

Connections

IIT Gandhinagar



Connections is the quarterly newsletter for friends of IIT Gandhinagar

2011 - 2012, Vol. IV, Iss. IV
April - June 2012

Institute News

Seventh Meeting of Board of Governors

At the BoG meeting on June 23, 2012, the Board gave approval to set up the IITGN Incubation Centre (IIC). Five students of the graduating batch (**Sarthak Jain, Prathamesh Juvatkar, Prashant Borde, G. Nithin Kumar, and Kundan Suguru**) are in the process of setting up a company called GridAnts, which aims to provide technological solutions in situations where data processing and data collection take place at different locations. Two important schemes were also approved by the BoG: the **Scholar-in-Residence** scheme and the **Industry-Academic Associateship** scheme.



Support for the Institute



Shri Avi Nash has sponsored several Research Fellowships for young faculty with a view to attract outstanding faculty to the Institute. Shri Avi Nash is a former partner of Goldman Sachs, where he headed the Global Chemical Industry Group. After retiring from Goldman he founded a company that advises the heads of many of the world's largest chemical companies on Strategy, Acquisitions, and Corporate Finance. He is a Director of Sigma-Aldrich Corporation, a global leader in Life Science consumables, and serves as a Trustee of several educational and charitable organizations. He earned an MBA from Northwestern University, an M.S (Ch. Engg) from Syracuse University, and a B. Tech. (Ch. Engg) from IIT Bombay.

Shri Ashraf Habibullah joined the growing list of significant benefactors of the Institute. He is a structural engineer and software developer best known as the Founder, President, and CEO of Computers and Structures, Inc., a structural and earthquake engineering software company based in Berkeley, California. In 2010, Shri Ashraf received the Structural Engineers Association of Northern California (SEAONC) H. J. Brunnier Lifetime Achievement Award. His additional recognitions include the 2011 American Concrete Institute (ACI) Charles S. Whitney Medal, the 2000 SEAONC Community Involvement Award, and the American Society of Civil Engineers (ASCE) George Winter Award in 2005.



Reaching Out

Prof. Sudhir K. Jain attended the Annual Meeting of the Earthquake Engineering Research Institute (EERI) in Memphis, Tennessee during April 10-13, 2012. He took the opportunity to visit a number of universities and organizations in the US for building relationships, recruiting faculty, and seeking donors. He visited Caltech and addressed their "Friends Dinner" on April 19, 2012 on the vision of IITGN as a follow up of the "India-ki-khoj". Prof. Jain visited University of Notre Dame and University of California, Berkeley. He had meetings with leaderships of EPIR Technologies (Chicago), and Hospira (Chicago). **Ms Anjali Joshi** hosted at her home a meeting of potential friends of IITGN in San Francisco area while **Mr Navneet Chugh** hosted a similar meeting in his office for those based in Los Angeles region. **Mr HR Shah** hosted a *Meet and Greet* programme for Dr Jain at TV Asia in New Jersey.

Prof. Sudhir K. Jain and **Prof. D. V. Pai** participated in the Young Researchers Meet in Stanford University during May 26-27, 2012 with a view to build connections with potential faculty candidates in Mathematics and Computer Science. Prof. Jain also attended the conference "Engaging India - Human and Social Dimensions of Science and Technology" at Calgary during June 3 - 4, 2012 organized by Shastri Indo-Canadian Institute. He also took this opportunity to visit Stanford University, Ricoh Innovation Centre (Menlo Park), and Caltech. He visited and signed an MOU of mutual collaboration with University of Saskatchewan.

Activities at IITGN

Continuing Education Programmes

- ▲ A short course on **Finite Element Method, Constitutive Modeling and Applications** was conducted by Prof. C. S. Desai, and Prof. Amit Prashant during April 2-5, 2012. Prof. C. S. Upadhyay and Prof. Durgesh Rai of IIT Kanpur were the other resource persons. The course was attended by 77 engineers and senior professionals from all over the country.
- ▲ A short course on **Low-Cost High-Tech Automation** was conducted during April 16-18, 2012 at IITGN. There were 9 participants from various industries. Prof. N. Ramakrishnan was the Coordinator and Prof. Joyce Mekie the Co-coordinator. The same course was offered at Tata Motors, Sanand, Gujarat by Prof. N. Ramakrishnan, June 20-22, 2012.
- ▲ An in-house CEP course on **Gear Technology** at Mahindra Navistar, Pune was conducted by Prof. N. Ramakrishnan during April 4-6, 2012.

