

# Campus diary

February 2016

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INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

## Interim Convocation Ceremony: Degrees awarded to 107 students



Prof. D . V. Khakhar, Director, IIT Bombay, presenting degree certificate

Degrees were awarded to 107 (101 Ph.D., 2 M.Tech and 4 M.Sc.) students of the Institute on successful completion of their doctoral programmes at the Interim Convocation ceremony held on February 24, 2016.

The degrees were conferred upon those Ph.D. students who have completed all the requirements during the period from August 2015 to January 2016 and have requested for the degree to be awarded earlier than the 54<sup>th</sup> Convocation. The function was presided by Prof. Devang V. Khakhar, Director, IIT Bombay and Prof. Subhasis Chaudhuri, Deputy Director (Academic and Infrastructural Affairs) among others.

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. Let the motto of IITB be your guiding light.*

*Though you will be leaving the Institute today, you all as alumni of the Institute are important stakeholders and we intend to maintain strong ties with all of you.”*

Apart from the students and faculty members of the Institute, the ceremony was attended by the families and friends of the students.

Institute functionaries along with BOG Members at the Interim Convocation ceremony



## Hack-a-Thon 2016-Driving Innovation ( Make in India initiative )



Students during Make in India - Hack- a- Thon 2016

As part of the Make in India initiative, Hackathon 2016 was held on campus during February 10-16, 2016. IITB played perfect host to participants from 23 colleges across the country for the event. This unique event witnessed 118 enterprising students gather at the IITB campus to develop hardware and software solutions for complex urban challenges in three key areas viz. water, energy and transport. The students also got a chance to attend series of lectures and workshops by IITB professors during February 10-13, 2016. From 13th February onwards, they started intensive work—hackathon

style—to develop working solutions in the next 48 hours. Nine awards were presented (2 jury wards and 1 popular award in each category) at the final award ceremony which was held at the Make in India Week, Bandra Kurla Complex. Some international teams also participated in the Hack-a-Thon and their ideas were presented during the ceremony. Prof. Krithi Ramamritham supported by CUSE, IRCC, IDC, and Department of Civil Engineering led the Institute. It was a grand success.

## Meeting of the Russian-Indian Network of Institutions of Higher Education

The first meeting of the Russian-Indian Network of Institutions of Higher Education (RIN) was held at the Institute on February 11-12, 2016. The Institute is the Indian coordinator of RIN, while the co-organizer of the event from the Russian side is the Tomsk State University. The meeting was attended by 9 Russian universities and 11 leading Indian institutes.

The main objective of the meeting was to discuss the problems and prospects of cooperation between higher education institutions of India and Russia in the field of education, science and technology; to develop mechanisms of joint projects and programs implementation, and identification of an action plan for 2016-2017.

The participants presented their educational programs, scientific potential and capacities of high-



Prof. Devang Khakhar, Director, IIT Bombay, Prof. Rajiv Dusane, Dean (International Relations) along with RIN participants.

tech products development during the first day of the two day meet. Participants also explored the intricacies of scientific and educational process in both the countries. The second day was devoted to a lively debate on the issues of scientific and educational cooperation, and the coordination of proposals on the RIN's activities. Participants reached a consensus with regard to the main vector of scientific cooperation

development. Any potential joint project begins with the personal interaction of scientists. They create the foundation for further promotion of cooperation and its transformation in joint research activities or in joint doctoral programs. In view of the current difficulties in the creation of programs of double diplomas and degrees, the parties proposed to start cooperation through joint supervision of post-

graduate students. Many institutes present in the meeting already have successful experience in this sphere with European countries.

In conclusion, the participants expressed their readiness to actively collaborate and boost scientific and educational cooperation further on, which again confirms the high potential of Russian-Indian relations in these spheres.

## Abhyuday



Bollywood Actress Shraddha Kapoor at the third edition of Abhyuday, the social Fest of IIT Bombay

The third edition of Abhyuday, the social Fest of IIT Bombay was held during February 6-7, 2016. The theme of the festival this year was “Transforming Finance: Catering to the Emerging Class”. The festival witnessed experts from various fields coming together on one platform to discuss few of the nation’s pressing issues. From professors to their students, social innovators to unsung heroes, quora top writers to CEOs and COOs, everyone came together and presented their views on various societal issues and provided a new perspective.



