



Campus diary

February - March 2015

<http://www.iitb.ac.in/en/activities/CampusDiary>

INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

IIT Bombay celebrates 56th Foundation Day

Keeping the tradition alive, like every year, the Indian Institute of Technology Bombay, celebrated its 56th Foundation Day on March 10, 2015. The foundation stone for the internationally recognized Institute was laid by Pandit Jawahar Lal Nehru, then Prime Minister of India on March 10, 1959. Speaking at the Foundation Day, Prof. Devang Khakhar, Director, IIT Bombay remarked, *“Our aim is to see IIT Bombay among the top ranked technical universities in the world and known for its outstanding undergraduate and post-graduate programs and for its contribution to research. We want to participate in providing solutions to the problems, faced by the nation and the world, through innovation.”*



Chief Guest Prof. S.P. Sukhatme and Prof. Devang V. Khakhar with the awardees on the Foundation Day

Prof. S.P. Sukhatme, Former Director of IIT Bombay and Former Chairman, AERB was the Chief Guest for the function and presented the **Distinguished Alumnus Awards** and **Young Alumni Achievers Awards** to select alumni of the Institute, besides **Prof. S.C. Bhattacharya Award for Excellence in Pure Sciences** and **Prof. H.H. Mathur Award for Excellence in Applied Sciences** to faculty members for excellence in research work.

The recipients of this year's awards are as follows:-

Distinguished Alumnus Awards



“My mantra for success is to ask yourself three questions - Why are you doing this? How are you going to do this and what do you intend to achieve?”

Prof. Srinivasan Raghunathan, (Mech – M.Tech.- 1966 & Ph.D. 1970) - Emeritus Professor of Aeronautical Engineering, Mechanical Aerospace Engineering, Queens University of Belfast, UK.



“I have always believed in doing what is right, without worrying about its cost or consequences. My message to others is to do what is right and give it your best shot, irrespective of the cost or consequences involved and never worry about your career.”

Prof. Ajit Pandurang Rangnekar, (Che – B.Tech. 1968) – Dean, Indian School of Business, Hyderabad.



“Dedication, perseverance and optimistic attitude, coupled with the ability to learn from mistakes – is my mantra for success.”

Prof. Ramakrishna Vijayacharya Hosur, (Chem - M.Sc., 1973) - Senior Professor, TIFR, Mumbai.



“High-tech work needs team effort. Always ensure that you are adding value to the team and doing your work with utmost integrity.”

Dr. Vijaya Korwar Gallagher, (EE - B.Tech., 1976) - Technical Director, Advanced Systems at Space Systems Loral, LLC in Palo Alto, California, United States.



“Be humble, be nimble, be flexible and yet be resolute. This is the mantra of success for me.”

Prof. Gautam Barua, (EE - B.Tech., 1976, & M.Tech., 1978) - Professor and former Director of Indian Institute of Technology Guwahati.



“Trust is the Lord with all your heart and have faith in your own understanding.”

Prof. George Varghese, (EE - B.Tech., 1981) – Principal Engineer and Partner, Microsoft Research (Dr. Sundar Iyer, receiving award on behalf of Prof. George Varghese)



“Truthfulness, faith and patience is my mantra of success.”

Prof. Ketan Mulmuley, (EE – B.Tech., 1981) – Professor, Computer Science Department, University of Chicago, (Prof. B.G. Fernandes, Head of Electrical Engg. receiving the award on behalf of Prof. Mulmuley)



“Enjoy every new finding (opportunity) and relish (execute) it with the freshness and enthusiasm of a newcomer.”

Prof. S. Ramakrishnan, (Chem – M.Sc., 1982) – Chairman, Division of Chemical Sciences and Professor, Department of Inorganic and Physical Chemistry, IISc Bangalore.



“Don't be afraid to fail, and be prepared to take risks.”

Prof. Subhash Khot, (CS – B.Tech., 1999) - faculty member, Computer Science Department, Courtesan Institute for Mathematical Science, New York University (Ms. Jayashree Khot, Mother of Prof. Khot receiving award on his behalf).



“Self-belief, focus and hard work is my mantra for success.”

Prof. Srikant Sastry, (Phy - M.Sc., 1986) - Professor, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bengaluru.



“A happy team is an efficient team, lead by example and enjoy the journey; success is bound to follow.”

Lt. Gen. Dr. R.S Panwar, (CS – M.Tech., 1988, & Ph.D., 1992) - Commandant, Military College of Telecommunication Engineering, Mhow and Colonel Commandant of the Corps of Signals.



“Never accept anything but fundamental limits. Have an attitude to get into bottom of things and try for the best possible outcome, without getting deterred by obstacles. Give your best shot to whatever you choose in life and do not make an halfhearted attempt.”

Dr. Dharmendra Modha, (CS - B.Tech., 1990) - IBM Fellow and Chief Scientist, Brain-inspired Computing, IBM.



Mr Harish Badami, (Che - B.Tech., 1985) - CEO and MD, ACC Limited (Dr. Suman Badami, Wife of Mr. Badami, receiving award on his behalf)

“I don't really believe in a single, all-purpose mantra or even in chasing 'success'. As with life, and in the corporate world too, success should be more about the journey than the destination. Along this path, build upon your knowledge and experience, use the appropriate tools and technologies, ask all relevant questions, respect people and listen to your teams and advisors and finally apply the filter of your own conscience. And you will be fine.”

