Prof. Padmanabhan Balaram has been conferred the prestigious Padma Bhushan Award and Prof. Vinod K. Singh and Prof. Eluvathingal Devassy Jemmis have been conferred the prestigious Padma Shri Award by the Government of India for their distinguished contribution to the field of Science and Engineering.

**Professor Padmanabhan Balaram** (MSc2/CHM/1969) is a Professor of Molecular Biophysics and is currently the Director of the Indian Institute of Science, Bangalore, India. His main research interests are in bioorganic chemistry and molecular biophysics. He received his M.Sc. degree from IIT Kanpur (1969) and his Ph.D. in Chemistry from Carnegie-Mellon, Pittsburgh, USA (1972). Professor Balaram is a Fellow of the Indian Academy of Sciences, the Indian National Science Academy and the Third World Academy of Sciences, Trieste, Italy. He has received many awards/honors in recognition of his work, a few of which are the Shanti Swarup Bhatnagar Award of CSIR (1986), Alumni Award for Excellence in Research from IISc (1991), the TWAS Award in Chemistry (1994), the G.D. Birla Award for Scientific Research (1994), the Distinguished Alumnus Award of IIT Kanpur (2000) and the Padma Shri by the Government of India (2002). Prof. Balaram has delivered a number of lectures at national and international organizations and events and has served on the Editorial Boards of journals, both national and international. He has been the Editor of "Current Science" since 1995.

**Professor Vinod K. Singh** is a Professor of Chemistry at the Indian Institute of Technology, Kanpur and is currently the founder Director of IISER Bhopal. He is a well known Organic Chemist and a member of the Scientific Advisory Council to the Prime Minister (SAC to PM). He has extended his unstinted services to the nation for the past several years in the field of technical education and research. His work has been recognized in the form of several awards and honors such as the Shanti Swarup Bhatnagar Award, the Goyal Prize, and the Swarnajayanti Fellowship Award among others. He is a Fellow of the Indian National Science Academy, the National Academy of Sciences and the Fellow of Indian Academy of Sciences. He is also a recipient of the the Vigyan Ratna Award of Uttar Pradesh. For his contribution to research, he has also been conferred the J.C. Bose Fellowship given by the DST, Government of India.
**Professor Eluvathingal Devassy Jemmis (MSc2/CHM/1973)** is a Professor of Theoretical Chemistry at the Indian Institute of Science, Bangalore, India. Until recently, he was also the Director of the Indian Institute of Science Education and Research, Thiruvananthapuram. His main research interest concerns are in quantum chemistry. He received his M.Sc. degree from IIT Kanpur (1973) and his Ph.D. from Princeton (1978). Prof. Jemmis is a member of the Editorial Advisory Board of the Journal of Computational Chemistry and a member of the Scientific Advisory Board of World Association of Theoretically Oriented Chemists. He is an Honorary Professor at the Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore. He was the recipient of the prestigious Shanti Swarup Bhatnagar Award in 1994. Prof. Jemmis is an elected Fellow of the Indian Academy of Sciences, Bangalore (1992), the Indian National Science Academy, New Delhi (1998), the National Academy of Sciences, Allahabad(2003), India, and the Academy of Sciences for the Developing World, Trieste, Italy (2004). Prof Jemmis is presently a member of Board of Governors, IIT Kanpur.

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**Inter-IIT ’13 Performance**

The difference between the impossible and the possible lies in commitment. IIT Kanpur’s Inter IIT contingent could not have done any more justice to this statement, as history was created at IIT Guwahati during the Inter IIT sports meet 2013. A year of intense practice, an indomitable spirit and perseverance enabled to lift the men’s general championship winner’s trophy by a lead of 3.5 points over IIT Madras, the runner up. The second runner up position in the men’s GC was shared by IIT Kharagpur and IIT Bombay. IIT Kanpur secured the 3rd position in the women’s general championship at 35 points, just 2 points short of IIT Guwahati. The women’s GC was won by IIT Roorkee. The victory streak was further extended by the Staff contingent of IIT Kanpur who won the Staff Inter IIT Tournament held after the students’ meet ended.

