

Connections

IIT Gandhinagar



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Connections is the quarterly newsletter for friends of IIT Gandhinagar

Institute News

THIRD CONVOCATION CEREMONY

The third convocation of the Institute was held on Aug 2, 2014 in which a total of 161 students, comprising of 123 BTech, 36 MTech and 2 PhD students were conferred degrees. **Shri K Venkataramanan**, Chief Executive Officer & Managing Director, Larsen & Toubro Limited, was the chief guest at the event. **Dr Baldev Raj**, president, Indian National Academy of Engineering, and chairman of IITGN BoG, presided over the convocation. The institute awarded 30 medals and awards for academic, sports, leadership and community service to the following students: President's Gold Medal, BTech (**Dhwanil Shukla**), President's Gold Medal, MTech (**Ritesh Jain**), Institute Gold Medal, BTech (**Dhwanil Shukla, Pranav Bagaria, Shashank Tyagi**), Institute Gold Medal, MTech



(**Mishra Nidhi, Ritesh Jain, Rachit Prasad**), Institute Silver Medal, BTech (**Shashank Agarwal, Pamulapati Sushma Sri, Aishwarya Agrawal**), Director's Gold Medal, BTech (**Kotak Yash Prashant**), Director's Silver Medal, BTech (**Shashank Agarwal, Akshay Jain, Shah Nisarg Nikhil**), Outstanding Innovation (**Kotak Yash Prashant**), Integrity and Exemplary Human Qualities (**Sushrut Pramod Meshram**), Outstanding Research, BTech (**Akshay Jain**), Outstanding Research, MTech (**Rachit Prasad**), Outstanding Research, PhD (**Sumitava Mukherjee**), Overall Outstanding Performance in Sports (**Suresh Choudhary**), Outstanding Performance in Outdoor Sports (**Gavasane Ritu Milind**), Outstanding Performance in Athletics (**Suresh Choudhary**), Outstanding Performance in Arts and Culture (**Bhaskarjyoti Das**), Pioneer Batch Award for Outstanding Leadership (**Katre Vibhav Vikas**), Best Performance in the core courses in Engineering Graphics, and Manufacturing and Workshop Practice (**Katre Vibhav Vikas**), Best Performance in core courses of Mathematics (**Shashank Tyagi**), Best Performance in core courses in Physics and Chemistry (**Aishwarya Agrawal**), Best Performance in core courses in Humanities and Social Sciences (**Katre Vibhav Vikas**), and Best Overall Performance in Humanities and Social Sciences subjects (**Shaliwahan Singh Rathore**).

GLOBALISATION OF IITGN'S CURRICULUM WINS WORLD EDUCATION AWARD 2014

IIT Gandhinagar was awarded the **World Education Award 2014** at the World Education Summit, New Delhi, Aug 8, 2014. IITGN was declared winner in the category of "Global Collaborative Learning" at the annual summit, which is organized by Elets Technomedia, All India Confederation for Women's Empowerment through Education (AICWETE), National Commission for Minority Educational Institutions (NCMEI) and United Nations Educational Scientific and Cultural Organization (UNESCO). IITGN was recognized for its outstanding performance in globalizing its curriculum, which includes study abroad opportunities for nearly a third of its undergraduate students, engaging a large number of international faculty, collaborative courses and projects with leading international institutes and participation of international students in its programmes.



PEER REVIEW OF IITGN

The External Peer Review of IIT Gandhinagar was carried out on Aug 28-29, 2014 by a peer review committee comprising eminent persons namely, **Prof G K Mehta**, Hon Eminent Scientist, Inter University Accelerator Centre, New Delhi; **Prof Indira Rajaraman**, former professor, IIM Bangalore and member of 13th Finance Commission; **Mr Vijay Thadani**, CEO, NIIT Technologies Ltd, New Delhi. At the start, the committee was apprised of the genesis of the institute and its academic and administrative structure by the Director and the Deans. This was followed by individual presentations outlining the academic and research activities and achievements of the Engineering, Sciences and HSS disciplines. The committee members also reviewed the laboratory, library and hostel facilities before finally meeting with undergraduate and graduate students to hear about their experience of life at IITGN. The peer review exercise was a time for introspection and stock-taking for the institute. The wide-ranging and thought-provoking discussions will be immensely helpful as IITGN grows in the years ahead.

