# Connections

# IIT Gandhinagar



2015-2016, Volume VIII, Issue I July - Sep 2015

Connections is the quarterly newsletter for friends of IIT Gandhinagar

# **Institute News**

## FOURTH CONVOCATION CEREMONY



The fourth convocation of the Institute in which 173 students were awarded degrees, was held at its permanent campus at Palaj on Aug 1, 2015. The graduates included 105 BTech, 31 MTech, 6 PhD, 25 MSc and 6 PGDIIT students. **Shri Baba N Kalyani**, chairman & managing director, Bharat Forge Limited; & chairman, Kalyani Group of Companies, was the chief guest at the event. **Dr Baldev** 

**Raj**, chairman of IITGN Board of Governors, presided over the event. The Institute awarded 40 medals and awards to recognize achievements in academics, sports, leadership and community service. The recipients of the awards are as follows:

President's Gold Medal, BTech (Preet Shah), President's Gold Medal, MTech (Gundeep Kaur Sudan), President's Gold Medal, MSc (Vishakha), Institute Gold Medal, BTech (Prathamesh Ganesh Bhat, Sudiksha Sridhar, Preet Shah), Institute Gold Medal, MTech (Gundeep Kaur Sudan, Preeti Rathi, Ganeriwala Mohit Dineshkumar, Krishna Kumar Saxena), Institute Gold Medal, MSc (Amarjyoti Das Mahapatra, Vishakha, Pamnani Ujival Ashokkumar) Institute Silver Medal, BTech (Ayush Choudhary, Tushti Shah, Mishita Jaiswal), Director's Gold Medal,



# **NEW PROGRAMMES FROM NEXT ACADEMIC YEAR**

IITGN plans to start BTech, MTech and PGDIIT programmes in the discipline of Computer Science and Engineering (CSE) from the Academic Year 2016-17. The Institute currently runs BTech,



BTech (Harsh Gupta), Director's Gold Medal, MTech (Taruna Yadav), Director's Gold Medal, MSc (Goldy Yadav), Director's Silver Medal, BTech (Soham Harshe, Monish Bhangale, Raj Shah), Outstanding Innovation (Dhyey Shah), Outstanding Social Service (Akash Keshav Singh), Integrity and Exemplary Human Qualities (Eepsit Tiwari), Outstanding Research, BTech (Rohan Patidar), Outstanding Research, MTech (Ganeriwala Mohit Dineshkumar), Outstanding Research, MSc (Vishakha), Overall Outstanding Performance in Sports (Parth Sane), Outstanding Performance in Aquatics (Parth Sane), Outstanding Performance in Indoor Sports (Monish Bhangale), Outstanding Performance in Outdoor Sports (Chetan Patil), Outstanding Performance in Athletics (Taruna Yadav), Outstanding Performance in Arts and Culture (Eepsit Tiwari), Pioneer Batch Award for Outstanding Leadership (Akash Keshav Singh), Best Performance in core courses in Engineering Graphics, and Manufacturing and Workshop Practice (Prathamesh Ganesh Bhat), Best Performance in core courses of Mathematics (Mishita Jaiswal), Best Performance in core courses in Physics and Chemistry (Preet Shah), Best Performance in core courses in Humanities and Social Sciences (Nishant Rao), Best Overall Performance in Humanities and Social Sciences subjects (Sukriti Gakhar).

MTech and PGDIIT programmes in five disciplines viz, Chemical Engineering, Electrical Engineering, Mechanical Engineering, Civil Engineering, and Materials Science and Engineering.



## **FOUNDATION PROGRAMME 2015**

From adventure sports to treasure hunt, IITGN used an array of innovative methods to groom its incoming batch of undergraduate students during the five-week long Foundation Programme held during July 23-Aug 28, 2015. Appropriately, the event was flagged off by the chief guest Prof Urjit Yajnik, a professor of physics at IIT Bombay and the first dean of Academic & Student Affairs at IITGN. The programme began with a welcome address by **Prof S P** Mehrotra followed by an interactive session with the deans and the academic co-ordinators of the various disciplines. The five weeks were interspersed with sessions on story-telling, photography, sketching, music, painting, making comic books, sculpture, yoga, sports, heritage walk, theatre activities, street cleaning and tree-planting. Several engaging talks on leadership, gender sensitivity, ethics and value education were also organized to encourage the students to open up their minds. The city-based dance and theatre group, Darpana Academy, conducted workshops on Kalaripayattu and Folk Dance followed by a lecture-cum-demonstration by the renowned danseuse Ms Mallika Sarabhai. The programme was coordinated by Prof Abhay Raj Singh Gautam, Prof Madhumita Sengupta, Prof Bharadwaj Coleppa and Prof Sourindra Choudhury.

