Happenings at the Institute

New Director

Prof. Indranil Manna has taken over as Director of IIT Kanpur on 7th November, 2012. Prior to joining IIT Kanpur he was the Director of the Central Glass and Ceramic Research Institute (CGCRI), Jadavpur, Kolkata. Prof. Manna was born on 22nd January, 1961 in Calcutta, West Bengal. He obtained his BE degree from Calcutta University (B.E. College) in 1983 and MTech degree in 1984 from the Indian Institute of Technology Kanpur. Prof. Manna obtained his PhD from IIT Kharagpur in 1990. After a brief stint at Mishra Dhatu Nigam, Hyderabad, he joined IIT Kharagpur in 1985. He was a professor in IIT Kharagpur till he joined CGCRI as Director in 2010. Prof. Manna is a Metallurgical Engineer, a renowned educator and a prolific researcher. His significant contributions in the studies of amorphous/nanocrystalline Al-alloys, nano-fluid and laser/plasma assisted surface engineering greatly inspired the scientific community. His early contributions in moving boundary phase transformation are still widely cited. As a teacher, Prof. Manna has developed several new courses and taught subjects related to phase transformation, materials engineering, surface engineering, thermodynamics and X-ray diffraction. His research interests are structure-property correlation in engineering materials including synthesis/application of nano-materials, surface coating/engineering, phase transition, fuel cells, sensors, bainitic steel and mathematical modeling.

Prof. Manna is a recipient of several honours and awards like the INSA Medal for Young Scientists, Young Metallurgist and Metallurgist of the Year Awards, the MRSI Medal, the AICTE career award, DAAD and the prestigious Humboldt Fellowship. The Indian Institute of Metals (IIM) conferred upon him the GD Birla Gold Medal for the year 2008. Prof. Manna is a Fellow of the Indian National Academy of Engineering (FNAE), New Delhi; a Fellow of The National Academy of Sciences of India, (FNASc), Allahabad; and a Fellow of the Indian Academy of Sciences, (FASc) Bangalore. The INAE has recently awarded him the prestigious "INAE Chair" for two years; he is the third recipient of this prestigious chair.
New Heads

Prof. Ashish Dutta, Department of Mechanical Engineering has been appointed as the new Head of the Computer Centre. His research interests are in robotics, intelligent control systems, microsensors and actuators, and bio-robotics.  
Homepage: http://home.iitk.ac.in/~adutta/index.htm

Prof. Sanjay Mittal, Department of Aerospace Engineering has been appointed as the new Head of the National Wind Tunnel Facility. His research interests are in aerospace engineering, computational fluid dynamics, finite element methods, parallel computing and flow-induced oscillations.  
Homepage: http://home.iitk.ac.in/~smittal/

New Faculty Members

Dr. Amit Kumar Agarwal has joined the Department of Physics. He obtained his PhD from the Indian Institute of Science, Bangalore.

Dr. Raja Angamuthu has joined the Department of Chemistry. He obtained his PhD from Leiden University, The Netherlands.

Dr. Anindya Chatterjee has joined the Department of Mechanical Engineering. He obtained his PhD from Cornell University, USA.

Dr. Devlina Chatterjee has joined the Department of Industrial Management and Engineering. She obtained her PhD from the Indian Institute of Science, Bangalore.

Dr. Yogesh Singh Chauhan has joined the Department of Electrical Engineering. He obtained his PhD from the Ecole Polytechnique Federale de Lausanne, Switzerland.

Dr. Anshu Gaur has joined the Department of Material Science and Engineering. He obtained his PhD from the University of Illinois at Urbana-Champaign, Illinois, USA.

Dr. Saikat Ghosh has joined the Department of Physics. He obtained his PhD from Cornell University, USA.

Dr. Raju Kumar Gupta has joined the Department of Chemical Engineering. He obtained his PhD from the National University of Singapore, Singapore.

Dr. Kaustubh Narhar Kulkarni has joined the Department of Material Science and Engineering. He obtained his PhD from Purdue University, West Lafayette, USA.

Dr. Arvind Kumar has joined the Department of Mechanical Engineering. He obtained his PhD from the Indian Institute of Science, Bangalore.

Dr. Alakesh Chandra Mandal has joined the Department of Aerospace Engineering. He obtained his PhD from the Indian Institute of Science, Bangalore.