Young Alumni Achievers Awards 2015



“Connect the strategic and tactical dots, and plan to execute at the last meter, not just the last mile.”

Mr. Gagan Bhalla, (Civil – B.Tech., 1996) - Chief Executive Officer, Apollo Sugar .



“Game - changing entrepreneurs have exceptional emotional intelligence and the ability to translate a mission into a movement.”

Mr. Ursheet Parikh, (CS - B.Tech., 1998) - Partner in Mayfield Fund.



“Following passion relentlessly and learning from everyone I have interacted with, is my mantra for success.”

Prof. Devavrat Shah, (CS - B.Tech., 1999) - Jamieson Associate Professor, Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology (Prof. S. Sudarshan, Head of the Department of Computer Science & Engg. receiving the award on behalf of Prof. Shah).



“My mantra for success is to build coherent team for doing any job. If the entire team is focused on doing the same thing then any task becomes easy.”

Mr. Vishal Gupta, (EE - B.Tech., 2000) - Founder and CEO, Seclore.



“Don't be afraid to fail, but take smart, opportunistic risks.”

Prof. Sachin Katti, (EE - B.Tech., 2003) - Assistant Professor, Electrical Engineering and Computer Science, Stanford University (Prof. B.G. Fernandes, Head, Electrical Engg. receiving award on behalf of Prof. Katti).



“Sticking to first principles, building great teams and deciding fast is the mantra for success.”

Mr. Zishaan Hayath, (Civil - Dual Degree, 2005) – Founder, Toppr.com.

Prof. S.C. Bhattacharya Award for Excellence in Pure Sciences

Prof. H.H. Mathur Award for Excellence in Applied Sciences



Prof. M. S. Balakrishna, Department of Chemistry



Prof. S. Sudarshan, Department of Computer Science and Engineering



Prof. Vivek Agarwal, Department of Electrical Engineering

Degrees awarded to Ph.D. students at Interim Convocation



Dignitaries on the Dais during the Interim Convocation Ceremony

Degrees were awarded to 58 Ph.D. students of IIT Bombay, on successful completion of their doctoral programmes at the Interim Convocation ceremony held in the Institute on March 11, 2015. Among the 58 Ph.D. students 31 were present to take their Degrees.

The degrees were conferred upon those Ph.D. students who have completed all the requirements during the period from August 2014 to January 2015 and have requested for the degree to be awarded earlier than the 53rd Convocation. The function was presided by Dr. Anil Kakodkar, Chairman, Board of Governors, IIT Bombay, in the presence of Prof. Devang V. Khakhar, Director, IIT Bombay and Prof. Subhasis Chaudhuri, Deputy Director (Academic and Infrastructural Affairs), IIT Bombay, among others.

Emphasizing on the need of research activities in the country, Dr. Kakodkar said, *“There is a steady effort from IIT Bombay to increase research activities at the Institute. We have an ambition of creating leaders who will not only lead India but the world and therefore we believe that a strong research program for the country is a must. India can never become number one in the world with adopted technology. We need our own technology if we want to fulfill our ambition of becoming the best in the world and therefore our aim at IIT Bombay to put emphasis on research is not misplaced.”*

There is a steady increase in the number of Ph.D. students at IIT Bombay. While there were only 771 Ph.D. students on roll in the academic year 2001-02, today the number of Ph.D. students at the Institute has increased to 2800.

Congratulating the graduating students, Prof. Khakhar said, *“The education that you get at IIT Bombay, is comparable to the best in the world. These are exciting times as there is immense opportunity across sectors as everyone is understanding the need of research activities. I also see a new culture emerging in start-ups, where Ph.D. students are at the helm of high technology enterprises.”*

Apart from the students and faculty members of the Institute, the ceremony was attended by the families and friends of the students who were awarded their Degrees.

Amsterdam - Mumbai Symposium on ‘Sustainable Urban Development: Practices, Problems and Prospects’



Mr. Eberhard van der Laan, Mayor of Amsterdam handing over the MoU to Prof. Rajiv Dusane, Dean (IR), IITB

on March 25-26, 2015. The Symposium looked into the issues of Public transportation and infrastructure, Housing, Health and sanitation and Urban governance and democratic participation. The Symposium was inaugurated by Mr. Eberhard van der Laan, Mayor of Amsterdam.

Speaking at the Symposium, the Mayor of Amsterdam said, *“There has been a lot of work that has been done in India since Independence but there is a lot that remains to be done. Therefore it is very interesting for both Netherlands and India to collaborate and work together and do something in the area of developing smart cities. This symposium is a first step towards the process.”*

The two-day joint symposium organised by the Centre for Urban Studies, University of Amsterdam and the Department of Humanities and Social Sciences and Centre for Urban Science and Engineering, Indian Institute of Technology Bombay was held on Campus

The rapid growth of cities causes a large number of challenges, including insufficient power supply, unreliable public transportation systems and limited access to adequate medical treatment. At the same time environmental infrastructure of works and services are inadequate to serve the resulting increases in population

and population densities. The inevitable congestion causes environmental hazards and degradation. Therefore smart city planning for sustainable development is crucial.