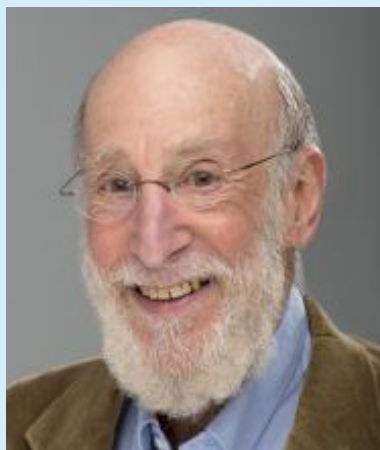
Bollywood Actress Sonam Kapoor during the series Unsung Heroes at Abhyuday.

The event was also attended by Bollywood actresses Sonam Kapoor and Shraddha Kapoor. While Sonam Kapoor featured as Neerja in the series Unsung Heroes, which highlighted the lesser-known contributions made by different individuals in the society, Shraddha Kapoor talked to students about the importance of following their passion.

Institute Colloquium /  
Lectures & Seminars



**Prof. S.P. Kothari**, Gordon Y. Billard Professor of Accounting and Finance and Director, MIT India Program, MIT Sloan School of Management, United States, delivered an Institute Colloquium titled “What Should India do to Accelerate Growth?” on February 1, 2016.



**Prof. Douglas Allen**, Professor of Philosophy, The University of Maine, USA, delivered an Institute Colloquium on the title “Is Gandhi Significant for India in 2016?” on February 10, 2016.



**Dr. Clement Sanchez**, Laboratoire de Chimie de la Matière Condensée de Paris, Collège de France, delivered the Prof. C.N.R. Rao Lecture Series on Nanoscience and Nanotechnology titled “Biomimetism and Bioinspiration: Sources of knowledge to create new materials” on February 29, 2016.

Departmental  
Lectures

**Department of Humanities and Social Sciences**

**Dr. Johanna Hoeffken**, Netherlands gave a talk in a seminar titled, “Different priorities for implementing micro hydro plants in India” on February 11, 2016.

**Prof. Douglas Allen**, University of Maine, USA, gave a talk on “Gandhi’s Philosophy: Theory, Practice, and Relative Truth” on February 17, 2016.

**Prof. Gerhard Rinkenauer**, Dortmund, Germany gave a lecture on the topic “Anticipation of upcoming events during driving: The role of action preparation” on February 19, 2016.

**Prof. Indradeep Ghosh**, Meghnad Desai Academy of Economics, Mumbai gave a lecture on the topic “Why does an economy go to pieces after a financial crisis?” on February 29, 2016.

**Department of Computer Science and Engineering**

**Prof. Holger Hermanns**, Saarland University, Germany, gave a talk on the topic “How good is your embedded design, if at all?” on February 11, 2016.

**Department of Energy Science and Engineering**

**Prof. Chris Greig**, Director UQ Energy Initiative, The University of Queensland, Brisbane, Australia, gave a lecture on the topic “The transition to a low-carbon economy: What’s really reasonable and possible?” on February 15, 2016.

**Department of Civil Engineering**

**Prof. B. S. Mazumder**, retired Senior Professor, Indian Statistical Institute Kolkata, gave a talk on “Turbulence statistics of flow over obstacle marks: An experimental and theoretical study” on February 16, 2016.

**Centre for Urban Science & Engineering (C-USE)**

**Dr. Santosh Sahu**, Assistant Professor, Madras School of Economics, Chennai, delivered a lecture in a seminar titled “Cooking Fuel Choices in Urban Indian Households” on February 26, 2016.

**Centre for Technology Alternatives for Rural areas (CTARA)**

**Dr. Ravi Chopra**, Director of People’s Science Institute, Dehra Doon, gave a talk on the topic “Science of the people, by the people, for the people” on February 8, 2016.

**SJM School of Management**

**Prof. S.P. Gautam**, Member of MP Public Service Commission, gave a talk in a seminar on the topic “Insights on Environmental Consciousness and Sustainable Development from Indian Traditional Wisdom” on February 12, 2016.

## Research in Focus

## E-nose to detect explosives, RDX



Centre for Excellence in Nanoelectronics at the Institute has recently demonstrated a nano-technology based portable electronic nose platform (known as X-Niff) to sniff explosive vapours from the congested places. The work on X-Niff was carried out under the leadership of Prof. V.Ramgopal Rao, Department of Electrical Engineering, IIT Bombay. Prof. Soumyo Mukherji, Department of Biosciences and Bioengineering, Prof. Anil Kumar, Department of Chemistry, Prof. Maryam Shojaei Baghini and Prof. Dinesh Sharma, Department of Electrical Engineering and their students were involved in this activity.