# **FIRST IITGN ALUMNI MEET**

The Alumni Association of IIT Gandhinagar hosted 50 alumni at its first Annual Alumni Meet on Aug 1, 2015. An Alumni-Student Interaction session provided the current students an opportunity to engage themselves with alumni working in more than 40 different organizations and exchange ideas with them. A guided tour of the permanent campus was also arranged for the alumni. Mr Pratyul Kapoor, executive council member of the Alumni Association addressed the members and discussed various issues and the association's plans to take up further activities. This was followed by an address by Prof Jaison Manjaly, dean, Student Affairs. Mr Anshul Gupta presented the director Prof Jain with a gift of Rs 6 lakhs raised by the class of 2015. The Meet concluded with alumni-faculty interaction over dinner. The event was coordinated by Muzammil Rawoot, M Surya, Nilay Thakor, Darshil Chauhan and Anikesh Kamath, student coordinators, IITGN Alumni Cell; and Prof Superb Misra, faculty advisor, Alumni Affairs, IITGN.



# **Support for the Institute**

# **REACHING OUT**

Prof Sudhir K Jain, director, and Mr Ravi Mistry, executive director, IITGN Foundation in USA met with friends and well-wishers of the Institute in Dallas on July 21, 2015 and in Houston on July 22, 2015. The event at Dallas was facilitated by Ms Neelima Gonuguntla, president, US-India Chamber of Commerce, Dallas Fort Worth, Texas and the one at Houston was hosted by Mr Mihir and Mrs Vaishali Mody.

Prof Jain, Mr Mistry and **Prof Achal Mehra**, dean, Strategic Planning & Special Initiatives represented IITGN at the **IIT Global Leadership Conference**, San Jose, California, July 24-25, 2015. Prof Jain participated on a panel on **Innovations in Higher Education**. Prof Jain and Mr Mistry met with a number of executives, entrepreneurs, and investors and hosted a meeting of IITGN's US based alumni at Santa Clara on July 23, 2015.

Prof Jain also visited California Institute of Technology and signed a 3-year agreement for student exchanges. **Mr Pramod Kunju**, president, PAN IIT Alumni Association, Southern California organized an event "Chai pe Charcha – Raising the Bar in Engineering Education" for Prof Jain to share IITGN story with well-wishers of the Institute.



# **Faculty News**

#### **AWARDS AND RECOGNITION**

• Prof Arnab Dutta received the EMSL's 2014 MT Thomas Award (Environmental Molecular Sciences Laboratory) for Outstanding Postdoctoral Achievement on Sep 30, 2015. He received this award in recognition of his scientific progress and research of bio-inspired molecular catalysts.



Prof Pratik Mutha's poster with his foreign collaborators won the Best Poster Award in the "Theoretical Motor Control" category at the Progress in Motor Control Conference held in Hungary, July 21-25, 2015. This work was co-authored by Hannah Lefumat, R Chris Miall, J L Vercher and Fabrice Sarlegna.



# **BOOK RELEASE**

- Mapping Indo-Pacific Beads vis-à-vis Papanaidupet, an ethno-archaeological study and documentation of a unique glass-bead manufacturing centre in Andhra Pradesh identical to those of 2,500 years ago; by Dr Alok Kanungo was released by Prof Sudhir K Jain on Aug 14, 2015 during the Stone-beads workshop.
- The book titled **Fence** written by **Prof Rita Kothari** was launched by Zubaan Publishing, in Aug 2015. The book is a translation of the Gujarati novel, **Vaad** by **Ila Arab Mehta**.

## PATENTS APPLIED

 A cost-effective microcontroller-based health monitoring device that can non-invasively measure ones physiological indices, e.g., diastolic and systolic blood pressure, hemoglobin, pulse rate,

- etc has been developed and applied for patent application by **Prof Uttama Lahiri** and her students, **Dhaval Solanki** and **Poojan Oza**.
- Another cost-effective home-based device SmartEye, a gaze-based diagnostic & prognostic tool for stroke patients and also used for operant-conditioning for Visuo-motor Balance Therapy has been developed and applied for patent application by Prof Uttama Lahiri and her collaborators, Dr Anirban Dutta (INRIA, France) and Dr Abhijit Das (Director, Institute of Neurosciences, Kolkata).