Talking about the need for such a Symposium, Prof. Jan Nijman, Director, Centre for Urban Studies, University of Amsterdam said, *"The world is expanding and we have to learn the ways to adapt to these changes. We have to learn ways to solve the challenges that it poses. This Symposium is a platform to bring together urban planners and*

urban development government functionaries, scholars and researchers, activists and practitioners from Amsterdam and Mumbai to brainstorm and share lessons learnt on problems of urbanization, development (broadly defined), and sustainability."

The symposium also marked the signing of MoU between IIT Bombay and University of Amsterdam. The MoU, will encourage student and faculty exchange and joint research activities in the areas of mutual interest, among other things.

According to Prof. Rajiv Dusane, Dean, International Relations, IIT Bombay, *"The MoU will encourage students to take up research activities and work under the joint supervision of the both the reputed Institutions. This is an wonderful opportunity for Ph.D. students and will lead to excellent results in the area of academics and research."*

The Symposium was attended by urban government functionaries as well as by scholar-researchers and practitioners from both the countries.

Launch of ERP System at IIT Bombay

It is the 21st century and there is a constant pressure on Institutes to perform. All of them want to stand out, be uniquely valuable, and distinguish themselves from the competition. Even if they are doing exceedingly well, there is always a need felt for improving the processes by making them simpler and faster - while capturing all the data from its various units so as to help in future decision making. Understanding the requirements of modern times, IIT Bombay launched its 'Enterprise Resource Planning (ERP)' in the Institute on March 16, 2015 . This also makes IIT Bombay the first educational institute in India to implement ERP in a comprehensive manner.

Speaking on the occasion, Prof. Devang Khakhar, Director, IIT Bombay said, *"It is a very important day for the Institute since implementing ERP is a big step. ERP System will enable us to have data on our fingertips. All the information that one needs to know about the Institute will be on one platform and this is going to make life easy for all of us."*

An ERP implementation will help in improving administrative processes and operating efficiency, integrating information across all functions, tracking a wide range of institutional events in an integrated manner and facilitating planning future activities based on these events, etc. Thus,

with such an integrated system, the Institute can have all the data at a click, while ensuring that data is fed in, only once into the system - thus avoiding duplication or multi-feeding of unnecessary data through different departments.

ERP will be implemented in two phases at IIT Bombay. First phase will cover Administration, Finance and Accounting, HR and Logistics and Assets under the ERP system. Second phase will see Academics and students data linked with the ERP system of the Institute. To implement the ERP smoothly concerned persons will be provided training

International Women's Day Celebrations



Director IIT Bombay felicitating previous Conveners of Women Cell

As a part of the International Women's Day celebrations, the Women Cell of IIT Bombay organized an interactive session-cum-workshop with Ms Mahalaxmi Ravishankar, lawyer specializing in sexual harassment and gender sensitization at work place, in the Institute on March 18, 2015. The session was an attempt to understand the evolving professional space, in the context of gender diversity, laws to prevent sexual harassment and protection from crime against women. Prof. Devang V. Khakhar, Director, IIT Bombay was the chief guest and he felicitated the previous conveners of the Women Cell during the event.

Addressing the gathering, Prof. Khakhar, Director, IIT Bombay said, *"Though IIT Campus is very safe and girls can walk around the campus even at odd hours but we*



Students performing play during Women's Day Celebration

still have a Women Cell who looks into any matter that concerns the safety of girls on the campus because that is of utmost importance to us. The number of girl students at IIT Bombay is increasing every year but same can't be said about women faculty members. There is a strong need to increase women faculty in the Institute and hopefully we will be able to do it." Earlier, as a part of the celebration a small play by students - "Just a little...chit-chat" was performed midst deafening cheers.

A small video on "Unheard voices" was also played during the event. The video was a salute to women who are support staff members of IIT Bombay and do their work religiously without much recognition. The event was attended by faculty, students and staff members.



Ms. Mahalaxmi Ravishankar speaking during Women's Day celebration

Grand Finale of eYRC 2014: Robots to solve problems of 'Urban Services'

The grand finale of the third edition of highly popular e-Yantra Robotics Competition 2014 (eYRC 2014) for college students, which is a part of the MHRD's sponsored e-Yantra project of IIT Bombay was held on campus on March 26-27, 2015. Almost 33 teams from various institutions across India battled it out for prizes and opportunity to do summer internship at IIT Bombay.

Talking about the theme for eYRC 2014 Prof. Kavi Arya, Principal Investigator of the e-Yantra Project remarked, "The theme for this year competition is '**Urban Services**' and students had to develop indigenous solutions using robotics to engineer services such as Fire Fighting, Warehouse Management, Waste Segregation, Cargo Alignment and Cargo Sorting. One more theme of Caretaker Robot was also introduced as part of the e-Yantra Robotics Competition Plus (eYRC+-2014) in order to incorporate more students in the competition."

With every passing year the competition is growing and becoming bigger and better. Talking

about the growth of the competition over the years Dr Krishna Lala, Senior Project Manager, e-Yantra Project informed, "In the year 2012, the number of teams that registered for the competition was 1096. This number increased to 1331 in the year 2013 and eYRC 2014 got 3107 registrations which is more than double the number of registrations that the competition had in 2013. Number of colleges participating in the competition has increased from 105 and 323 in the year 2012 and 2013 respectively to 469 in 2014."

