IIT Gandhinagar

Connections



Connections is the quarterly newsletter for friends of IIT Gandhinagar

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Institute News



1st Convocation Ceremony

On July 22, 2012, IIT Gandhinagar held its first Convocation in which 86 graduating students were awarded Bachelor of Technology degrees in Chemical, Electrical, and Mechanical Engineering. Shri N. R. Narayana Murthy, Chief Mentor, Infosys Technologies was the Chief Guest and Dr R. A. Mashelkar, FRS, Chairman of IITGN Board of Governors presided over the event. In his convocation address, Shri Murthy encouraged graduates to participate in the exciting opportunities that lay ahead in building a strong and egalitarian India. Dr Mashelkar and Prof. Sudhir K. Jain, Director IIT Gandhinagar also gave inspiring addresses to the students. The President's Gold Medal, Outstanding Researcher's Medal, and other performance awards were given by Dr Mashelkar while the Bachelor of Technology degrees were handed over by Prof. Jain. Swetava Ganguly received the first President's Gold Medal of IIT Gandhinagar. Other awards include: Institute Gold Medal (Yogesh Goyal, Prathamesh Juvatkar, and Swetava Ganguli), Institute Silver Medal (Pratyul Kapoor, Prerit Terway, and Ishan Tembhekar), Director's Gold Medal (Sarthak Jain), Director's Silver Medal (Akshay Bishnoi, Mani Shankar Shahi, and Swati Verma), Outstanding Innovation Award (Keshav Giriyapnavar), Outstanding Social Service Award (Kanchan Patel), Integrity and Exemplary Human Qualities (Tanmay Balwa), Outstanding Research (Yogesh Goyal), Outstanding Performance in Sports (Bhargav Kumar Thadem), Outstanding Leadership (Ajinkya Kulkarni), Best performance in Core-courses in Engineering Graphics, Manufacturing and Workshop Practice (Saurabh Nagrecha), Best performance in Core-courses in Mathematics (Anusha Gunturu), Best performance in Core-courses of Physics, Chemistry, Humanities and Social Sciences (Swetava Ganguli).

Foundation Programme 2012



A five-week Foundation Programme was conducted during July 19-August 23, 2012 for the second consecutive year. The programme is designed to inculcate qualities of physical fitness, values and ethics, creativity, social awareness, and team-work. The inaugural address of the programme was delivered by **Mr**

Arvind Singhal, Chairman, Technopak Advisors Pvt. Ltd. A number of lectures were delivered by eminent speakers on topics such as Right to information (Dr Sandeep Pandey, Social Activist), Teach for India (Mr Gunvant Jain, Teach for India-NGO), Social media (Mr Vijayendra Haryal, writer), Ethics (Prof. R. P. Chhabra, IIT Kanpur), Grassroot comics (Prof. Suchitra Mathur, IIT Kanpur), Inter personal communication (Ms Rashmi Dutt, Founder, Dialog Services), Technology in ancient India (Mr Michel Danino, archeologist and scholar), Kerala School of Mathematics (Dr M. D. Srinivas, Centre of Policy Studies), Higgs Boson (Prof. Raghavan Rangarajan, PRL Ahmedabad), and Growing inequalities in India (Mr Jaideep Hardiker, Journalist). The programme ended with a popular lecture by Chief Guest Prof. Mahesh Tandon, Managing Director, Tandon Consultants Pvt Ltd, New Delhi. Prof. Amit Arora and Prof. Prachi Thareja coordinated the event.

Support for the Institute







Shri V. Sastry

Smt. Amba

Prof. A. V. Anilkumar has established the Sastry Endowment at the Institute in memory of his parents Smt. Amba and Shri Venkatasubba Sastry. Originally from the villages of Amrutur and Nanjangud in Karnataka, they had the opportunity to reside at various locations throughout India, while Shri Sastry worked as a field service engineer at Hindustan Aeronautics Limited's Air Force Detachments. As parents, they strongly emphasized the importance of education and responsibility to society. Prof. Anilkumar is an aerospace engineer on the faculty at Vanderbilt University. He has been a NASA

investigator of microgravity fluid flow phenomena on Space Shuttle flights and on the International Space Station. His current interests are in the design and evaluation of novel energy conversion systems for airplane flight, through low altitude rocketry, and in the design and evaluation of renewable energy technologies.

Activities at IITGN

New Building Inaugurated

A new 2010 sq. m. building (Shed-4) constructed on the temporary campus at VGEC was inaugurated by Prof. Sudhir K. Jain on July 25, 2012. The building will be used to house expanded laboratory facilities, provide office space to faculty and research scholars and meet the requirement of new class-rooms.