The win was adorned by the overall championship in Athletics; Gold medals in Cricket and Volleyball (women); Silver medals in Badminton (men), Hockey and Squash; and Bronze medals in Lawn Tennis (men), Table Tennis (women) and Aquatics. The Athletics team was on an absolute rampage. They grabbed the Overall Athletics Championship in both the Boys & the Girls category by a huge margin, breaking 6 Inter IIT Meet Records in the Girls Category & 2 Inter IIT Meet Records in the Boys Category, a feat unprecedented. Veer Singh and Devi Mutyala added glory to the achievement by winning the Best Athlete Male and Female respectively. The team had also won the overall championship the previous year in the Boys Category but did not have any position in the Girls Category. Cricket Boys secured the Gold medal and bettered their previous year’s performance where they had exited in the quarter finals. The Volleyball Girls, who had won Silver last year, won the Gold medal this year, which was also the first year of Volleyball (women) being included in the points tally. Hockey Boys brought home a silver medal, improving upon their previous year’s performance where they were eliminated in the league stages. Badminton Boys too bettered their previous year’s performance where they had exited in the quarter finals to win silver this year, after a gruelling final. Squash Boys, Lawn Tennis Boys and Table Tennis Girls maintained their previous year’s performance, winning a silver, bronze and bronze respectively. Both the Swimming Boys and Swimming Girls won bronze medals at the Inter IIT Aquatics meet held in
October 2013, maintaining the previous year’s performance. Water Polo Boys stood 4th, faring better than their previous year’s performance where they were eliminated in the groupstages itself. Almost all our teams performed better than previous years, setting benchmarks that would inspire future team members. The teams that could not win this year shall surely bounce back to relive the shared dream of the entire contingent, as champions keep playing till they get it right.

As the Inter IIT meet completes 50 years next year at IIT Bombay, IIT Kanpur is all set to keep the precious trophy with itself for years to come. With more vigour, more determination and even more responsibility, the teams are moving towards converting what we call history to trend. From here on in, is the time to never give up, never give in, and as the upper hand is ours, we pledge to handle the win with dignity and consistency.

Happenings at the Institute

Homecoming

The 35th Year Reunion of the Class-of-79 was held from 3rd – 5th January, 2014. It was inaugurated by the IIT-K director Prof Indranil Manna and co-ordinated by Mr Basant Joshi of the 1979 batch. The celebrations began, after the arrival of these ex-IITians on the campus. On this occasion, ex-student Jayanthi Murthy was given the distinguished alumnus award. The former students clicked photographs of each other and of the new buildings in the Institute. The happiness of being back on the campus where they had studied was visible on their faces. Many of them also saw the labs where they used to work and went to the lecture hall complex to recall the good old days spent here. On this occasion the Institute's director Prof Indranil Manna released a book “The Birds of IIT Kanpur” and launched a related website www.iitk.ac.in/iitkbirds. The book is authored by member of the Nature Club Mr. Bikram Grewal, who has provided the pictures and content for the website as well. On the last day of the reunion, the alumni along with their family members went for a trip to Bithoor. An interactive session was held on Saturday, several issues were discussed by the alumni such as the vision of the Institute, the challenges it has to face, why no IIT figures in the top 100 institute, meeting the crisis of faculty members, improving the quality of research etc. The fun and frolic also went on for long. as several activities were organised to entertain the alumni and their family. There were presentations by Prof. Prabhat Munshi (Dean, Resources and Alumni) and the alumni were told about the activities of the Resources and Alumni Office. The reunion came to an end with a lunch and a felicitation ceremony at the Director’s residence.
Silver Jubilee Reunion Class-of-89 was celebrated at IIT Kanpur from 27th – 29th December, 2013. The three day alumni event witnessed a large gathering of over 100 alumni from India and abroad. The alumni were thrilled to visit their former Institute, where they had spent some of their most precious years as students. They were full of fond memories and nostalgically recalled the good time they had here. The family members of the alumni were equally enthusiastic and went around visiting the classrooms, laboratories and other facilities, happy to experience the sprawling campus with its unspoiled rich flora and its extensive infrastructure. Several events were organized to make the alumni reunion memorable. The alumni also planted saplings in the orchards of IIT Kanpur to commemorate their batch mates who are no more. They went around the campus cycling, walking, running and jogging and after breakfast interacted with the Heads of Departments, visited their departments and went around the academic area. The alumni revisited their student days by playing games like phatta cricket, basket ball and golf with much zest and enjoyment. Some cultural performances were also hosted by the alumni and their families, thus making the reunion even more eventful and memorable.