The selection process is a rigorous task and explaining the entire process Dr Saraswathi Krithivasan, Senior Project Manager, e-Yantra said, "Teams took an online selection tests to qualify for participation in the prestigious competition. Students who qualified were shipped robotic kits and accessories along with the rule-book for their respective assigned theme. These teams implemented a solution using the robot in a step-by-step manner through the various tasks assigned in the competition that uses the Project Based Learning (PBL) methodology."

The winners under various themes were:

- 1. Fire Fighting Robot:** Jawaharlal Nehru National College Of Engineering, Shimoga
- 2. Warehouse Managing Robot:** Father C. Rodrigues Institute of Technology, Vashi, Navi Mumbai
- 3. Waste Segregating Robot:** Maharaja Agrasen College, University Of Delhi
- 4. Cargo Aligning Robot:** National Institute of Technology Surathkal Srinivasnagar Mangalore
- 5. Cargo Sorting Robot:** Veermata Jijabai Technological Institute, Mumbai
- 6. Caretaker Robot:** J.K Institute Of Applied Physics & Technology, University Of Allahabad

Sharing his experience of the competition, Abhishek Desai, a student from one of the participating teams said, "It is only because of this competition that we learnt about robotics. This is a perfect medium to put in your theoretical knowledge into practice. The whole concept is interesting and an unique learning experience."

Science Expo- 2015



Institute's participation in the Science Expo-2015 at Nehru Science Centre

IIT Bombay recently participated in the Science Expo-2015, held at Nehru Science Centre, Worli, Mumbai, during February 4-7, 2015. This expo aimed at promoting and spreading scientific awareness among school children and the general public.

Dr. Ratan Kumar Sinha, Chairman Atomic Energy Commission and Secretary, Department of Atomic Energy, Mumbai inaugurated the exhibition on February 4, 2015. Shri. A.K. Jain, Additional Chief Engineer (Corporate Communication), Nuclear Power Corporation of India Ltd. gave the valedictory address on February 7, 2015.

The Institute displayed a variety of exhibits from various Departments, and Centres in the form of working models, demonstrations, posters and videos that highlighted research, and technology development efforts and illustrated scientific concepts that would interest

students. As part of the Expo, two popular science lectures were given by Institute faculty members. Prof. G. N. Jadhav, Department of Earth Sciences gave a lecture on 'Pathar me be Dil hai!' while Prof. Virendra Sethi, Centre for Environmental Science and Engineering gave a lecture on 'Air Pollution: Ants and Elephants (even Dinosaurs)'

Institute's participation in the Science Expo-2015 was co-ordinated by a team of 65 members including faculty, staff and students, headed by Dr. V. Arumugam, from the Industrial Research & Consultancy Centre, IITB. More than 11,000 people including school children, visited the exhibition.



Display of IITB exhibits

4th National IPR Researchers' Confluence

Shailesh J Mehta School of Management (SJMSOM), IIT Bombay through the MHRD IPR Chair Project, and National Institute of Industrial Engineering (NITIE), jointly organized the 4th National IPR Researchers' Confluence on "IP Challenges in Frugal Innovation" between March 27-28, 2015. The objective was to identify challenges posed by intellectual property across various stages in developing frugal innovations and to explore possible solutions for such challenges. It is a unique opportunity for participants to identify and share their problems.

Kavi Sammelan

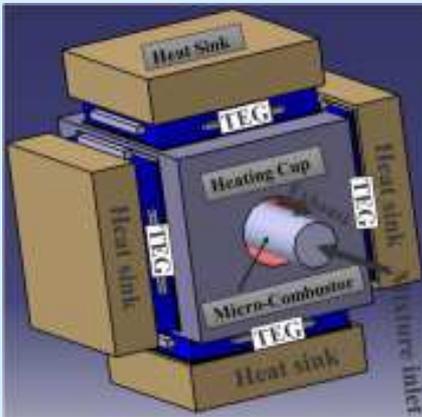


Kumar Vishwas performing at the Kavi Sammelan

Institute's Hindi club and the Institute Cultural Council organised *Kavi Sammelan* on March 17, 2015. The event started with the performance by Dr. Kumar Vishwas, who is emerging as one of the most loved poets in recent times and also saw performances by Mr. Dinesh Bawra, semi-finalist in the Great Indian Laughter Challenge 2008, Ms Lata Haya, who has performed in more than 3000 *kavi sammelan* all around the globe and Mr. Rajesh Reddy, a well-known poet mostly known for his urdu ghazals.

Research in focus

Smart Solution for Smartphones?



Anybody who migrates to smart phones soon begins to question the smartness of it all. While batteries lasted a fortnight or so in vanilla mobile phones, a smartphone typically empties the battery in less than a day. Carrying those bulky rechargers is a remedy worse than malady. How do you power your smart phone for days when you are nowhere near a power source?

A promising innovation by researchers at IIT Bombay and their collaborators at Institute of Aeronautical Engineering Hyderabad and Far Eastern Federal University, Russia holds a ray of hope that it may be possible, sooner rather than later, to be able to find a more efficient source of mobile power than conventional batteries.