Dr. Ashis Kumar Patra has joined the Department of Chemistry. He obtained his PhD from the Indian Institute of Science, Bangalore.

Dr. Uday Shankar Racherla has joined the Department of Industrial Management and Engineering. He obtained his PhD from Purdue University, USA.
Prof. C. V Seshadri Memorial Distinguished Lecture

Prof. Sirshendu De, IIT Kharagpur gave a talk titled, “Technology Innovation: Membrane Casting, Applications and Arsenic Removal” on 4th October, 2012. In his talk Prof. De said that a membrane is a phase that allows the selective transport of a species through it, resulting in the physical separation of the species. Polymers are one of the key components used in the preparation of these membranes. His talk demonstrated how casting conditions resulted in membranes of varying characteristics. A novel and cost effective method for spinning hollow fiber polymeric membranes of various grades starting from microfiltration to dialysis was also discussed. Various applications like (1) treatment of industrial wastewater; (2) extraction of phytochemicals from plants; (3) Processing of fruit juice; (4) electric field assisted filtration and (5) micellar enhanced ultrafiltration were also discussed.

Prof. De said that several places in India, especially the Gangetic plains in West Bengal and the plains of Bangladesh are badly affected by arsenic contamination. In this talk, a project for the development of a low cost, domestic arsenic filter, its technical details, efficiency, design aspects, cost analysis and suitability for rural population was also presented.

About the speaker: Prof. Sirshendu De obtained his PhD from the Department of Chemical Engineering, IIT Kanpur. His research interests include membrane separation, membrane casting and its various applications, process developments, modeling and design; also flow modeling, heat and mass transfer in microchannel, and mathematical modeling of different chemical engineering processes. He has authored 6 books and has more than 180 publications in journals of repute. Prof. De has been awarded several awards, including the INAE Silver Jubilee Award (2012), the DAE-SRC Young Investigator Award (2012), the Shanti Swarup Bhatnagar Prize in the “Engineering Science” category by CSIR, Govt. of India (2011), the Herdillia Award (2010), the A. V. Rama Rao Award (2010 and 2007), the Amar Dye-Chem Award (2000) by the Indian Institute of Chemical Engineers (IIChE), the Young Engineer Award by INAE (2001). He became a Fellow of the Indian National Academy of Engineers, New Delhi in 2011.

About the donor: The corpus of the Professor C. V. Seshadri (CVS) Memorial Distinguished Lecture in the Department of Chemical Engineering, IITK has been set up by several students, family members and friends of CVS. This lecture is to be delivered by a promising young Chemical Engineering researcher (below 45 years) working in India.
About Prof. C. V. Seshadri

The late Prof. C. V. Seshadri was a distinguished Chemical Engineer. He did his PhD from Carnegie Mellon University, Pittsburgh, USA. He joined IIT Kanpur in 1965. He served as the Head of the Department and also as the Dean of Students' Affairs. Prof. Seshadri left IITK in 1974 to join Kasturi Paper, Food and Chemicals Ltd., Bangalore, where he set up India's first fodder yeast plant. In 1976, he became the founder director of the Shri A. M. M. Murugappa Chettiar Research Center in Chennai, an institute emphasizing appropriate technology, the forte of CVS. It was here that CVS really blossomed and helped develop several appropriate technologies, including Spirulina Algae. For his efforts in this direction, CVS received the prestigious Jamnalal Bajaj award for Science and Technology for rural development in 1981.

Prof. Hari Sahasrabuddhe Distinguished Lecture

Prof. Kurt Mehlhorn, Director, Max Planck Institut für Informatik and Professor, University of Saarland, Germany gave a lecture on “Physarum Computations” on 9th October 2012. In his talk Prof. Mehlhorn spoke about a slime mold called physarum. He said that it was observed over the past 10 years that the mold is able to solve shortest path problems and is able to construct good Steiner networks (Nakagaki-Yamada-Toth, Tero-Takagi-et al). In a nutshell, the shortest path experiment is as follows: A maze is built and the mold is made to cover the entire maze. Food is then provided at two positions and the evolution of the slime is observed. Over time, the slime retracts to the shortest path connecting the two food sources. A mathematical model of the slime's dynamic behavior was proposed in 2007 by Tero-Kobayashi-Nakagaki. Extensive computer simulations of the mathematical model confirm the experimental findings. For the edges on the shortest path, the diameter converges to a fixed value, and for the edges of the shortest path, the diameter converges to zero. Prof. Mehlhorn said that they had reviewed the wet-lab and computer experiments and provided a proof for these experimental findings and they also suggested avenues for further work. His talk was based on joint work with Vincenzo Bonifaci (Rome) and Girish Varma (TIFR).