Alumni Achievements

Prof M.V. Ramana (MSC5/PHY/88) received the “2014 Leo Szilard Lectureship Award” from the American Physical Society.

Mr. Vasdev Chanchlani (MT/IME/76) received the Pravasi Bharatiya Samman Award from the Government of India.

Prof Rishikesha T Krishnan (MSC5/PHY/86) has been appointed Director at IIM-Indore.
IIT Kanpur created a new Department of Earth Sciences on February 5, 2014. Prof Rajiv Sinha has been appointed as head of the Department. Earth Science is a strongly interdisciplinary subject with several links to important resources such as minerals, energy, and water as well as to hazards and environmental management. The Department of Earth Sciences at IIT Kanpur would focus on the study of the Earth, encompassing its evolution and internal dynamics, its surface processes, emphasizing natural and human-induced transformations of the terrestrial environment vis-a-vis sustainable development, given the biggest problem we face in terms of rapidly increasing population. Apart from a modern teaching programme, students will be trained for high quality research that will allow thorough examination of issues related to the Earth Sciences, such as those concerned with natural resources (identification and exploration techniques) and their use to society, solid earth geology, Quaternary geology and the understanding and mitigation of natural hazards. It would thus provide a sound, topical background in various aspects of Earth Sciences, which will form the foundation for further study and for a wide range of employment opportunities in the mineral, energy, water, environmental and space sectors.

New Department of Earth Sciences

New Faculty Members

Dr. Abhijit Pal has joined the Department of Mathematics and Statistics. He obtained his PhD from the Indian Statistical Institute, Kolkata, India.

Dr. Anurag Tripathi has joined the Department of Chemical Engineering. He obtained his PhD from the Indian Institute of Technology, Mumbai, India.

Dr. Debasis Sen has joined the Department of Mathematics and Statistics. He obtained his PhD from the Indian Statistical Institute, Kolkata, India.

Dr. Harish K. Venkatanarayanan has joined the Department of Civil Engineering. He obtained his PhD from the College of Engineering and Science, Clemson University, U.S.A.

Dr. Rajat Mittal, has joined the Department of Computer Science and Engineering. He obtained his PhD from Rutgers University, New Jersey, U.S.A.
Prof. Subir Sachdev, a distinguished condensed matter physicist gave a lecture titled “Quantum Mechanics Without Particles” on 21st January, 2014. Prof. Sachdev was educated in India and studied for one year at IIT Delhi, before attending MIT and Harvard, where he obtained his Ph.D. degree in theoretical physics. He held professional positions at Bell Labs (1985–1987) and at Yale University (1987–2005), where he was a Professor of Physics, before returning to Harvard. He is very well known for his research on quantum phase transitions, and its application to a variety of quantum materials, such as the high temperature superconductors. His book "Quantum Phase Transitions" (Cambridge University Press) has formed the basis of much subsequent research. More recently, he pioneered the application of string theory to the study of quantum phase transitions in condensed matter physics, such as the superfluid-insulator transition of bosons moving in a lattice.

For details of the talk please visit:
http://www.iitk.ac.in/dord/templates/r_d/data/institutelecture/2013/Professor_Shibir_Sachdev.pdf

Prof. Roderick I. L. Guthrie, MacDonald Professor of Metallurgy and Director of the McGill Metals Processing Centre (MMPC), Montreal, Canada gave a lecture titled "The Importance of Gas Bubble sizes in Liquid Metal Processing Operations" on 20th December 2013. Dr Guthrie is an Honorary Member of ISIJ, a Distinguished Member of AIST, a Fellow of the Canadian Institute of Mining and Metallurgy, the Royal Society of Canada, and the Canadian Academy of Engineering. He is the author of two text books titled "Engineering in Process Metallurgy", and "Physical Properties of Liquid Metals".