Electric batteries are inefficient in terms of energy carried for given weight. For instance, normal batteries can only carry around 1 Mega Joule per kilogram educates Professor Sudarshan Kumar, Department of Aerospace Engineering, IIT Bombay. Whereas hydrocarbon fuels—LPG, Methane, and Kerosene—can carry almost 40 - 50 times more fuel per kilogram.

Of course the solution is simple—convert thermal energy of hydrocarbons into electric energy. Alas, if only it were that simple. The first hurdle is in the fabrication and manufacture of microscopic devices of really small dimensions to convert chemical energy stored in these fuels to thermal energy and then followed to electric energy. Even if one somehow overcomes that hurdle, the real bad news is that at present level of technological development, the level of efficiency in converting thermal energy to electric energy only barely reaches 2.6%, making the entire effort pointless, considering the arithmetic of it all.

However, the latest innovation at IIT Bombay is really promising. The micro combustor based micro thermo-electric power generator design by Professor Sudarshan and other colleagues, leapfrogs the efficiency of energy conversion from 2.6% to a respectable 4.5%, with more improvements possible, thus making conversion of thermal energy to electric energy through a minute device, not only feasible technically but also commercially.

The design by Professor Sudarshan and others relies on Seebeck effect, which simply put means that when there is a circuit connecting two different metals and there is difference in temperature from one junction to another, electricity is generated.

The researchers have fabricated a micro thermoelectric power generator based on Bismuth-Telluride modules. The high temperature end (around 200 degrees Celsius) is created by burning a fuel – LPG in this instance. The low temperature end is normal room temperature. This combination of different metals being connected with a temperature difference generates electricity. Of course, if the room temperature is lower, say 5 degrees Celsius instead of 25 degree Celsius, more electricity would be generated. Apart from including the inner micro-combustor for burning the fuel, the design also includes heat sinks to take away the heat not converted to electric energy. The Micro Thermoelectric Power Generator may cost around Rs. 7000 and their bulk production will bring the costs down.

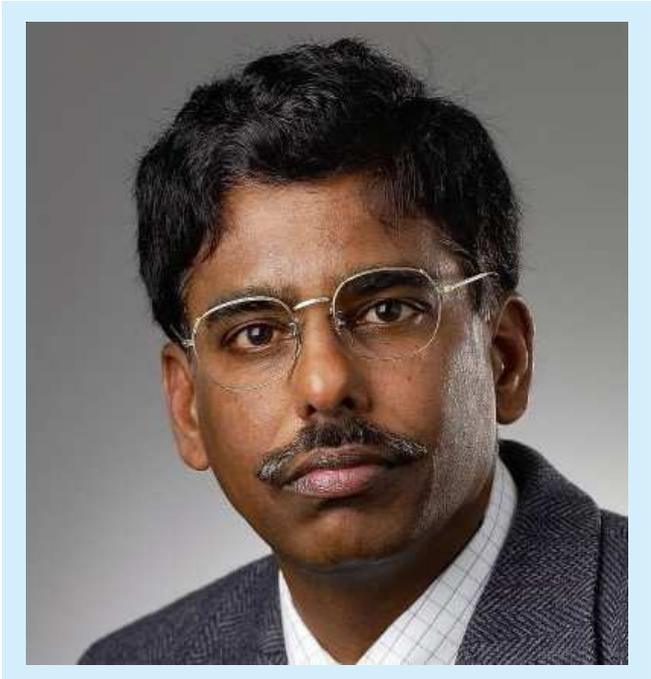
Going ahead, of course the levels of efficiencies of conversion of thermal energy to electric energy need to improve further, so that use of such Micro Thermoelectric Power Generators becomes a compelling case. Professor Sudarshan educates that efficiency levels have improved slowly from mere 0.1% to 1% and slowly to 2.6% and now to 4.5% in the present innovation. Hence, it would be realistic to hope for better efficiency.

For more information please visit: <http://www.iitb.ac.in/en/research-highlight/smart-solution-smartphones>

Institute Colloquium /
Lectures & Seminars



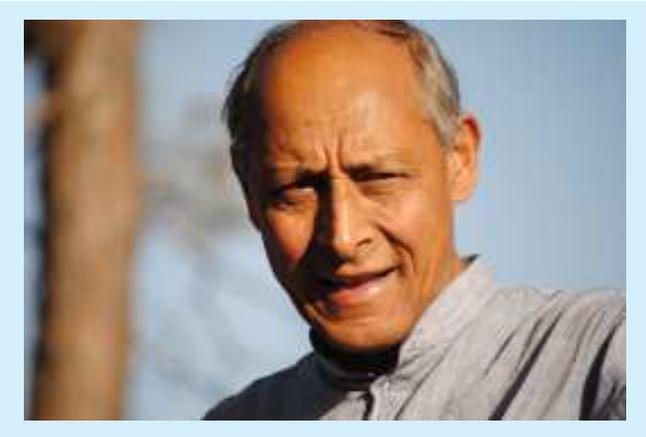
Dr. Jonathan S. Dordick, Vice President for Research, Howard P. Isermann Professor of Chemical and Biological Engineering, Rensselaer Polytechnic Institute, Troy, NY, delivered a Nomura Lecture on “Biocatalytic Nanocomposites: Engineering Form, Function, and Protection from Disease” on February 4, 2015.