About the speaker: Prof. Kurt Mehlhorn obtained his Ph.D. in 1974 from Cornell University, USA. He has been a vice president of the Max Planck Society and is the Director of the Max Planck Institute for Computer Science, Saarbrücken. He is the author of several books and over 250 scientific publications which include fundamental contributions to Data Structures, Computational Geometry, Computer Algebra, Parallel Computing, VLSI design, Computational Complexity, Combinatorial Optimization, and Graph Algorithms. Prof. Mehlohorn has several recognitions to his credit. He has been on the editorial boards of ten journals, a trustee of the International Computer Science Institute in Berkeley, California, and a member of the board of governors of Jacobs University Bremen. He won the Gottfried Wilhelm Leibniz Prize in 1986, the Karl Heinz Beckurs Award in 1994, the Konrad Zuse Medal in 1995, and the EATCS Award in 2010. He was named a Fellow of the Association of Computing Machinery in 1999, a member of the Berlin-Brandenburg Academy of Sciences in 2001, and a member of the German Academy of Sciences Leopoldina in 2004. He has received honorary doctorates from the Otto von Guericke University of Magdeburg in 2002 and the University of Waterloo in 2006.

About the Donor: The Professor Hari Sahasrabuddhe Lecture Series in the Department of Computer Science and Engineering has been made possible by an endowment from Mr. N. R. Narayana Murthy (MT/EE/69). In this lecture series, the foundation organizes two lectures in a year. These lectures are given by people who have made pioneering advances in the theory and practice of computing. Mr. N. R. Narayana Murthy is the
Chairman and Managing Director of Infosys Technologies Limited, Bangalore. He was born on August 20, 1946 and obtained his Bachelors degree in Electrical Engineering from the University of Mysore in 1967. He did his M. Tech in Computer Science from the Indian Institute of Technology Kanpur in 1969. He worked with various organizations such as SESA (Paris), Systems Research Institute (Pune) and Patni Computer Systems. Then in 1981, he along with six other professionals formed India’s first software company that was for, by and of professionals - INFOSYS. Mr. Murthy is a proven professional who commands tremendous respect in the industry. As a result of his efforts, Infosys today has top quality technology, clients and services. Mr. Murthy received the Distinguished Alumnus Award of IIT Kanpur in 1998 for creating and building an outstanding entrepreneurial venture and putting India on the international software map.

About Prof. Hari Sahasrabuddhe:  Prof. Hari Sahasrabuddhe was born in 1943. He obtained his Masters and PhD in Computer Science and Engineering from IIT Kanpur. Prof. Sahasrabuddhe was a faculty member at IIT Kanpur from 1964-1974 and 1976-1984. Professor Sahasrabuddhe was a founding faculty member of the Department of Computer Science and Engineering at IIT Kanpur as well as a pioneer in computing education in India. To know more about Prof. Sahasrabuddhe please visit: http://www.it.iitb.ac.in/~hvs/

Institute Lectures

Prof. Rohini Godbole, Centre for High Energy Physics, Indian Institute of Science, Bangalore, gave a lecture titled “Significance of the discovery of a Higgs boson at CERN” on 10th September 2012. Prof. Godbole obtained her PhD from SUNY, Stony Brook, USA. She then joined TIFR as a visiting fellow. She was a faculty member at the University of Bombay from 1982 to 1995. She has made fundamental contributions in High Energy Physics, specifically the Standard Model and BSM and has worked extensively on the interpretation of high energy collider data. She has received several recognitions like the Sheel Memorial Lecture Award of NASI; the Jawaharlal Nehru Centenary Visiting Fellowship of INSA; the Distinguished Alumnus Award of the Indian Institute of Technology Bombay; the Rustom Choksi Award for Excellence in Research by IISc; the Satyendranath Bose Medal for Theoretical Physics by INSA; the Meghnad Saha Memorial Gold Medal for Physics by the Asiatic Society of Kolkata and the J. C. Bose Fellowship. She is also the editor of the prestigious journal PRAMANA and is a fellow of the Indian National Science Academy and the National Academy of Sciences.