Short Courses/ Workshops/ Seminars

- ▲ A short course on **Critical Thinking** was conducted by Dr Ranadhir Mitra, formerly of University of California and University of Pittsburgh, March 31-April 1, 2012.
- ▲ A workshop on **Chemical Engineering and Academics** was organized during May 28-June 1, 2012. The workshop was attended by 20 faculty members and 3 post- graduate students from various colleges in India. The workshop was organized by Prof. K. S. Gandhi, Prof. M. H. Divekar and Prof. Nitin Padhiyar.
- ▲ A Seminar on **Education and Quality of Life** by Mr M. S. Raghavan Ayyangar, Managing Director, Emmessar Biotech and Nutrition Ltd, Mumbai was held on June 11-12, 2012. The Seminar was attended by 30 participants and organized by Prof. Raghunath Echempati.

Lectures at IITGN

The following lectures were delivered in the Institute by invited speakers:

- ▲ **Energy perspectives, Hydrogen-Electricity economy, Heat pipes/Nuclear reactor safety, Energy and society**, by Prof. Manfred Groll, University of Stuttgart, Germany, March 30-April 6, 2012.
- ▲ **Renewable energy based power generation in Indian context - Challenges and Opportunities** by Prof. S. Sreenivasa Murthy, formerly with IIT Delhi, April 2, 2012.
- ▲ **India's Foreign Policy and its impact on the economy** by Mr S. R. Tayal, IFS Officer (retd), April 2, 2012.
- ▲ **The Indian Ocean as an interactive sphere** by Dr Sunil Gupta, Assistant Keeper, Allahabad Museum, April 3, 2012.
- ▲ **Molecular Motors: tiny machines of nature** by Dr Roop Mallik, Tata Institute of Fundamental Research, April 16, 2012.

1st Science Day Observed

On April 1, 2012 IIT Gandhinagar observed Science Day to attract motivated and talented scholars to scientific research and the Ph. D. programme at the Institute. It was attended by **60 students and 3 faculty members** from across different universities in the region.

Avant Garde: Visual Art Expo-cum-Workshop

IIT Gandhinagar celebrated the joys of colours and art with a three-day Visual Art Expo-cum-Workshop **Avant Garde** from May 1-May 3, 2012. A cross-section of the IITGN family joined hands to learn and create their own art-works. The workshop was conducted by artist **Mr Suguresh Sultanpur** from Baroda and comprised 22 participants. Segments of the workshop included: Painting, Sketching, and Print-making.

Faculty News

Awards and Recognition

Prof. Nikhil Balram, a Guest Professor at IITGN, President and CEO of Ricoh Innovations Inc., was conferred the **2012 Fellow Award** by the Society for Information Display (SID).

New Sponsored Projects

Carbaporphyrins with inbuilt arene moiety: their synthesis, characterization and metal coordination study, sponsored by the Council of Scientific and Industrial Research, Human Resource Development Group. Principal Investigator: Prof. Iti Gupta, Chemistry.

New Faculty

The following persons joined IITGN faculty during this quarter:

Name	Designation	Discipline	Ph. D./Last Degree	Date of Joining
Uttama Lahiri	Assistant Professor	Electrical Engineering	Vanderbilt University, USA, 2011	25.04.12
Amey Karnik	Assistant Professor	Mechanical Engg	University of Michigan, USA, 2007	25.05.12
Vimal Mishra	Assistant Professor	Civil Engineering	Purdue University, USA, 2010	31.05.12
R. Sharan	Visiting Professor	Electrical Engineering	University of Waterloo, Canada, 1968	01.06.12
Mona G. Mehta	Assistant Professor	Social Sciences	University of Chicago, USA, 2010	04.06.12
Gregory A. MacRae	Visiting Professor	Civil Engineering	University of Canterbury, New Zealand, 1989	15.06.12
Pratyush Dayal	Assistant Professor	Chemical Engineering	University of Akron, 2007	28.06.12