Prof. Murugappan Muthukumar, Polymer Science and Engineering, University of Massachusetts, Amherst, USA, delivered an Institute Colloquium on “Menagerie of Viruses” on February 11, 2015.



Prof. Steven P. Gross, University of California Irvine, United States, delivered an Institute Lecture on “Molecular-motor transport in cells: What is the importance of motor number, and how might ensemble motor function be regulated?” on February 6, 2015.



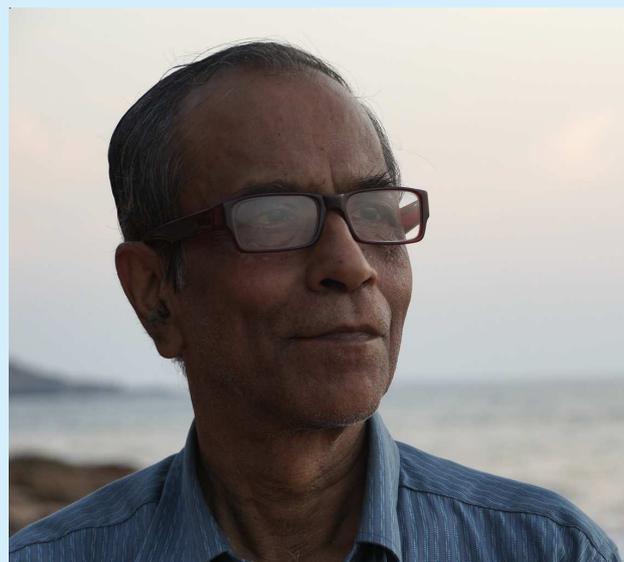
Prof. Shekhar Pathak, Retired Professor of History, Kumaon University, Nainital and Founder of People’s Association for Himalaya Area Research (PAHAR), Nainital, delivered an Institute Colloquium on “We have but ONE Himalaya” on February 18, 2015.



Prof. Kankan Bhattacharyya, Senior Professor, Indian Association for the Cultivation of Science, delivered an Institute Colloquium on “Single Molecule Spectroscopy of a Single Live Cell” on February 26, 2015.



Prof. S.D. Mahanti, Michigan State University, USA, delivered an Institute Lecture on “Thermoelectricity, History, Renaissance, and Challenges” on March 11, 2015.



Prof. B.M. Deb, INSA Senior Scientist and Scholar-in-Residence, Visva-Bharati University, Santiniketan, delivered an Institute Colloquium on “Glimpses into Classical Indian Art” on March 18, 2015.

Invited / Departmental Lectures

Prof. A. Khan, Department of Humanities and Social Sciences, delivered a lecture on “Formation and retrieval of event based prospective memory: An electrophysiological study,” at the Department of Physiology, University of Erciyes, Turkey.

Department of Computer Science and Engineering

Prof. Katherine Yelick, University of California Berkeley, delivered a talk on “Antisocial Parallelism: Avoiding, Hiding and Managing Communication” on February 5, 2015.

Prof. Nitesh Chawla, University of Notre Dame, delivered a seminar on “Big Data for the Common Good: Being a Dataologist” on February 17, 2015.

Department of Earth Science

Prof. R. R. Navalgund, Professor Emeritus, ISRO, delivered lectures on various aspects of ‘Remote

Sensing and its Applications’ between January 27 – February 6, 2015.

Department of Humanities and Social Sciences

Dr. Udit Sen, Hampshire College, Amherst, USA, delivered a talk on “Developing Terra Nullius: Colonialism, Nationalism and Indigeneity in the Andaman Islands” on February 11, 2015.

Dr. Uday Chandra, Max Planck Institute for the Study of Religious and Ethnic Diversity, Gottingen, Germany, delivered a talk in a seminar on “Intimate Antagonisms: Adivasis and the State in Rural India” on March 5, 2015.

Dr. Eivind Kahrs, Faculty of Asian and Middle Eastern Studies, University of Cambridge, UK, delivered a Special Lecture Series on “Buddhist Philosophy”, followed by reading sessions of selected Text in Sanskrit during March 16-20, 2015. He also delivered a seminar on “The concept of a category in Indian philosophy and the Sanskrit term bhâva” on March 25, 2015.

Centre for Technology Alternative in Rural Areas

Mr. Ranjit Bhavirkar, IIT Bombay Alumnus, delivered a lecture in a seminar on “Future of the Grid” on February 5, 2015.

Dr. Sanjoy Paul, Managing Director, Accenture Technology Labs India, delivered a talk in a seminar on “Transforming a Billion Lives via Digital (Social, Mobile, Analytics and Cloud) Technologies: Affordable Excellence @Scale” on March 3, 2015.

Department of Chemistry

Prof. S.N. Datta, Department of Chemistry participated and delivered a lecture titled “Fragments of Imagination” in Physical Chemistry Symposium organized by the Department of Chemistry during March 13-14, 2015.

Climate Studies

Dr. A.K. Sahai, Indian Institute of Tropical Meteorology, Pune, gave a lecture in a seminar on “The challenge of summer monsoon prediction in the Extended Range: Where do we stand?” on March 25, 2015.