While delivering a keynote lecture on the technology and the mechanism at the Bangalore India Nano conference on March 4, 2016, Prof. Ramgopal Rao said that *“The X-NIFF is a nano-electro-mechanical based device which consists of specific coatings on its surface. There are tiny polymer cantilevers in the X-Niff, developed at IIT Bombay, whose length is typically the diameter of a strand of human hair. These cantilevers perform as sensors and the nano-coatings present in the cantilevers bind to the vapors of explosives, thereby detecting the presence of explosives, similar to a sniffer dog.”*

### Seminars / Conference / Workshops

**Prof. A.K. Dikshit**, Center for Environment Science & Engineering organized a workshop on “Appropriate Technologies for Treating and Disposing Municipal Solid Waste” on February 25, 2016 at SINE, IIT Bombay in collaboration with SINE incubated Firm SWEEP Enviro Private Limited.

**Prof. A. Malani**, Department of Chemical Engineering presented a poster titled “Role of surface ion on adsorption of water on hydrophilic surfaces” at Solid-Liquid Interfaces Workshop organized by CECAM at EPFL Laussane, Switzerland during January 25-27, 2016.

#### DrupalCon Asia 2016

DrupalCon Asia 2016 was held during February 18-21, 2016. The conference brought together thousands of people from across the globe who use, develop, design, and support the Drupal platform. The conference is a meeting point where improvements to the project are made, where important business connections are built, and where lifelong friendships bloom. The Drupal community gathers and joins together three times a year, for a full week dedicated to sharing and growing Drupal skills.

Drupal is content management software. It's used to make many of the websites and applications we use every day. Drupal has great standard features, like easy content authoring, reliable performance, and excellent security. But what sets it apart is its flexibility; modularity is one of its core principles. Its tools help to build the versatile, structured content that dynamic web experiences need.

### Awards, Honors and Distinctions

**Prof. Ram Gopal Rao**, Department of Electrical Engineering, has been selected to receive the prestigious Prof. CNR Rao Bangalore INDIA NANO Science Award for the year 2015 in recognition of his outstanding research contributions.

**Prof. G. Haripriya**, Department of Humanities and Social Sciences, has been invited to join the Department of Economics, Harvard University, as a Visiting Scholar for a period of one year

**Prof. Vinish Kathuria**, SJMSOM, has been awarded the “Distinguished Alumni Award” for Professional Achievements in the Field of Education by National Institute of Technology Kurukshetra.

**Prof. Krishna Kaliappan**, Department of Chemistry, has been selected as a fellow under “Dr. S. K. Pradhan Endowment established at the Institute of Chemical Technology, Mumbai in Pharmaceuticals Science & Technology” for the year 2015-16.

**Prof. A.S. Khanna**, Department of Metallurgical and Materials Science, has been appointed as Chairman of the sectional committee of the Bureau of Indian Standards for Raw materials for paints, varnishes and other products.

**Prof. Bijan Bandyopadhyay**, Department of Systems and Control Engineering has been appointed as an Associate Editor of the IEEE Transaction on Industrial Electronics for a period of three years.

**Prof. Ashutosh Kumar** co-workers, Ms. Nikita Malik and Mr. Jai Shankar Singh, Department of Biosciences and Bioengineering won the “Best Oral Presentation” and “Best Poster presentation” award in recently concluded National Magnetic Resonance

Symposium (NMRS) 2016 in Kharagpur, West Bengal.

**Prof. Sourav Pal**, Department of Chemistry, IIT Bombay, President of Chemical Research Society of India (CRSI), presided over the CRSI Annual meeting held at Panjab University, Chandigarh between February 5-7, 2016. He also chaired the Chemical Division Council meeting of Bureau of Indian Standards on March 9, 2016 at New Delhi.

### Invited Talk

**Prof. A.K. Dikshit**, Centre for Environment Science & Engineering chaired a pre-lunch session of the ‘Workshop on Hazardous and Medical Waste’ organised by Goa Chamber of Commerce and Industry on February 19, 2016. He also delivered talk on “Design, Operation and Maintenance of Secure Landfill for Biomedical and Hazardous Wastes”.

### Visits to foreign Universities / Organisations

**Prof. R. Balaji**, Department of Civil Engineering, visited Monash University, Melbourne, Australia as part of Australia-India Strategic Research Fund (AISRF) based joint-research project, during February 22-23, 2016. He also visited National Central University, Taiwan during February 24-28, 2016 under India-Taiwan Programme for Cooperation in Science and Technology based joint-research project.