Workshops

▲ A workshop on Elliptic and parabolic partial differential equations and related topics: theory and numerical methods was conducted during August 16-19,



2012. It was attended by 25 participants. Prof. Jagmohan Tyagi was the convener of the workshop and the co-conveners were Prof. Anulekha Dhara and Prof. Kishore Kumar.

- A two-day workshop on Indian archaeology, epigraphy and ancient history was organized during August 23-24, 2012. The event was addressed by 18 top archaeologists, epigraphists and scientists from across India. It was attended by about 50 scholars, faculty members and students and was coordinated by Mr Michel Danino and Prof. Jaison A. Manjaly.
- A workshop on Conversations across Disciplines -Mathematics and Engineering was organized on September 8, 2012. Around 35 faculty members attended the event. Prof. Jagmohan Tyagi, Prof. Mythily Ramaswami, and Prof. Ramesh Gaonkar organized the event.
- A one-day workshop on Intellectual Property Rights (IPR) was conducted by Ms Rachna Singh Puri and Dr Arvind Viswanathan, Xellect IP Solutions, Bangalore and Mr Vivek Khadpekar, consultant editor on September 15, 2012. It was attended by 34 M. Tech. and Ph. D. students. Prof. Arnapurna Rath and Prof. Sriram Kanvah organized the event.

Lectures at IITGN

- Ahmedabad: Shock city of twentieth century India by Dr Howard Spodek, Department of Geography and Urban Studies, Temple University, USA, August 7, 2012.
- ▲ Current psychological perspectives on human nature by Dr N. Sriram, Senior Scientist, University of Virginia, August 8, 2012.

- A CEN and NCPRE @ IIT Bombay by Prof. Anil Kottantharayil, IIT Bombay, August 9, 2012.
- ▲ Decision support in process systems: From controlling molecular crystals to managing multi-national clusters by Prof. Rajgopalan Srinivasan, National University of Singapore, August 13, 2012.
- A Innovation and Entrepreneurship by Prof. Shiladitya Sengupta, Harvard Medical School, August 16-17, 2012.
- LA VLSI Interconnects by Prof. Rajendra Patrikar, VNIT-Nagpur, August 17, 2012.
- ▲ The region and its margins: Re-appropriations of the border from Maha Gujarat to Swarnim Gujarat by Dr Farhana Ibrahim, IIT Delhi, August 21, 2012.
- A Synergies between engineering and entrepreneurship by Prof. Ken Pickar, California Institute of Technology, Pasadena, USA, August 31, 2012.
- ▲ Nano structured and thin film solar cells by Prof. Bodh Raj Mehta, IIT Delhi, September 1, 2012.
- ▲ Transition in Indian health care market by Prof. Barun Kanjilal, Indian Institute of Health Management Research (IIHMR), Jaipur, September 6, 2012.
- ▲ What holds constant: Translational topologies by Dr Valerie Henitiuk, Director, British Council Centre for Literary Translation, University of East Anglia, Norwich, September 17, 2012.

Other Visitors

Dr Kumar Akhilesh, and Dr Shanti Pappu, Sharma Centre for Heritage Education, Chennai; Dr Kuldeep K. Bhan, and Prof. K. Krishnan, M. S. University, Baroda; Prof. Onkar Dikshi, and Dr Javed Malik, IIT Kanpur; Dr Sunil Gupta, Allahabad Museum; Prof. Pramod Joglekar, and Dr R. K. Mohanty, Deccan College, Pune; Dr Chithra Madhavan, Epigraphist and historian, Chennai; Dr T. S. Ravishankar, Archaeological Survey of India, Mysore; Dr Y. S. Rawat, Gujarat State Archaeology Dept, Gandhinagar; Dr K. S. Saraswat, Former Emeritus Scientist, Birbal Sahni Institute of Palaeobotany Lucknow; Dr Rakesh Tewari, U. P. State Dept of Archaeology, Lucknow; Prof. K. K. Thaplyal, Historian and epigraphist, Lucknow University; Dr Mayank Vahia, and Ms Nisha Yadav, Tata Institute of Fundamental Research, Mumbai; Dr Parth Chauhan, Stone Age Institute, Gosport, USA; Prof. Samaresh Chatterji, and Prof. V. P. Sinha, DAIICT, Gandhinagar.

Faculty News

Awards and Recognition











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S. K. Jain

R. Kothar

D. V. Pai

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Prof. Nikhil Balram, Guest Professor at IITGN, President and CEO of Ricoh Innovations Inc., was awarded the Gold Stevie Award for Executive of the Year at the 9th Annual International Business Awards.