Awards and Distinctions

Prof. Deepankar Choudhury, Department of Civil Engineering, has been invited to join the Editorial Board of International Journal of Geomechanics (IJOG), ASCE, USA, (<http://ascelibrary.org/journal/ijgnai>). This IJOG, American Society for Civil Engineers (ASCE) journal is Science Citation Index (SCI) listed journal with impact factor of 1.197.

Prof. Rinti Banerjee, Department of Bioscience & Bioengineering, has been selected for the Central Drug Research Institute (CDRI) Awards 2015 for Excellence in Drug Research under Biological Sciences.

Prof. Kannan Moudgalya, Department of Chemical Engineering, has been awarded the Google MOOC Focused Research Award for his proposal "Extending the Offline Capability of Spoken Tutorial Methodology".

Prof. Atul Shrivastava, Department of Mechanical Engineering has been awarded the Swarnjayanti Fellowship for the year 2013-14.

Research Scholars Forum

Mr. S. Vinay Kumar, Founder & CEO of InvenZone and Alumni of IIT Bombay, delivered a talk on "10 Things to remember if you are a Researcher and want to be an Entrepreneur" on March 1, 2015.

Mr. Walter Bender, Technologist and Researcher in the field of electronic publishing, media, and technology for learning conducted a workshop on 'Turtle Blocks' on March 29, 2015.

Conference / Workshops

Typography Day was organised by Industrial Design Centre (IDC), in association with India Design Association (InDeAs) and Aksharaya during March 7-9, 2015

in the Institute. The event featured workshops on "Typography and Calligraphy" followed by two days International Conference on "Typography, Sensitivity and Fineness". The conference included presentations by eminent academicians, industry professionals, research scholars and students. The event also hosted an exhibition of selected posters and typographic works of students and faculty members from Design Institutes.

Workshops

Prof. A. Khan, Department of Humanities and Social Sciences, presented a paper titled "Non parametric tests and Analysis of Variance", under SPSS and Research Method Workshop Sponsored by Indian Council of Social Sciences Research at Rizvi College, Mumbai, on March 16, 2015.

Prof. A. Khan, Department of Humanities and Social Sciences, presented a paper titled "Neurofeedback: Basic Mechanism and Application," at the Department of Psychology, Central University of Karnataka, Gulbarga, Karnataka, on March 24, 2015.

Student News

Performing Arts Festival (PAF)

The biggest inter-hostel cultural festival, the "Performing Arts Festival (PAF)" was organized by Institute's Cultural Council - Students' Gymkhana on March 22, 25, 28 and 31, 2015. PAF is a culmination of music, dance, theater and fine arts. Both Undergraduate and Post Graduate students at IIT Bombay participated enthusiastically in the preparation and organization of the festival.

Performance titled 'Discovery of Indya', by hostels - 1, 5, 8 and 10, were declared winners, while Performance 'Keta' (English skit),

by hostels - 2, 3, 11, 14 and 15A were the runners Up. 'Pahal', by hostels - 7, 9, 10A, 12, 16C stood third, and 'Aahuti', by hostels - 4, 6, 13, 15C and Tansa stood fourth.

Abhyuday - Annual Social Festival

The second edition of 'Abhyuday', the Annual Social Festival of IIT Bombay was organized during February 14-15, 2015. The theme for the festival this year was "Youth Education and Employability." The two day event hosted Lectures, Workshops, Exhibition by NGO's, Cultural fair, Quora Meet up, Interactive Sessions and Competitions. **Abhyuday** is first of its kind initiative in India to promote Social Responsibility among youth in India making.

Dr. D.R. Mehta, Padma Vibhushan Awardee and Ex-Governor of RBI, delivered the keynote address followed by a lecture series by Mr. Joe Madiath: Indian social entrepreneur, founder of Gram Vikas, and Mr. Shailesh Mishra: Social activist and Founder Secretary of Al Alzheimer's society of India. Other speakers who participated in the lecture series and panel discussions included the likes of Dr. Aishwarya Mahajan - Regional Head Livelihood Education at Aide et, Action (AEAI) development organisation, Dr. Abhijeet Barse - CEO of Slum Soccer, Mr. Shekhar Kulkarni - Founder & Chairman of MANIKS Systems Pvt. Ltd, Mr. Ankit Samdariya - Vice President - Asset Management and Acquisitions (The Xander Group), Mr. Ruben Mascarenhas - Media Spokesperson of Aam Aadmi Party in Maharashtra, Mr. Nitin Saluja - Consultant with National e-Governance Division at Ministry of IT & Communications and Mr. Premjeet kumar - Co-founder Netapedia. The panel discussion was followed by exhibition of indigenous art forms from across the country by many NGO's.

Publications

Prof. S.N. Datta, S. Hansda and Prof. A.K. Pal, Department of Chemistry, published a paper titled "Ferromagnetic Nature of Silicon Substituted Meta-xylylene Polyradicals" in Journal of Phys. Chem. C 2015, 119 (7), pp 3754–3761.