For details of the lecture please visit: http://www.iit.ac.in/dord/institutelecture/2012/Rohini_Godbole.pdf

Prof. Prem Kumar, AT&T Professor of Information Technology and Director of the Center for Photonic AT&T Professor of Information Technology and Director of the Center for Photonic Communication and Computing, Northwestern University, USA, gave a lecture titled “Ultrafast Processing of Photonic Entanglement: Technologies and Potential Applications” on 14th September 2012. Prof. Prem Kumar obtained his Ph. D from the State University of New York at Buffalo, USA. His research interests are quantum fiber optics—generation and distribution of quantum entanglement over the fiber channel and quantum cryptography over fiber lines; optical communications—novel optical amplifiers and devices for terabit/s communications; nonlinear and quantum optics—applications of novel quantum states of light such as squeezed and twin-beams states in precision measurement and imaging systems. Prof.
Kumar has received several recognitions like the Martin E. and Gertrude G. Walder Research Excellence Award by Northwestern University; and the International Quantum Communications Award by Tamagawa University, Japan. He is a Fellow of the Society of Photo-Optical Instrumentation Engineers (SPIE), the American Association for the Advancement of Science (AAAS), Institute of Electrical and Electronics Engineers (IEEE), the Institute of Physics U.K., the American Physical Society (APS) and the Optical Society of America (OSA). Prof. Kumar was the IEEE Photonics Society Distinguished Lecturer in 2008-09 and 2009-10. He is also the founder and managing partner of NuCrypt LLC.

For details of the lecture please visit: http://www.iitk.ac.in/dord/institutelecture/2012/Prem__Kumar.pdf

Dr. Ajay Mathur, Director General, Bureau of Energy Efficiency, Government of India gave a lecture titled “Energy in India: Strategies for the Future” on 3rd October 2012. Dr. Ajay Mathur obtained his Ph.D from the University of Illinois in 1986. Before his current position he was the President of Suzlon Energy Limited. Dr. Mathur is a distinguished alumnus of the University of Illinois. He is a Fellow of the Indian National Academy of Engineering and a Fellow of the Royal Institute of Chartered Surveyors. He has been honoured with the Global Energy Efficiency Visionary Award by Alliance to Save Energy in 2010. His current interests include public policy initiatives to promote energy efficiency, private sector business models for clean energy enterprises, climate change negotiations, clean energy technology innovation, global environment issues, human and institutional management and development.

For details of the lecture please visit: http://www.iitk.ac.in/dord/institutelecture/2012/Ajay_Mathur.pdf

Workshops, Conferences and Meets

An Interface - Industries of Kanpur and IIT Kanpur

IIT Kanpur organized a workshop, An Interface - Industries of Kanpur and IIT Kanpur on 28th October in the Outreach Auditorium. The aim of this workshop was to start a dialogue on ways in which the Institute can work with Kanpur city. A number of industrialists including Mr. Gopal Sutwala (Alumus of IITK), Mr. Shyam Sunder Khetrapal, Mr. Sanjay Garg, Mr. Shishir Agarwal, Mr. Rajeev Bharatiya, Mr. Mohammad Iqbal and Mr. Pankaj Bhasin participated in this workshop. The Institute was represented by Prof. S. C. Srivastava (Deputy Director), Prof. Ajit Chaturvedi (Dean, R&D), Prof. Manindra Agrawal (Dean, RPG), Mr. Mohammad Shakeel (Deputy Registrar, R&D) and Mr. O. P. Srivastava (Assistant Registrar, DRPG). Several faculty members and also staff members of the DRPG office participated in this workshop.

Mr. Gopal Sutwala, an alumnus of IIT Kanpur and a prominent industrialist in the city welcomed the Institute's move of re-developing Kanpur. During this session the Institute also shared its current research, entrepreneurial and social activities as well as future plans while the guests shared their perspectives and views on how the two can work together.