IITGN Offers Summer Internships to Undergraduate Students

The second edition of the Summer Research Internship programme at IITGN was organized during May-July 2012. A total of 30 students from 20 different institutions participated. Nearly 60 IITGN undergraduates also did their summer research internships at the Institute with similar provisions as those for external students. The students shared their research experience at a symposium held at the end of June.

Student and Staff Activities

Staff Training & Educational Programme (STEP)

The first **Staff Training & Educational Programme (STEP)** at IITGN was organized on June 2, 2012. The workshop on **Team Building** conducted by **Mr Jacob Matthews** was attended by 23 staff members. As part of an initiative to develop their skills, a significant number of staff members attended different programmes conducted by external agencies to enhance skills that will enable them to discharge their duties with greater zeal and enthusiasm.

Campus Placements

In the very first year of placements our students did very well. The organizations that offered campus placements include Ricoh Innovations, BPCL, Grasim Industries, TCE, Finisar, JCB, Microsoft, Flipkart, Timetooth Technologies, Bank of India, Fluidyn India, Matheson K-Air, Magneti Marelli, Citrix, Fashion & You.com, Hospira Inc., Underwriters Laboratories India Pvt. Ltd, and DRDO. Out of a total of 59 students who sought placements, 54 were successful in securing placements of their liking.

Keshav G. Receives Gandhian Young Technological Innovation Award

Keshav G., a 4th year Mechanical Engineering student received the **Gandhian Young Technological Innovation Award** for designing a machine to make incense sticks. The low-cost hand-driven machine, developed under the mentorship of **Prof. Murali Damodaran**, was conceived with the objective to generate and improve the livelihood of the poor women workers in India. The award was given by **Dr R. A. Mashelkar** FRS at IIM Ahmedabad on April 5, 2012 under the category of 'More-for-Less-for-Many'. The competition, organized by **SRISTI** (Society for Research and Initiatives for Sustainable Technologies and Institutions, Ahmedabad), received over 5000 entries from students of 45 universities across the country. The best 14 ideas were awarded.



Paper presentations

Manish Kumar, a Ph. D. student presented a paper at the Energy and Materials Research Conference (EMR-2012), Malaga, Spain, June 20-22, 2012.

Summer Research Opportunities for Faculty of Other Engineering Institutions

Faculty members from prominent institutions were invited to participate in ongoing research projects at IITGN and to undergo mentorship by IITGN faculty. Three visiting faculty from **Shri Mata Vaishno Devi University, Katra**; **VNIT, Nagpur** and **DDU, Nadiad** spent the summer on campus as part of this arrangement and worked with IITGN faculty.

Researchers' Ferret Confab' 12

A **Researchers' Ferret Confab' 12** was organized on April 14, 2012 with a vision of laying out an interdisciplinary platform to share research carried out by IITGN students. There were 16 oral presentations and 9 poster presentations. The winners included **Sudipta Das** and **Payel C. Mukherjee** (Oral Presentation), and **Awaneesh Upadhyay** (Poster Presentation).

Musical evening UDAAN

To bid adieu to the graduating pioneer batch of IIT Gandhinagar, a musical evening was held on April 3, 2012. The evening started with the opening address by **Prof. D. V. Pai**, who was among the first professors to teach the pioneer batch. The event was attended by around 20 faculty members and their families besides the IITGN students. Some of the guests who shared their early



experiences of life at IITGN were **Prof. U. A. Yajnik**, the first Dean, Academic and Students Affairs IITGN, **Prof. M. R. Patel**, Principal, V.G.E.C, **Prof. S. K. Jain**, **Prof. S. L. Narayanamurthy**, **Prof. G. K. Sharma** and **Prof. D. P. Roy**. A mellifluous sitar recital by **Prof. Srinivas Reddy** set the tone for the evening and this was followed by musical performances by students. The main announcement of the evening regarding the **IITGN Alumni Association** was made by **Vineeth Dasaraju**, ex-General Secretary of the Student Gymkhana, and **Ajinkya Kulkarni**, General Secretary Student Gymkhana. The evening concluded with a sumptuous dinner and a group photograph.