Prof. Sudhir K. Jain, Director, has been elected as the President of the International Association for Earthquake Engineering (IAEE). IAEE is an international association with membership of the societies of 56 countries.

Prof. Jain was also noted for his contribution in the field of earthquake engineering at the national and international level in a recently published book by American Society of Civil Engineers, ASCE Press: Earthquakes and Engineers: An International History, Robert K. Reitherman, 2012.

Prof. Rita Kothari is a member, Advisory Board for the series Dalit Literatures, In, Out and Beyond ed. Judith Misrahi-Barak and Joshil Abraham, Presses Universitaires de la Mediterranee.

Prof. D. V. Pai, Visiting Professor at IITGN has taken over as Chairman, Programme Advisory Committee, Mathematical Sciences (PAC MS) of SERB, DST, Government of India.

Prof. Arnapurna Rath received the "Excellence in Thesis Award" during the Golden Jubilee Convocation of IIT Bombay held on August 18, 2012 for her doctoral research.

Ramanujan Fellowship awarded to Prof. Sudhanshu Sharma



The Department of Science and Technology (GoI) sponsored Ramanujan Fellowship is meant for brilliant scientists and engineers from all over the world to take up scientific research positions in India. The fellowship is highly selective and is given to

scholars based on their research proposal/ideas and academic credentials. **Prof. Sudhanshu Sharma** is the first recipient of this fellowship at IITGN.

New Sponsored Projects

A Colloidal Particles Self Assembly in Liquid Crystals sponsored by the Department of Science and Technology. Principal Investigator: Prof. Prachi Thareja, Chemical Engineering.

New Consultancy Projects

- Smart Grid pilot project UGVCL for Uttar Gujarat Vij Company Ltd. (UGVCL), Gujarat. Principal Investigator: Prof. Naran M. Pindoriya, Electrical Engineering.
- A Computational fluid dynamics for Hi-Tech Automobiles. Principal Investigator: Prof. Murali Damodaran, Mechanical Engineering.
- A Seismic design criteria for metro structures for MEGA. Principal Investigator: Prof. Sudhir K. Jain, Civil Engineering.
- A IITK-BMTPC Earthquake Tips, Phase II for BMTPC. Principal Investigator: Prof. Sudhir K. Jain, Civil Engineering.
- ▲ Establishment of Mechanical Workshop for Navrachana University. Principal Investigator: Prof. N. Ramakrishnan, Mechanical Engineering.

Initiation of Scholars-In-Residence Programme

Prof. Rajagopalan Srinivasan, Associate Professor, Dept of Chemical & Biomolecular Engg, National University of Singapore (NUS), is the first Scholar-In-Residence at IITGN. Under this programme, individuals with outstanding track record as Teachers/Researchers/Scholars are invited to spend varying periods (from one month to a year) at IITGN, to promote the spirit of inquiry, research and scholarship on campus.

New Faculty

The following persons joined IITGN faculty during this quarter

Name	Designation	Discipline	Ph. D./Last Degree	Date of Joining
S. P. Mehrotra	Visiting Professor	Materials Science and Engg	IIT Kanpur, 1973	04.07.12
Sudhanshu Sharma	Assistant Professor	Chemistry	IISc. Bangalore, 2009	09.07.12
Sharad Gupta	Assistant Professor	Biological Engg	University of Pittsburgh, 2009	11.07.12
Malavika Subramanyam	Assistant Professor	Social Sciences	Harvard University, 2009	12.07.12
Shivakumar Jolad	Assistant Professor	Physics	The Pennsylvania State University, USA, 2010	13.07.12
Achal Mehra	Visiting Professor	Humanities	Southern Illinois University, Carbondale, 1985	30.07.12
Salim Rashid	Visiting Professor	Social Sciences	Yale University, 1976	30.07.12
Robin Anav	French Instructor	Humanities	Bachelor of Language Sciences University of Besançon, 2011	31.07.12
Dhiman Basu	Assistant Professor	Civil Engineering	University at Buffalo, 2012	01.08.12
N. R. Ladhawala	Adjunct Professor	Mathematics	Purdue University, USA, 1976	01.08.12
Vinod Stokes	Visiting Professor	Social Sciences	University of Michigan, Ann Arbor, 1988	03.08.12
Ramesh Gaonkar	Visiting Professor	Electrical Engg	Syracuse University, New York, 1975	03.08.12
Arnab Sarkar	Visiting Professor	Chemical Engineering	Catholic University of America, USA, 1973	31.08.12

Student and Staff Activities

Staff Training & Educational Programme (STEP)

The second Staff Training & Educational Programme (STEP) on Government rules and regulations was organized on August 4, 2012. The programme, conducted by Shri D. S. Gupta, Sr Assistant Registrar, IITGN Cell Mumbai, was attended by 36 staff members.