IIT Kanpur, being the premier technological Institute in the city, can play a crucial role in this transformation by providing technological solutions, manpower, entrepreneurs, and new business ideas. At the same time, the city of Kanpur can play an important role in the growth of the Institute by helping the Institute attract more faculty members and raise more funds to develop the research facilities.
IIT K celebrates 53rd foundation day

IIT Kanpur celebrated its 53rd foundation day on 2nd November, 2012. On this occasion Prof. Sanjay G. Dhande launched the Tinkering Laboratory where students can get involved in hands-on activity in the fabrication processes of mechanical/electrical/electronics elements. The laboratory will provide a platform for creative minds to come out of the ‘think space’ to hands-on ‘tinker space’ and transform ideas into real-life engineering objects, and eventually to products and patents. This program is funded by the alumni of the 1986 batch. For a details on Tinkering Laboratory visit: http://www.iitk.ac.in/drpg/Tinkering_Lab.pdf

Another initiative known as PRIME83 was also launched on this occasion. Promoting research, innovation, mentoring and entrepreneurship (PRIME83) is aimed at nurturing students with innovative ideas, by providing mentoring, facilities and fund support from both alumni and the institute. This program is funded by the alumni of the 1983 batch.

Achievements

Prof. Avinash Agarwal, Department of Mechanical Engineering, has been chosen for the NASI-Reliance Industries Platinum Jubilee Award for Application Oriented Innovations in Physical Sciences for the year 2012.

Prof. Avinash Agarwal, Department of Mechanical Engineering, has been elected as a Fellow of SAE International (Society of Automotive Engineers).

Prof. Manindra Agrawal, Department of Computer Science and Engineering, has been elected as a Fellow of the Third World Academy of Sciences (FTWAS).

Prof. Gautam Biswas, Department of Mechanical Engineering, has been elected as a Fellow of the Indian National Science Academy, India.

Prof. R. C. Budhani, Director of National Physical Laboratory, and a faculty member in the Department of Physics, IIT Kanpur has been chosen for the Distinguished Alumnus Award of IIT Delhi for the year 2012.

Prof. Amalendu Chandra, Department of Chemistry, has been elected as a Fellow of the Indian National Science Academy, India.

Prof. Kalyanmoy Deb, Department of Mechanical Engineering, has been awarded the prestigious prize of the Third World Academy of Sciences (TWAS) in Engineering Sciences.

Prof. S.Ganesh, Department of Biological Sciences and Bioengineering, has been elected as a Fellow of the National Academy of Sciences, India.

Prof. Sudhir Jain, Director, IIT Gandhinagar, has been elected as President of the International Association for Earthquake Engineering (IAEE).
**IIT Kanpur** has received the 2012 Agriculture Leadership Award, in recognition of the innovative knowledge management model in agriculture extension developed by **Prof. T. V. Prabhakar**, Department of Computer Science and Engineering.

**Prof. P. C. Kapoor**, who retired from the Department of Material Science and Engineering, received the Lifetime Achievement Award in the recently held International Mineral Processing Congress (IMPC-2012), Sept 24-28, New Delhi. He is the first Indian to receive this prestigious honor.

**Prof. S. A. Ramakrishna**, Department of Physics, has been awarded the Swarnajayanti Fellowship for the year 2012.

**Prof. Sanjay Mittal**, Department of Aerospace Engineering, has been elected as a Fellow of the National Academy of Sciences, India.

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**Support from Alumni and Friends**

**Mrs. And Mr. Gian Singh Bindra Chair**: Mr. and Mrs. Gian Singh Bindra Faculty Research Fellowship instituted by Mr. Jagjeet S. Bindra (BT/CHE/1969) has been converted into Mrs. and Mr. Gian Singh Bindra Memorial Chair. This chair is for a faculty member in the Department of Chemical Engineering.

**Ministry of Steel Chair Professor** has been instituted by the Government of India, Ministry of Steel. This chair is for a distinguished faculty member working in Metallurgical Engineering.

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**Institute Initiatives**

**Domestic Waste Water Management at IIT Kanpur**

In the last issue of Grapevine we had given a report about the Domestic Solid Waste Management at IIT Kanpur. In this issue we give a report about the Domestic Waste Water Management at IIT Kanpur.

Apart from solid waste, the campus generates a large amount of liquid waste as well. It was in 1960 when the first concrete step towards liquid waste management was taken. Back then, the entire campus population...
was concentrated to the north of a distributary running from east to west of the campus land while the southern area remained untouched.

To manage the generated liquid waste, the entire northern area was divided into five zones each provided with sump wells at strategically important locations. These sump wells acted as basins to collect the sewage which was then fed into an oxidation pond created at the northern end of the campus. This elaborate system was designed for sewage to flow under gravity.