**Prof. A.K. Dikshit**, Centre for Environment Science and Engineering, was invited by Malardalen University, Sweden as examiner for PhD thesis in Energy and Environmental Engineering titled “Microbiological Analysis of Municipal Wastewater Treating Photobioreactors” of Mr. Ivo Krustok in the Department of Energy, Building and Environment. During his visit from January 29 to

February 6, 2016, he gave talks on “Decolourization of Distillery Wastewater by Fungal Batch Aerobic Bioreactor (FBAR)”, “Distillery Wastewater Treatment using Fungal Sequencing Batch Aerobic Bioreactor (FSBAR)”, “Distillery Wastewater Treatment using Fungal Sequential Membrane Bioreactor (FSMBR)” and “Rationalization of Air Quality Monitoring Network for a City based on Fuzzy Logic and Human Health Risk” to undergraduate and postgraduate students. He also visited various laboratories and saw instrumental and experimental setups and various facilities in School of Business, Society and Environment and School of Innovation, Design and Engineering. He also, had interactions with several faculty members about various collaborative projects. The visit to Idélab was especially useful, which is a creative meeting place where students, staff and researchers at Mälardalen University get help to realize and do business with their ideas. Idélab acts as a sounding board and gives you help to get started. He also visited the Växtkraft Biogas Plant manufacturing transport biogas fuel from the Västerås city’s food waste.

### Publications

**Prof. A. Malani**, Department of Chemical Engineering, published a paper titled “Comparative Study of Water Adsorption on a H<sup>+</sup> and K<sup>+</sup> Ion Exposed Mica Surface: Monte Carlo Simulation Study” in *Langmuir*, 2016, vol. 32, pp.1034-1046.

**Prof. Sambasivarao Kotha**, Department of Chemistry and his co-workers from Chemistry Department have published eight articles in *Beilstein Journal of Organic Chemistry (BJOC)* in a special issue, “Progress in metathesis chemistry- II” published by the Beilstein-Institut zur Förderung der Chemischen

Wissenschaften. In the special issue there are 27 articles from various researchers from various parts of the world. Among these eight articles, four articles were placed in most downloaded category. The hard copy of the issued was published in January 2016.

### Appointments

**Dr. Sherinmol Thomas**,



Department of Biosciences and Bioengineering, has been appointed as UGC Women Post Doctoral Fellow w.e.f. February 1, 2016.

**Dr. Rahul D. Telore**, Department



of Chemistry, has been appointed as Post Doctoral Fellow w.e.f. February 1, 2016.

**Dr. Kishor G. Thorat**,



Department of Chemistry, has been appointed as Post Doctoral Fellow w.e.f. February 1, 2016.

**Dr. Ashutosh Mahajan**,



Department of Electrical Engineering, has been appointed as Post Doctoral Fellow w.e.f. February 3, 2016.

**Dr. Tarasankar Das**, Department



of Chemistry, has been appointed as Post Doctoral Fellow w.e.f. February 5, 2016.

### NOTIFICATION

**Prof. N. N. Viswanathan**, Department of Metallurgical Engineering & Materials Science has been appointed as Associate Dean-1 (IPS) and has taken over the charge w.e.f. February 8, 2016.

### Retirements on February 29, 2016

**Prof. Uday B. Desai**, Professor,



Department of Electrical Engineering, retired after 29 years of service.

**Shri Subhash G. Mudgal, Jr.**



Supdt., Center for Technology Alternatives for Rural Areas Science, retired after 39 years of service.

**Shri Mukundrao R. Pawar**,



Sr. Attdt., Department of Energy Science & Engineering, retired after 37 years of service.

**Shri Chandra Rajan**, Sr. Helper,



Estate Office, retired after 35 years of service.

**Shri Namdeo S. Jadhav**,



Sr. Helper, Department of Metallurgical Engineering & Materials Science, retired after 36 years of service.

**CEP courses scheduled during April 2016**

No.	Course Title	Course Coordinator / Department	Duration
1	3D Printing	Prof. K.P. Karunakaran, Dept of Mechanical Engineering	April 11 – 13, 2016 (3 days)
2	Wide Area Monitoring Control And Protection of Transmission Networks	Prof. S.A. Soman, Dept of Electrical Engineering	April 17 – 18, 2016 (2 days)
3	Data Analytics For Process Monitoring, Soft Sensing Controller Performance Assessment	Prof. Ravindra D. Gudi, Dept of Chemical Engineering	April 25 – 27, 2016 (3 days)
4	Exploring Self And Enhancing Entrepreneurial Leadership	Prof. S. Bhargava SJM School of Management	April 28 – 29, 2016 (2 days)