He has over 500 publications and 200 patents to his name, and has been the recipient of many best paper awards. The winner of the 2006 Killam Prize for Engineering in Canada, he was co-inventor of the successful LiMCA process for detecting inclusions in liquid metals, and also of the Horizontal Single Belt Casting (HSBC) process for casting steel and aluminum alloy strip materials. He is currently working for the development of near net shape casting processes for advanced sheet steel production, as well as studies on ladle-tundish-mold designs which include the role of bubbles in removing inclusions from the liquid steel. For details of the talk please visit:
http://www.iitk.ac.in/dord/templates/r_d/data/institutelecture/2012/Prof_Roderick_Guthrie.pdf
Professor B K Pattnaik, Department of Humanities and Social Sciences, book titled "Sociology of Science and Technology in India," has been published by Sage India recently.

Professor Debashish Chowdhury, Department of Physics, paper titled "Modeling stochastic kinetics of molecular machines at multiple levels: from molecules to modules" has been chosen as one of the 13 best papers of 2013 published in BIOPHYSICAL JOURNAL (published by Cell Press on behalf of the BioPhysical Society, USA).

Professor Jitendra Kumar, Department of Materials Science Programme, has been elected APAM Academician (Fellow) of the Asia-Pacific Academy of Materials (APAM) in its General Assembly meeting held in Shanghai, China.

Professor J K Bera, Department of Chemistry has been elected Fellow the of Indian Academy of Sciences this year.

Professor N K Sharma, Department of Industrial and Management Engineering, has been nominated by the State Government as a member of the Management Board of the Madan Mohan Malaviya University of Technology Gorakhpur.

Professor Kamal K. Kar Department of Mechanical Engineering and Materials Science Programme has been invited to join as associate editor in "Materials Express", an international online journal on multidisciplinary materials research published by American Scientific Publishers.

Professor Mukesh Sharma Department of Civil Engineering has been elected National Vice President of the Indian Association of Air Pollution Control (IAAPC), Delhi Chapter, 2013-15.

Professor Peeyush Chandra Department of Mathematics and Statistics has been selected as an editorial board member of the Journal of Indian Mathematical Society.

Professor Sandeep Verma Department of Chemistry has been invited to join the Editorial Advisory Board of the Journal of Peptide Science. This is a journal of the European Peptide Society and is published by the Society jointly with John Wiley & Sons.
Prof. Dayal Saran passed away on 8th January, 2014. Prof. Dayal Saran obtained his PhD from IIT Kanpur and joined the Department of Physics on 1st August, 1960. He gave the very first Introductory Physics Lecture in the Institute to the first year students, and also shouldered the responsibility of planning for courses of studies and teaching labs with the then Director, Prof. Kelkar. He was also involved in the up-gradation of the X-ray lab, UG labs and re-writing of lab manuals. After retirement he served as Director of the Institute of Engineering and Technology under CSJM University (later renamed University Institute of Engineering and Technology) for about 13 years. Prof. Dayal Saran was an extremely warm person and a gentleman, much loved by students, faculty, and the Institute community.

Prof. Sanjeev Kumar Aggarwal passed away on 11th January, 2014. He obtained his MTech and PhD degrees from IIT Kanpur and joined the institute in 1990 as Assistant Professor. He also served the institute as the Head of the Computer Centre, Head of the CSE department and finally as the Dean, Resource Planning and Generation. In each of these roles he excelled as an administrator and academician and contributed hugely to their growth. He joined as Director of BITS Pilani, Goa campus in July, 2013 and was in service till his sad demise. His calm and organized way of approaching any issue meant that many students, faculty and staff sought his help and advice when confronted with a problem and almost always they came away with a lighter heart and a possible solution.

Prof. Ashvini Kumar passed away on 25th January, 2014. He obtained his Ph.D. in 1966 from the University of Amsterdam. His thesis "Hilbert spaces in intuitionism" was written in Dutch, but on his own he also translated it in Esperanto (believed those days to be the future language of mankind) and along with it also submitted a summarized version in Hindi. Professor Ashvini Kumar had great command over Dutch, Sanskrit, German, English, Esperanto, and of course Hindi. He joined I.I.T. Kanpur on 7th April, 1970 as an Assistant Professor. He was an excellent mathematician and also an excellent teacher of mathematics.

The Institute expresses its deepest condolences to the bereaved families of Prof. Ashvini Kumar, Prof. Dayal Saran, Prof. Sanjeev Kumar Aggarwal and prays for the peace of the departed souls.