#### SPONSORED PROJECT

 Role of predictive mechanisms in attention capture by action sponsored by Department of Science & Technology. Principal investigator: Prof Meera Mary Sunny, Humanities & Social Sciences.

#### **NEW FACULTY**

The following faculty joined IITGN during this quarter:

Name	Designation	Discipline	PhD/Last degree	Date of joining
Rupak Banerjee	Assistant Professor	Physics	University of Calcutta, 2012	01.07.15
Virupakshi Soppina	Assistant Professor	Biological Engineering	Gulbarga University, 2006	01.07.15
Ravi Hegde	Assistant Professor	Electrical Engineering	University of Michigan, 2008	06.07.15
Kamalakar Karlapalem	Professor	Computer Science & Engineering	Georgia Institute of Technology, 1992	23.07.15
Nitin Khanna	Assistant Professor	Electrical Engineering	Purdue University, 2009	23.07.15
Pedro Pombo	Visiting Assistant Professor	Humanities	ISCTE-IUL, Lisbon, 2015	07.08.15
Atul Abhay Dixit	Assistant Professor	Mathematics	University of Illinois at Urbana-Champaign, 2012	14.08.15
Neeldhara Misra	Assistant Professor	Computer Science & Engineering; Mathematics	The Institute of Mathematical Sciences, Chennai, 2012	22.09.15

# **DISTINGUISHED SCHOLAR-IN-RESIDENCE**

Name	Affiliation	Date of joining		
Nishant Shah	Institute of Culture and Aesthetics of Digital Media, Leuphana University, Lueneburg	05.08.15		
Shungo Kawanishi	Professor/Advisor to the President, Japan Advanced Institute of Science and Technology	28.08.15		
FULBRIGHT SPECIALIST				
Umesh Garg	Professor, University of Notre Dame	03.08.15		

# **Activities at IITGN**



# 69<sup>™</sup> INDEPENDENCE DAY CELEBRATIONS

The 69<sup>th</sup> Independence Day celebrations held at Palaj campus began by hoisting of the flag by the director, Prof Sudhir K Jain. On this occasion, 64 students who featured on the Dean's List 2014-15 (Semester II) by securing an SPI of 8.5 or more, were felicitated with a letter of appreciation and a topical book (In the light of what we know by Zia Haider Rahman). It was followed by a cultural programme including music performances, dance, drama and poetry

recitation. The drama **Mumbai Chodo** by Abhinaya, the Drama Club, was received very well by the audience.



#### **HINDI DIWAS-2015**

IITGN celebrated **Hindi Diwas** on September 14, 2015 at its Palaj campus. The two-hour long event was inaugurated by the director, **Prof Sudhir K Jain**, and was attended by faculty, staff and students of the institute. The programme included poem recitations, riddles, and drama on Heer-Ranjha by the students.

# **OBSERVANCE OF SADBHAVANA DIWAS**

Sadbhavana Diwas is observed nation-wide on August 20 every year. The theme of Sadbhavana is to promote National Integration & Communal Harmony among people of all religions, languages and regions. On this occasion, a pledge for unity and harmony was taken by all faculty and staff members.

# SUMMER TRAINING PROGRAMME FOR FFE SCHOLARS

IITGN hosted a Summer Training Programme for FFE (Foundation for Excellence) scholars during June 15-July 04, 2015. The programme was attended by a total of 58 engineering students from across the country. The programme aimed at technical training, communication skills and spoken English. The event was coordinated by Ms Sushma Abburi, COO, Foundation for Excellence India Trust; and Prof Jaison Manjaly, HTGN.