FOUNDATION PROGRAMME 2014

The Foundation Programme for the incoming batch of undergraduate students was conducted during July 21-Aug 24, 2014. This immersion programme nurtures students in a holistic and engaging manner through workshops, talks and projects along the themes of creativity, social awareness, leadership, communication, values, ethics, sports and physical fitness. The programme was inaugurated by **Prof Sanjeev Sanghi**, member of

the Board of Governors, IIT Delhi, along with IITGN alumni **Sarthak Jain**, CEO, GridAnts Technologies and **Shrankha Narya**, independent visual artist. This year's programme included several workshops on sketching, theater, creating animations and comics and poetry. The Foundation Programme was coordinated by **Prof Anirban Dasgupta**, **Prof Surjeet Kour**, **Prof Sairam Mallajosyula**, **Prof Sharmistha Majumdar** and **Prof Pratik Mutha**.

Reaching Out

- **Dr Baldev Raj**, Chairman of the Board and **Prof Sudhir K Jain**, Director attended a day-long Conference of Chairmen of Boards of Governors, and Directors of IITs at Rashtrapati Bhawan, New Delhi, Aug 22, 2014. President Pranab Mukherjee and Prime Minister Narendra Modi were lead speakers at the conference.
- **Prof Sudhir K Jain** attended the 10th US National Con-



ference on Earthquake Engineering during July 21-25, 2014, and chaired the **Executive Committee meeting of IAEE** at Anchorage, Alaska. He took this opportunity to visit well-wishers and friends of the Institute in Tampa (Florida), Los Angeles, and San Francisco. During August 11-14, 2014 he visited four universities in Singapore. **Prof Amit Prashant** visited Institutes in Arizona and California, USA for research collaborations, July 5-19, 2014. Prof Prashant also visited West Coast USA, Canada with Government of Gujrat delegation and University of Tennessee, USA, Aug 20-Sep 7, 2014.

Support for the Institute



Mr Atul Jain, Chairman & CEO of TEOCO, has made a major contribution to support IITGN. Mr Jain founded TEOCO in 1994 with the idea of principled entrepreneurship and employee ownership. TEOCO focuses on business ethics, with a particular emphasis on

its core values of alignment with employees, clients and community. Today, TEOCO is a market leading global organization with operations on six continents providing cost, routing, revenue and network management solutions to top communications service providers worldwide.

Faculty News

AWARDS AND RECOGNITION



Prof Kabeer Jasuja and **Prof Babji Srinivasan** have been selected for the **Inspire Faculty Award** by the Department of Science and Technology. The

award is given to young scientists under the age of 32.



On Aug 19, 2014, **Prof Srinivas Reddy** launched his book **The Dancer and the King**, a translation of Kalidasa's comedic play *Malavikagnimitram*, with a staged reading of Act II along with musical accompaniment.

NEW FACULTY

The following faculty joined IITGN during this quarter:

Name	Designation	Discipline	PhD/Last Degree	Date of Joining
Vinod Chandra	Assistant Professor	Physics	IIT Kanpur, 2009	01.07.14
Sanjaykumar Amrutiya	Assistant Professor	Mathematics	HCRI, Allahabad, 2012	01.07.14
Souradyuti Paul	Assistant Professor	Computer Science & Engineering	Katholieke Universiteit Leuven, Belgium, 2006	01.07.14
B N Patnaik	Visiting Professor	Humanities	CIEFL, 1977	07.07.14
Chetan Pahlajani	Assistant Professor	Mathematics	University of Illinois, 2007	14.07.14
R R Puri	Visiting Professor	Physics	Bombay University, 1981	14.07.14
K R Padiyar	Visiting Professor	Electrical Engineering	University of Waterloo, 1972	15.07.14
Sudipta Sarkar	Assistant Professor	Physics	University of Pune, 2009	21.07.14
Laurent P G Fradet	French Language Tutor	Humanities	University of Toulouse, 2013	01.08.14
Guo Fei	Visiting Faculty	Humanities	Sichuan University, 2007	02.09.14