Prof. S.N. Datta and Prof. A.K. Pal, Department of Chemistry, published a paper titled "Quantum Chemical Investigation of meta-Xylylene Based One-dimensional Polymer Chain" in Journal of Phys. Chem. A, 2015, 119 (10), pp 2176–2185.

Prof. A. Khan., E. Fleva, & T. Qazi, Department of Humanities and Social Sciences, published a paper titled "Role of Self Esteem and General Self Efficacy in Teacher's Efficacy in Primary School," in Psychology, 6, 2015, 117-125

Prof. A. Khan, A. Abdal-hay, T. Qazi, C. Calle, and R. Castillo, Department of Humanities and Social Sciences, published a paper titled "Time Estimation in Developmental Dyslexia: An Experimental Investigation," in open Journal of Medical Psychology, Vol.3, 2014, pp.373-381

Prof. A. Khan, Department of Humanities and Social Sciences, published a paper titled "An investigation into prospective memory in children with developmental dyslexia", in Frontiers in Psychology, Vol 5, 2014 1308

Appointments

Dr. Nikhil Karamchandani, Department of Electrical Engineering, has been appointed as Assistant Professor on February 11, 2015.



Dr. Himani Sharma, Department of Mechanical Engineering, has been appointed as Post Doctoral Fellow on February 12, 2015.



Dr. Venkata S. Delhi, Department of Civil Engineering, has been appointed as Assistant Professor on February 13, 2015.



Dr. K. Karuppasamy, Department of Metallurgical Engineering and Materials Science, has been appointed as Post Doctoral Fellow on February 17, 2015.



Dr. Aswani Yella, Department of Metallurgical Engineering and Materials Science, has been appointed as Assistant Professor on March 31, 2015.



Retirements in February 2015

Prof. S.N. Datta, Professor, Department of Chemistry, retired after 36 years of service.



Shri Arvind S. Patil, Technical Officer, C-DEEP, retired after 8 years of service.



Shri D.B. Adagale, Assistant Registrar, Materials and Management Division, retired after 37 years of service.



Shri Bhimrao P. Pawar, Sr. Helper, Estate Office, retired after 35 years of service.



Retirements in March 2015

Shri Sitaram D. Rane, Jr. Tech. Supdt., Gymkhana, retired after 35 years of service.



Shri Anant G. Sawant, Jr. Tech. Supdt., IDC, retired after 39 years of service.



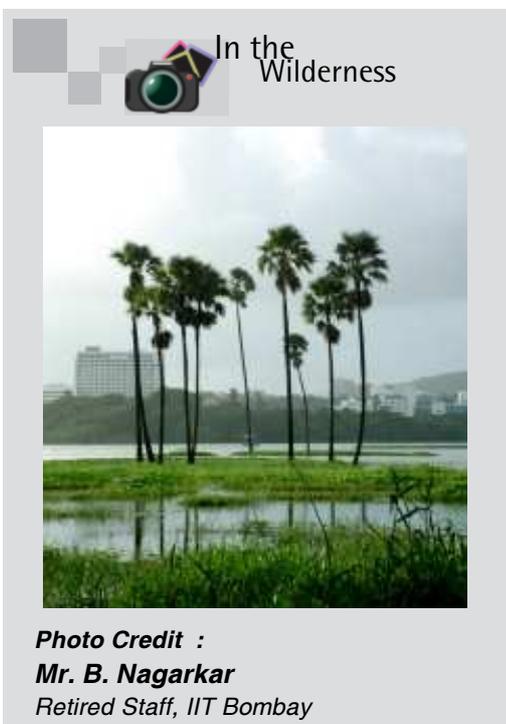
Shri Pandurang C. Gaikwad, Lib. Attdt. S(G), Central Library, retired after 38 years of service.



Shri Babasaheb B. Gaikwad, Sr. Helper, Vehicle Section, retired after 34 years of service.



CEP courses scheduled during May - June 2015			
No.	Course Title	Course Coordinator / Department	Duration
1	Dynamics and Control in State-Space (DCSS_15)	Prof. Ashok Joshi Aerospace Engineering	May 18 -22, 2015 (5 days)
2	Solar Photovoltaic Training for Technicians	Prof. Chetan S. Solanki Energy Systems Engineering	May 18 -22, 2015 (5 days)
3	Strategic Leadership Program	Prof. Ashish Pandey School of Management	May 18 -20, 2015 (3 days)
4	Advances in Variable Structure and Sliding Mode Control	Prof. B. Bandyopadhyay Systems and Control Engineering	May 28 – June 01, 2015 (5 days)
5	Introduction to large Eddy Simulation	Prof. Amitabh Bhattacharya Mechanical Engineering	June 3 – 4, 2015 (2 days)
6	Problem Solving and Programming with C++	Prof. Supratim Biswas Computer Science & Engineering	June 13 – 17, 2015 (5 days)
7	Optimization and Game Theory: from Basics to Latest Trends (Examples from Telecom Power & Logistics)	Prof. Ankur Kulkarni Systems & Control Engineering	June 15-19, 2015 (5 days)



Campus Diary is edited and published by Public Relations Officer, IIT Bombay, Powai, Mumbai - 400 076.

Printed at IITB Printing Press

For Private Circulation Only.

Material for publication in Campus Diary should reach PPR section by the 25th of every month

(email : campusdiary@iitb.ac.in)

