
58. Principal Investigator, SIDBI Innovation and Incubation Centre, 2007-08, B. V. Phani.
59. Principal Investigator, Seed Fund Weather Risk Management, 2007-08, B. V. Phani.
60. Principal Investigator, Technopreneur Promotion Program (TePP), 2007-08, B. V. Phani.
61. Principal Investigator, Seed Fund Multifacet Software Solutions Limited, 2007-08, B. V. Phani.
62. Principal Investigator, Seed Fund Whorl Engineering Solutions, 2007-08, B. V. Phani.
63. Principal Investigator, SIIC-MCIT Framework For National Entrepreneurs Support Programme, 2007-08, B. V. Phani.
64. Principal Investigator, Small Industry Cell, IIT Kanpur, B. V. Phani.

65. DRDO Advanced research project on crypt analysis using machine learning algorithms, April 2008, B. Chandra.
66. DST has sanctioned a project on Developing new split measures for classification in decision trees, B. Chandra.

Materials and Metallurgical

67. As a part of the Industrial Tour (MME390), the III yr MME students visited TATA Motors factory at Lucknow and Ordnance factory at Kanpur. The tour was conducted by Dr. K. Mondal.
68. Drs. R. Balasubramaniam, A. Upadhyaya and B. Basu were Convenors and Co-Convenors, respectively, for the International Conference on Metals and Alloys: Past, Present and Future that was held at IIT Kanpur between 07 and 10 December 2007. (Detailed conference report is attached herewith).
69. Dr. B. Basu was the Convener the International Workshop (Theme Meeting) on Nanoceramics and Nanocomposites, held at IIT Kanpur during 8-9 September, 2007 (<http://www.iitk.ac.in/infocell/announce/nanoceram/>).
70. TRADITION AND INNOVATION IN THE HISTORY OF IRON MAKING - AN INDO EUROPEAN PERSPECTIVE by Girija Pande and Jan af Geijerstam (Eds.), PAHAR Parikrama, Talla Danda, Nainital 283 002, 2002. review published in Indian Journal of History of Science, 42 (2007) 111-115.
71. PERSIAN STEEL: THE TANAVOLI COLLECTION by James Allen and Brian Gilmour, Oxford University Press, 2000. review published in Indian Journal of History of Science, 42 (2007) 713-726.
72. Archaeometallurgical activities: Investigation of Dimensions of Delhi Iron Pillar, 08 January 2008, ii. Investigation of Gupta Temple at Eran, Madhya Pradesh, 9 Feb 2008, R. Balasubramaniam.

Mechanical

73. Designed a cascade tunnel with a sweeping row of wake-generating cylinders to mimic the stator-rotor interactions, S. Sarkar.

74. Coordinated the activities on behalf of IIT Kanpur towards a national initiative on Futuristic Technologies for Gas Turbines in the country, S. Sarkar.
75. Initiation Grant Proposal, Indian Institute of Technology, Kanpur, Multiplex assaying of water borne pathogens using a Micro-chip platform, Funded (Sep. 2007- Sep. 2008). (Amount: Rs. 10, 00,000), S. Bhattacharya.
76. Department of Biotechnology, Government of India, Integrated Dielectrophoresis based concentration and real time PCR based identification of food pathogens in a single microchip, Submitted. (August 2007). (Amount: Rs. 49, 00,000), S. Bhattacharya.
77. Department of Information Technology, Ministry of Communication and Information Technology, Government of India, Bio-nano-photonics, Submitted (November 2007). (Amount: Rs.3 crores), S. Bhattacharya.
78. Bhaba Atomic Research Center, Exploratory studies for micro-Nanoscale structures and studying micro/ nano-scale transport, Submitted (November 2007). (Amount: Rs. 50, 00,000), S. Bhattacharya.
79. Organized INDO-GERMAN WINTER ACADEMY (A Brainstorming Academic Conclave on several exciting research themes, attended by the bright young undergraduates of various IITs and University of Erlangen-Nuremberg, Germany) at IIT Guwahati together with Prof. Subhash Mishra (IIT Guwahati), G. Biswas.

Humanities and Social Sciences

80. Member of advisory committee of Pragat Shikshan Sansthan, Phaltan, Maharashtra, A. Madan.
81. Member of advisory committee of Early Literacy Project, New Delhi, A. Madan.
82. Visiting faculty for dual-mode (contact and online) MA programme in Elementary Education, conducted by Tata Institute of Social Sciences, Mumbai, Madan.
83. Invited as Visiting Professor by Kyushu University, Japan (August to November 2007), B. Bhushan.
84. GUEST EDITOR to special issues of the International Journal: PERSPECTIVES IN GLOBAL DEVELOPMENT & TECHNOLOGY, (BRILL ACADEMIC PUBLISHERS, BOSTON & LEIDEN)1. Volume. 6. No.4, 2007. 2. And Volume. 7. No.1.2008, Devoted to the theme: Science and Technology under Globalization, Binay K. Pattnaik.
85. Festival Chairperson, Alfaaz, the IITK Literary Festival, Mar. 2008, S. Mathur.