The sewage in the pond got oxidized and the partially treated water was used for the horticulture needs of the surrounding area which has now turned into a regular orchard. In the last five years about two hundred fruit trees have been planted in the orchard including guava, mango, chiku and ber trees. Many varieties of birds can be easily spotted here like the kingfisher, woodpecker and the Indian tree pie. The orchard is also frequented by several vibrant migratory birds.

As the years passed, the campus population increased and the southern area of the campus began teeming with life, thus adding to the liquid waste generated in the campus premises. Since technically it was not feasible to pump the liquid waste from the south to the north zone, another sump well, sump well number Ten, and an oxidation pond to collect the sewage from it were built near Hall Eight.

Beside the oxidation pond, another water body was constructed to collect rain water and used swimming pool water to prevent it from flowing into drains. This water body is used for fish farming and horticulture purposes.

In 2009, the Institute took another crucial step in the direction of waste water management. It installed sewage treatment plants in the campus thus advocating the 3Rs of waste management strategy - 'Reduce, Reuse and Recycle'.

Each sump well has one sewage treatment plant that recycles the sewage collected from the nearby areas. The only exception is sump well Ten in the south zone where wastewater is recycled through three sewage treatment plants.

The sewage treatment plants installed at each sump well are bio-treatment based plants. The setup comprises a primary settling chamber, three rotating discs also known as rotors and a lamella zone. The sewage from the adjoining areas flows under gravity and is collected in a sump well. From here, it is pumped into the plant.

The first chamber of the plant is the settling chamber where the large particles in the sewage settle at the bottom. The sewage is then lifted to the first rotor known as the lifting rotor. The lifting rotor lifts it further to the aerobic rotor where aerobic aeration takes place. Aerobic aeration is a process where bacteria act on the sludge eating away the organic matter and cleaning it. The final sewage is transferred to the 3rd rotor where secondary aeration takes place. It then enters the lamella zone where the heavy particles settle down. To further disinfect the treated water, it is subjected to chlorination.

In the last stages of treatment, the water is passed through two filters. From the chlorination zone the treated water enters into the breaker tank from where it is lifted through pumps into the sand filters. These filters remove the suspended particles left behind in water. Finally, the water enters carbon filters for the final removal of any foul odor left behind. Water recycled at each sump well is used for gardening and other horticultural needs.

Presently, the total amount of recycled water is close to 1million lts per day. The samples have been tested by
the UP Pollution Board and were found to be satisfactory. Also, regular testing is done in the Institute's laboratories.

As per the February 2012 lab report, the Biochemical oxygen demand (BOD) level which stood initially between eighty and hundred went down to between seven and twelve after treatment. The chemical oxygen demand (COD) level had also reduced drastically thus rendering the recycled water suitable for horticulture purposes.

Our ultimate goal is to not discharge any untreated water into drains and to maximize the use of recycled water. As the campus population increases the recycling capacity will also be increased. The Institute will endeavor to exceed the requirements of relevant environmental legislation and to improve the standards of environmental management.

There are more interesting plans for the future. The Institute plans to turn the zone into a recreational park offering a variety of leisure activities like boating and fishing. The area with its scenic beauty and clean water bodies will truly be a picturesque place providing a refreshing break to the campus residents.

The entire process of domestic waste water management at IIT Kanpur can be viewed at the link below:
http://www.youtube.com/watch?v=U5fLqCjZfaA

Student Events

Udghosh 2012

**Udghosh 2012**, an annual inter-college sports festival of IIT Kanpur was held during 27th-30th September, 2012. Udghosh is one of the largest sports festivals in the country with the participation of about 50 colleges around the country offering an unparalleled competitive environment. Udghosh offers a platform for students from all over India to showcase their talent and compete with the best upcoming sports persons in the country. The festival comprised a plethora of events from Motivational Talks, Workshops, Gymnastic Shows and Sports Quizzes to various sports events like Athletics, Cricket, Football, Hockey, Volleyball, Basketball, Badminton, Tennis, Table Tennis, Weightlifting, Carrom, Chess etc. Wall climbing, kick-boxing, skating and power yoga workshops were also a part of the festival which benefitted many students.

IIT Kanpur secured 1st position in Athletics (Men), Athletics (Women), Badminton(Men), Cricket, Squash, Table Tennis (Men) and Weightlifting. It finished runner ups in Chess, Carrom, Tennis (Men) and Volleyball (Men). Mrs. Deepa Malik (a Paralympic champion) and Mrs. Sunita Antil (Olympic Discus Player) were the guests of honour. Udghosh ‘12 concluded with the distribution of prizes, medals and trophies to the winners of all the Sporting events.