SCHOLAR-IN-RESIDENCE

SPONSORED PROJECTS

- **Intelligent adaptive reality based stroke rehabilitation platform for elderly** sponsored by the Department of Science and Technology. Principal investigator: **Prof Uttama Lahiri**, Electrical Engineering.
- **Modeling spread of vector borne diseases in urban areas from spatially interacting network perspective** sponsored by the Science and Engineering Research Board (SERB). Principal investigator: **Prof Shivakumar Jolad**, Physics.
- **Heat flow and visco plastic flow based model for friction stir welding of copper** sponsored by Department of Atomic Energy-BRNS. Principal investigator: **Prof Amit Arora**, Materials Science & Engineering.
- **River basin scale hydrological investigation & characterization using variable infiltration capacity (VIC) model** sponsored by the National Remote Sensing Center (NRSC), Hyderabad. Principal investigator: **Prof Vimal Mishra**, Civil Engineering.

- **Hydrologic modeling and climate change impact assessment in the Ganga river basin** sponsored by the Ministry of Environment and Forest (MoEF). Principal investigator: **Prof Vimal Mishra**, Civil Engineering.
- **Sediment dynamics and sediment connectivity in the Kosi basin: implications for river hazards** sponsored by International Centre for Integrated Mountain Development (ICIMOD) Principal investigator: **Prof Vikrant Jain**, Earth Sciences.

CONSULTANCY PROJECTS

- **Providing hydrologic model output** for Institute of Rural Management, Anand. Principal investigator: **Prof Vimal Mishra**, Civil Engineering.
- **MMS SWIR Magnet Holding Cage** for IGTR-RP. Principal investigator: **Prof N Ramakrishnan**, Mechanical Engineering.

Activities at IITGN

INDUSTRY OPEN HOUSE



Delegates from more than 50 industries from all over India explored opportunities to partner with IIT Gandhinagar at the Institute's first **Industry Open House** on August 23, 2014. The event is a part of IITGN's plan to expand and scale-up its engagement and communication with industry. The event showcased IITGN's expertise, infrastructure and capabilities through presentations, posters, laboratory and library visits, idea pitches, and instrumentation and product demonstrations.

TEDx IIT GANDHINAGAR

IITGN hosted its first **TEDx IIT Gandhinagar** on Aug 31, 2014 in collaboration with TED, a nonprofit organization devoted to "Ideas worth Spreading". The event featured seven eminent personalities from diverse domains: **Dr Vidyadhar Oke**, inventor of the 22 shruti harmonium; **Harun Robert**, India's biggest kids' icon and animation film-maker; **Khurshed Batliwala**, faculty at Art of Living and director of WAYE (World Alliance for Youth Empowerment); **Neeti Kailas**, a social entrepreneur and winner of the Rolex 2014 Award for Enterprise; **Rajat Nagpal**, filmmaker and entrepreneur; and **Jiten Thukral** and **Sumir Tagra**. The event was organized by **Akhilesh Gommare**, **Mudit Rathor**, **Vaibhav Palkar**, and **Vidyanand Wagh**.

HINDI DIWAS @ IITGN

The institute celebrated **Hindi Diwas** on Sep 13, 2014 to mark the significance of Hindi. Speaking at the event, **Prof Sudhir K Jain**, director, said that Hindi serves as a common thread that binds together the diverse population of the nation. Students, faculty and staff members actively participated in a poetry recital event. The event also hosted fun and entertaining games including an open challenge of Amir Khusrao's riddles, and "Complete the Muhavra" in which one half of a popular Hindi proverb was given and the participants had to complete the remaining half.