An evening of Hindustani classical music

IITGN hosted an evening of Hindustani classical music featuring Prof. Srinivas Reddy (sitar) and Mr Sapan Anjaria (tabla) on September 7, 2012.

Independence Day celebrations

In keeping with IITGN tradition, the 66th Independence Day celebrations on August 15, 2012 began with the Flag hoisting by the Director, **Prof. Sudhir K. Jain.** On this occasion 75 students featuring on the Dean's List 2011-12 (semester II) were felicitated by the Director with a book (Unheard voices by Harsh Mander) and a letter of appreciation. The programme concluded with a cultural performance by the students.

Technology Vision 2035

As part of the Technology Vision 2035 exercise, 4 IITGN students (Nisarg Shah, Akshay Jain, Rajat Jain, and Susmita Purnima Kotu) represented the Institute at the TIFAC (Technology Information, forecasting and Assessment Council) interaction session with Dr Anil Kakodkar, DAE Homi Bhabha Chair Professor and Chairman-TIFAC, on September 16, 2012 at Delhi.

IITGN Student teams selected for i-Create Spark-up Idea Fund Grant

The two teams comprising of Gourav Dubey, Abhijith Rajiv, Kaustubh Tripude; and Yash Shah, Prateek Nyati and Shashank Agarwal have been selected for support and mentoring under the initial INR 50K Spark-Up Idea Fund Grant organized by the International Centre for Entrepreneurship and Technology (i-Create).

Highest downloaded article from IITGN fraternity

Thorat, A. A.; Dalvi, S. V., "Liquid antisolvent precipitation and stabilization of nanoparticles of poorly water soluble drugs in aqueous suspensions: Recent developments and future perspective", Chemical Engineering Journal, Volume 181-182, February 2012, Pages 1-34.http://top25.sciencedirect.com/journal/13858947/.

Web-design Hackathon

The Coding Club organized a Hackathon on Introductory Web Design on August 24, 2012. The event witnessed the participation of more than 100 students. It was conducted by Balaji Venkatesh, Hoosein Safdari and Kartik Saxena, B. Tech. students.

Life Skills Series

M.S./Ph. D. Application Process: Know how to make your application packet the



best was held on September 12, 2012. The speakers for this session were Prof. Malavika Subramanyam, Prof. Harish Palanthandalam-Madapusi, Prof. Sudhanshu Sharma, and Prof. Shivakumar Jolad. 85 students attended the session. The series was coordinated by Prof. Sharmita Lahiri.

Paper presentations

S. Chandrasekaran, a Ph. D. student presented a paper at the 55th IEEE Midwest Symposium on Circuits and Systems (MWSCAS 2012), Boise, Idaho, USA, August 5-8, 2012.

Manish Kumar, a Ph. D. student presented a poster at the Clostridium XII International conference, Nottingham Conference Center, Nottingham, UK, September 10-12, 2012.

Neeraj Kumar, a Ph. D. student presented a paper at the 34th Annual Conference of the Cognitive Science Society, Sapporo, Japan, August 1-4, 2012. He also attended a summer school in Poland during July 20 to July 28, 2012.

Sumitava Mukherjee, a Ph. D. student presented a paper at the National Conference on Positive Behaviour: Perspectives and Applications during September 21-22, 2012. He visited University of New South Wales, Sydney, Australia as a visiting research student during August 14-29, 2012.

Other Events

Deep Dinesh Kumar of 4th year Mechanical Engineering won the first prize at the All India Essay Writing Competition (Brain Drain, Reverse Brain Drain and Globalization) held at IIIM Charusat. Mihika Shah of 2nd year Chemical Engineering stood third for the topic Corruption, Polity and Indian Economy.

Alpana Thorat, Debika Choudhury (Research scholars - Chemical Engineering) and Pavni Pandya (M. Tech. student- Civil Engineering) participated in Women engineers leading global innovation symposium, Bangalore, August 29-31.

Sports News

Genesis Cup '12

IITGN's Men's Basketball team won a silver medal at the first ever Genesis Cup held at H. L. College of Commerce, Ahmedabad, August 22, 2012. **Ravi Kumar** was one of the top scorers and won the trophy for the "Most Promising Player" of the tournament.

State level Swimming Tournament

Parth Sane Vishwas won two Bronze medals for 50m Back Stroke and 50m Butterfly at the State level Swimming Tournament. The event was organized by the Gujarat State Aquatic Association during September 8-9, 2012.