# SHORT COURSES/ WORKSHOPS

Short term course-cum-workshop on History, Science & Technology of Stone Beads in collaboration with Archaeological Survey of India, Aug 10-14, 2015. Resource persons included Prof J M Kenover, Dr Randall Law, University of Wisconsin-Madison, USA; Prof Massimo Vidale, University of Padova, Italy; Dr Bérénice Bellina, National Centre for Scientific Research, France; Dr Bunchar Pongpanich, Buddhadasa

- Indapanno Archives-BIA, Thailand; Dr L Dussubieux, The Field Museum, Chicago; Prof Manabu Koiso, Kobe Yamate University, Japan; among others.
- Short course on Transmission Electron Microscopy by Prof T Ramachandran, Alufluoride Ltd, Aug 10-14 and Aug 17-21, 2015.
- Workshop on Containers for Housing and Re-urbanization after Disasters, August 19-21, 2015. It was attended by multidisciplinary teams comprising of engineers, architects and social anthropologists from EPFL Lausanne, UTM Malaysia, IIT Gandhinagar, and elsewhere.
- Short course on Configuring Digital Humanities by Prof Nishant Shah, Institute of Culture and Aesthetics of Digital Media, Leuphana University, Germany, Aug 22-23, 2015.
- Short course on Introduction to e-Business and e-Commerce by Mr Sunil Gupta, former senior vice president, ITC Infotech, Sep 5-6, 2015.
- Short course on Earthquake Seismology and Tectonics by Dr J R Kayal, formerly with Geological Survey of India, Kolkata, Sep 15-16, 2015.
- A one day workshop on Academic Leadership and Best **Practices** under TEQIP-II was attended by 45 participants from Government Engineering Colleges in Gujarat, Sep 19, 2015. Resource persons included Prof Sudhir K Jain and Prof Amit Prashant.

# **LECTURES**

Towards a science of security games: Key algorithmic principles, deployed applications and research challenges by Prof Milind Tambe, Helen N and Emmett H Jones Professor in Engineering at University of Southern California; under the Roddam Narasimha Lecture Series on Aug 10, 2015. The Roddam Narasimha Lecture



Series, which was set up in 2012, aims to bring distinguished professionals to the institute to present their work in areas of national importance. The lecture series was instituted with the support from Prof Amrutur Anilkumar, Vanderbilt University.

- Generation and application of high brightness sub-micron soft and hard x-ray beams by Dr Gyanendra Lodha, Raja Ramanna Centre for Advanced Technology, July 10, 2015.
- Lothal and the Sindhu-Saraswati civilization by Prof Nalini Rao, Soka University of America, July 13, 2015.
- Quantum information processing in many-body systems by Dr Debraj Rakshit, Harish-Chandra Research Institute, Allahabad, July 14, 2015.
- Role for coronin 1- mediated signalling in naive T cell

immune responses by Dr Rajesh Jayachandran, University of Basel, July 30, 2015.

- What and why of Research; Why and how to publish; and The supervisor and the supervised by Dr Dinesh Kant Kumar, Royal Melbourne Institute of Technology, Australia, Aug 17-18, 2015.
- The Commonwealth in India by Mr Taylor Rochill, University of Washington at Seattle, Aug 18, 2015.
- The making of classics: Mughal-e-Azam and Sholay by Prof Umesh Garg, visiting IITGN as a Nehru-Fulbright specialist from University of Notre Dame, Aug 19, 2015.
- Space-time as a thermodynamic system by Mr Sumanta Chakraborty, IUCAA, Pune, Sep 2, 2015.
- Social entrepreneurship by Mr Ullas Marar, Villgro foundation, Chennai, Sep 7, 2015.
- Light field imaging and display a system perspective by Dr Nikhil Balram, president and CEO, Ricoh Innovations Corporation, Sep 10, 2015.
- Renormalization group approach to quantum gravity by Dr Gaurav Narain, KITPC, Beijing, Sep 16, 2015.
- Session on Personal competency development programme for incubatees and start-ups, by Dr Meenakshi Kirtane, founder member of Maanas and psychotherapist, Sep 30, 2015.

# **Student and Staff Activities**

## AWARDS AND RECOGNITION

Rishabh Jain won second position for his presentation on Smart villages: Technological **Solutions** at the National Level Competition conducted by the **Institution of Engineering** & Technology (IET). A total of 5 participants (winners from five regions of India) among 1300 qualified for the finals held at Bangalore on Aug 31, 2015. The award function was graced by Mr N R



- Narayanamurthy, founder, Infosys; Prof William Webb, president, IET; Dr Gopichand Katragadda, CTO, Tata Sons; and Mr T V Ramachandran, ex-director Vodafone, who felicitated the winners.
- Goldy Yadav, Neeraj Kumar, Rushik Thumar and Prof Pratik Mutha, won the Best Poster Award for Paced respiratory exercise enhances retention of motor skills in the 2<sup>nd</sup> Annual Conference on Cognitive Science, held at IIT Kanpur, July 5-8, 2015.