86. Festival Chairperson, Umang, the IITK Media Festival, Jan. 2008, S. Mathur.
87. 2006-Present Faculty coordinator for English Speaking and Writing Instruction for Lakshya, an adult education programme run by the DRPG office, S. Mathur.
88. Beyond blaming the victim. The Hindu. (June 3, 2007), J. Das, & Kumar Ravi Priya.

Physics

89. Actively participated in department/institute administration (member DPGC, workshop, warden), Dr. Z. Hossain.
90. Refereed papers for Physical Review B, Solid State Comm, Dr. Z. Hossain.
91. Examiner for Ph.D. thesis from Jamia Millia Univ, Delhi, Dr. Z. Hossain.
92. A summer course (PHY103) during 2007 to undergraduate students with backlogs in this particular subject, Dr. S. Bhattacharjee.
93. Involved in installing a major facility for cross disciplinary research, namely 1.7 MV Tandatron accelerator, with microprobe and heavy ion irradiation. Beam lines have been designed and fabricated for carrying out research in solid state materials and other cross disciplinary field with a focus on development of futuristic technology. The facility is expected to be ready by mid June 2008, Dr. V.N. Kulkarni.
94. Authored a book Introduction to Mechanics. To be published in July 2008 by University Press, Dr. M.K.Verma.
95. Involved in the installation of 1.7MV Tandatron accelerator, the major facility coming up at IITK, Dr. S. Dhamodaran.
96. Involved in On re-structuring of UG/PG curricula in India, white paper prepared as a member of a Discussion Group set up jointly by the three Indian Academies of Science as preparation for the next Five Year Plan, Dr. S. Raychaudhuri.
97. Guest Faculty for the course New Physics at the LHC : Generic Framework at the 23rd SERC Main School on Theoretical High Energy Physics, IIT Mumbai (Feb 12-16, 2008), Dr. S. Raychaudhuri.
98. Coordinator of the Working Group on New Physics at TeV Scale and Precision Electroweak Studies, at the 2007 ILC workshop at DESY, Hamburg (May - June 2007), Dr. S. Raychaudhuri.
99. Member of the National Organising Committee for the DAE Symposium on High Energy Physics, Benaras (Jan 2009, scheduled), Dr. S. Raychaudhuri.

100. Member of the Programme Advisory Committee for the International Centre for Theoretical Studies, to be set up at Bangalore by the DAE, Dr. S. Raychaudhuri.
101. Short Video clips [~15 minutes] for 6 experiments were made. Also, a lecture on Error Analysis was video taped [~45 min]. These are available in the Brihaspati, Dr. S.C. Agarwal.

Chemistry

102. Time comb pulses through ultrafast pulse shaping, S.K. Karthick Kumar and Debabrata Goswami, Kiran—A Bulletin of the Indian Laser Association, 18(2), 17-20 (2007), Dr. D. Goswami.
103. Ultrafast pulse shaping: Applications in microscopy, molecular control and computing, D. Goswami, Directions: Reach Symposium 2007, 8(2), 124-128 (2007).
104. Guided summer research fellow of IASc, Bangalore, Dr. F.A. Khan.
105. Collaborative research at the Jacobs University, Bremen, Germany for 23 days (03 Dec 2007 to 26 Dec 2007) through the support of Royal Society of Chemistry (RSC) Journal Grants, Dr. J.N. Moorthy.
106. Invited to give a set of ten lectures on Classical-Quantum correspondences and semiclassical methods in Chemistry at the Inorganic and Physical Chemistry division, Indian Institute of Science, January 2008, Dr. K. Srihari.
107. DST PAC member, Dr. V.K. Yadav.

Mathematics and Statistics

108. Member, Steering Committee, Association for Logic in India, M. Banerjee.
109. Won the Kishore Vaigyanik Protsahan Yojna Fellowship, 2007, Ankur Jain (Y7072).
110. Elected as an associate of the Indian Academy of Sciences, 2007, A. K. Ghosh.
111. Senior Associate Editor, Applied Mathematics and Computation, M. K. Kadalbajoo.
112. Editorial Board Member of (1) Journal of Modern Applied Statistical Methods, (2) Journal Statistics and Its Applications, (3) Journal Communications in Statistics - Theory and Methods and (4) Journal Communications in Statistics - Simulation and Computation, Debasis Kundu.