SHORT COURSES/ WORKSHOPS/ PANELS

- Short course on **Tensor Mathematics in Constitutive Modeling** by **Prof Gyan Vikash**, Shiv Nadar University, Noida, July 9-13, 2014.
- Workshop on **Remote Sensing of Dholavira & Environs** by **Dr M B Rajani**, an expert on remote sensing applications to archaeology, Aug 5, 2014.
- Short course on **Crystallography** by **Prof T Ramachandran**, former faculty at IITK, Aug 11-25, 2014.
- International workshop on **Fire Investigation**, Aug 24, 2014 and international workshop on **Enclosure Fire Dynamics**, Aug 25, 2014 by **Dr Björn Karlsson**, Director General of the Iceland Construction Authority and an Associate Professor at the University of Iceland.
- Short course on **Financial Considerations in Engineering Decisions** by **Dr Kasivisvanathan Chelvakumar**, president of EPIR Technologies, Chicago, Sep 2-11, 2014.
- The **8th National Frontiers of Engineering (NAT-FOE-08) Symposium** with "Safety" as its main theme

and the four sub-themes including: Earthquake engineering and safety; Process and fire safety; Road safety and Cognition and safety was organized during Sep 5-6, 2014. The symposium was attended by 75 participants & coordinated by **Prof Pranab Mohapatra, Prof Dhiman Basu, Prof Rajagopalan Srinivasan, Prof Chinmay Ghoroi, Prof Krishna**

LECTURES

- **How to make teaching more interactive/ challenging by raising the level of problems given in standard textbooks** by **Prof M K Harbola**, IIT Kanpur, July 4, 2014.
- **Synchrotron radiation facility at RRCAT** by **Dr Sudip K Deb**, former head, Indus Synchrotron Utilization Division, Raja Ramanna Centre for Advanced Technology (RRCAT), Indore, July 7, 2014.
- **Large and great earthquakes in the stable continental region of India** by **Prof J R Kayal**, Institute of Seismological Research, Gandhinagar, July 10, 2014.
- **Cyber defense of critical infrastructure systems** by **Prof Vittal S Rao**, Director, Smart Grid Energy Center, Texas Tech University, July 22, 2014.
- **Prof T R Bieler**, Michigan State University, USA, delivered a series of three lectures on **Superplastic forming in aerospace, automobile and electronic industries**, July 28-29, 2014.
- **On the complexity of some graph/multigraph decomposition problems** by **Prof Shailesh Tipnis**, Illinois State University, July 31, 2014.
- **Introduction to probability theory and stochastic processes** by **Prof Krishna B Athreya**, Iowa State University, Aug 1, 2014.
- **Engineers can fight social injustice better - a personal story** by **Mr Kailash Satyarthi**, internationally acclaimed child right's activist and pioneer in the fight against child slavery, Aug 4, 2014.
- **Small voices sing big songs: music and the development imaginary in Western Rajasthan, India** by **Dr Shalini Ayyagari**, an ethnomusicologist who specializes in the music of South Asia, Aug 12, 2014.
- **Picture Abhi Baki Hai** by **Prof Rachel Dwyer**, School of Oriental & African Studies, London, Aug 13, 2014.
- **The barriers in the search for a cure for cancer: Recent understandings and advances** by **Prof Shiladitya Sengupta**, Harvard Medical School and MIT, Aug 19, 2014.
- **Nanodevice technology and smarter planet initiatives** by **Dr Murali Kota**, Chief Technologist, IBM India Semiconductor Research and Development Center, Aug 22, 2014.