For complete details of the final winners please visit:
https://docs.google.com/spreadsheet/ccc?key=0AprO7acMChCdHdTM0xmblg1Y3k2WEozRzFmVl9ZbUE#gid=0
IIT Kanpur celebrates Antaragni, the annual cultural festival from the 11th to the 14th of October. The theme of Antaragni'12 was 'A Medieval Fantasy'. It saw an overall participation of around 1500 students from some of the top-most colleges of the country.

The chief guest at the inauguration was Mr. Amitabh Yash, DIG of Kanpur and an alumnus of the institute. The opening night or 'Prima Nocte' as it is known, saw performances by an Irish folk band

Mutefish and the Indian multi-lingual sensation The Raghu Dixit Project in the auditorium grounds. The second night witnessed the fashion show Ritambhara with an interesting interlude by Nushrat Bharucha and Kartik Tiwari (lead pair of the cult hit 'Pyar Ka Punchnama'). The third night was the rock night Synchronicity and was headlined by the bands Solstice Coil from Israel and Black Queen Speaks from the USA. Renowned artists Shankar-Ehsaan-Loy gave a rocking performance on the final night in one of the largest ever concerts that the campus has seen.

Competitions, the basic essence of the festival, were given a major boost by the 'Dream On' campaign. The festival collaborated with some of India's leading cultural organisations like Shiamak Davar's Institute of Performing Arts, the Barry John Acting Studio and the Delhi College of Arts amongst others to provide internship and mentorship opportunities to stand-out performers. The IIT Kanpur teams did very well in the street dance, stage plays and literary events. The General Championship trophy, given to the best outstation team was won by Babu Banarasi Das National Institute of Technology and Management (BBDNITM), Lucknow while Miranda House, Delhi gave it a tough competition.

Antaragni's Kavi Sammelan reached a new height this year with the extremely popular Kumar Vishwas gracing the stage in front of a completely packed Convocation Ground. 'India Haat' too which showcases diverse art-forms from different parts of the country, was as popular as ever this year. It included performances by Kamal Naskar (mime), Konark Natya Mandap (Odissi dance) and Anuj Mishra (Kathak). Any event in IIT Kanpur is incomplete unless it has an intellectual component to it. To address this, the panel discussion India Inspired, was revived. The topic of this years discussion was 'Information Explosion: can we handle the surge?' The panellists included Air Chief Marshal, S. P. Tyagi; journalists, Mr. Ayaz Memon and Mr. Chandan Mitra; Ad-man, Mr. Santosh Desai; lawyer and politician, Ms. Pinky Anand and actress, Ms. Divya Dutta. The event was moderated by television journalist Naomi Datta. As a prelude to this, an 'Antaragni Leadership Initiative' was launched in association with the HSS department, IITK and Centre for Civil Society, Delhi. Under this initiative four candidates were selected to take part in the discussion. These candidates were selected through various rounds of questionnaires, discussions and role-playing games.

This year Antaragni had participation from international artists as well as people from the Bollywood fraternity. Artists from five different countries performed at the festival and the well known film directors Mr. Abbas Tyrewala, Mr. Luv Ranjan, Mr. Neerav Ghosh, and Mr. Sanjay Gadhvi were also present. The general outreach of the festival too increased vastly this year, for there were also a number of different workshops, exhibitions, informal activities and smaller events that contributed towards the general ambience of the festival.
The IIT Kanpur Alumni mentor program was launched in 2010. All IIT Kanpur alumni and current students are eligible to participate in the program. It offers every student a unique opportunity to develop a relationship with an alum and allows him or her to explore the information and advice related to academic and professional development. It builds a synergy between present students and the alumni and leads to developing a strong, global network of IITKians. To date, over 1500 students and 700 alumni are registered in the program. More than 300 students get paired up with alumni. Registrations for Alumni Student Mentorship Programme opens twice in a year. The link to join this program is: http://iitkmentor.chronus.com/p/main/about

The aim of this program is not to find alumni who can make career related decisions for a student. We just expect a viewpoint from our alumni so that students can learn from experiences of the alumnus and make informative decisions regarding their careers. In this program, we have a separate forum for alumni and students which is the good way of interaction and a platform for sharing their views.