Mechanism Mock-Up Display

The batch of 2009 Mechanical Engineering students held a **Mechanism Mock-Up Display Open House** on April 16, 2012 displaying the gadgets they had built as part of Kinematics and Dynamics of Machines Lab. The focus of this exercise was on identifying a task to be simplified by a mechanism, followed by

designing and building a workable model of the mechanism to address the problem. Thirty-seven students formed 13 groups and worked on gadgets like Stair-climbing wheelchair, compact fried food oil extraction gadget, among others.

Mean Mechanics 2012

A Mechatronic model-making workshop-cum-competition was organized on April 5, 2012 for the first and second year



students in which 114 students participated. The winning teams are as follows:

First position: Arun Singh, Prashant Bahtewara, Adit Bharadwaj, Pradeep Nikhade, Poonam Chand (2010 batch)

First position: Nitesh Udhani, Ankit Suchanti, Mohit Bajaj, Saksham Kohli (2010 batch)

Second position: Rajesh Patidar, Pankaj Gautam (2011 batch)

Third position: Sahil Mehta, Gaurav Mahamuni, G. N. Laxmi (2011 batch).

Visit to Lothal

Fifteen IITGN faculty members and eight students took part in a visit to the nearby Harappan port town of Lothal on April 8, 2012. Michel Danino, Guest Professor at IITGN, organized the visit and briefed the group on the site's features and importance. Lothal is a small Harappan port town approximately 80 km from Ahmedabad that was excavated between 1955 and 1960.

Summer internships

The Institute actively helps students to find internships in industries and research institutes in India and abroad. During the

summer of 2012, a total of 200 students did their internships in universities, research institutes, PSUs and various industries. Out of these, 66 students went to research institutions such as BARC and ISRO, 28 students interned at foreign universities such as Caltech, Syracuse University and University of Notre Dame, while 106 students spent their summers in industries such as L&T, TATA Power, Reliance Industries, National Instruments and Texas Instruments.

Summer camp

The Institute organized a four-week summer camp for IITGN students during June 18-July 14, 2012. It comprised of numerous activities centered on the theme of design. A total of 20 students as well as faculty and staff participated in technical projects and non-technical activities. The technical projects were coordinated by Prof. Raghu Echempati. Students and staff enjoyed several non-technical activities that also had design themes. These included a



workshop on People, Markets and Society that provided invaluable tips and advice on topics ranging from entrepreneurship, market behavior and survey design. The campus fraternity also enjoyed a workshop on Crafts and Mask-Making. The Incredible India Quiz was organized as part of the events for the Summer Camp on June 29, 2012. The summer camp was coordinated by Prof. Bhaskar Datta.

Sports News

IITGN Annual Sports Awards for the Academic Session 2011-12

On April 26, 2012 the following awards were given in different categories on the basis of the performance of students in the academic year 2011-12:

Best Player of the Year	:	Bhargav Kumar Thadem
Best Upcoming Player of the Year	:	Shivani Rani and Sane Parth Vishwas
Badminton Open (Singles) Champion	:	Harsh Paliwal
Badminton Open (Doubles) Champion	:	Kehbruce Singh and Purushottam Lal Suman
Inter Departmental Championship (Boys)	:	Mechanical Engineering Team
Inter Departmental Championship (Girls)	:	Chemical Engineering Team

Gully Cricket Tournament

A Friendly Gully Cricket Tournament was organized for the entire IITGN community from May 28-30, 2012. A total of 12 teams participated in the event. Team B. Tech 2 & B. Tech 3 played the final match on May 30, 2012 with Team B. Tech 2 (Ankur Meena, Mohit Bajaj, Nitesh Udhani, Shivanshu Arora, Akshay Pingale and Devendra Singh Yadav) winning the title.