- **Prasad, IITGN and Prof Vinod Vasudevan, IIT Kanpur.**
- Short course on **X-ray Diffraction** by **Prof T Ramachandran**, former faculty at IIT Kanpur, Sep 8-18, 2014.
- A workshop on **Low Cost Hi-Tech Automation** was conducted by **Prof N Ramakrishnan**, and **Prof Joyce Mekie**, Sep 25-27, 2014.

- **Elementary particles in our Universe and the search for Higgs boson** by **Prof Raghavan Rangarajan**, PRL Ahmedabad, Aug 29, 2014.
- **An entrepreneur's journey of ideas, trials and success** by **Mr Pranit Banthia**, Founder and CEO, Hi Tech group of companies, Ahmedabad, Aug 30, 2014.
- **Capitalizing on the economy of expertise** by **Dr Rajendra Bera**, chief mentor at Acadinnet Education Services India Pvt Ltd, Bangalore, Sep 3, 2014.
- **Emerging revolution in India's energy sector** by **Prof Rajendra Singh**, Clemson University, Sep 3, 2014.
- **Aesthetics and politics: Community and conflict transformation through theatre** by **Prof Henry Schwarz**, General Editor, Blackwell Encyclopedia of Postcolonial Studies, Sep 4, 2014.
- **From IIT to mapping genes** by **Ms Anu Acharya**, CEO, mapmygenome, Sep 4, 2014.
- **Orientation programme on New face of administration in the IIT system for the non-teaching staff of IITGN** by **Shri D K Ghosh**, former Registrar, IIT Bombay, Sep 6, 2014.
- **Engineering a sustainable future** by **Prof Nirmal Sethia**, California State Polytechnic University, Pomona, Sep 11, 2014.
- **From Dandy to Dandi: Gandhi's journey to social justice** by **Prof Tara Sethia**, California State Polytechnic University, Pomona, Sep 11, 2014.
- **Queer Movement in India: Rights, Struggles and Activism** by **Mr Pallav Patankar**, Director, HIV Programmes of India's first registered LGBT NGO, The Humsafar Trust, Mumbai, Sep 11, 2014.
- **Thought experiments, models and the heuristic power of metaphors in science** by **Prof Bipin Indurkha**, AGH University of Science and Technology, Cracow, Poland, Sep 11, 2014.
- **Patterns of life and death: Using physics to understand complex dynamics in human physiology** by **Prof Sitabhra Sinha**, Institute of Mathematical Sciences, Chennai, Sep 19, 2014.
- **Biogas technology** by **Dr Sharad Kale**, Bhabha Atomic Research Centre, Mumbai, Sep 23, 2014.

Student and Staff Activities

AWARDS AND RECOGNITION

Manish Kumar received the **Young Presenter Award** at Clostridium XIII (13th International Conference on the Genetics, Physiology and Synthetic Biology of Solvent and Acid-forming Clostridia), Sep 19-21, 2014, Shanghai, China.



GRASSROOTS ENTREPRENEURSHIP PROGRAMME

IITGN's recently launched Grassroots Entrepreneurship Programme, **NEEV** (Nurture & Empower Entrepreneurial Ventures),

conducted its first Training of Trainers (TOT) workshop on entrepreneurship development from Sep 1-5, 2014. NEEV aims at helping the growth of entrepreneurship through training, mentoring and linkages for access to finances and is developed in collaboration with I Create, a non-profit organization. Twenty nine people including IITGN employees and their family members, and members from Saffrony Institute of Technology, Mehsana, participated in the workshop conducted by **Mr Ulhas Kamath, Mr B R Venkatesh** and **Mrs Tejaswini Venkatesh** from I Create India.

INDEPENDENCE DAY CELEBRATIONS

The 68th Independence Day celebrations on Aug 15, 2014 began with the flag hoisting ceremony by the Director **Prof Sudhir K Jain**. On this occasion 114 students who featured on the Dean's List 2013-14 (semester II) by securing an SPI of 8.5 or more, were felicitated. It was followed by a cultural programme including patriotic songs, poems, and a drama about the trial of Bhagat Singh.