



First Row:
Ekta Prashnani
Shruti Jain
Vivek Yadav
Saurya Prakash

Second Row:
Divyank Singh
Anchit Gaurav
Abhishek Umrao
Adnan Ahmad Ansari

Students selected for Summer Internship at Underwriters Laboratory, USA in 2010

All participating students received certificates for their efforts.

The winning teams were invited to present their ideas at a dinner during the International Conference on Disaster Mitigation through Fire Safety and Earthquake Engineering. The first two teams worked on the project to reduce hazards to fire fighters for urban India, while the other teams worked on creating a national incident database for fire events in India. All eight students of the four winning teams were granted three-week internships at UL, Northbrook, USA during the summer of 2010.

This collaborative research initiative will continue next year with new challenges.

Distinguished Honorary Professors

To help the Institute in its tryst with excellence, two of India's distinguished academics Prof. S. P. Sukhatme and Prof. J. B. Joshi have joined the Institute as Distinguished Honorary Professors. A Distinguished Honorary Professor commits to spending a minimum of 10 days in a year at the Institute.



Prof. S. P. Sukhatme obtained his B.Sc. (Engg) from Banaras Hindu University (1958), and S. M. (1961) and Sc.D. (1964) both from MIT. He taught at IIT Bombay from 1965 to 2000 and was its Director (1995 – 2000). He was also the Chairman of the Atomic Energy Regulatory Board (2000 – 2005). He was honoured with “Padmashri” in the year 2001 and received the prestigious S. S. Bhatnagar Prize in the year 1983.



Prof. J. B. Joshi received his B.Chem. Engg (1971) and Ph.D. (1977) both from the Mumbai University. A renowned Chemical Engineer, Prof. Joshi taught at the Institute of Chemical Technology, Mumbai until recently and was its Director from 1999 to 2009. He has received numerous awards and fellowships, including the prestigious S. S. Bhatnagar Prize in the year 1991. Prof. Joshi holds a unique Indian record - engineer with the largest number of citations (more than 4000).

Distinguished Visitors

Visits by eminent personalities in diverse fields including science, engineering, technology, and education inspire the students, faculty and staff of the Institute. IITGN hosts lectures by such distinguished individuals both on special invitation and if they happen to be in the area for some other engagement. Faculty and students are encouraged to meet the distinguished visitor and engage in interactions. Some of the eminent persons who visited the Institute during 2009-10 are:



Dr Anil Kakodkar, the then Chairman of the Atomic Energy Commission of India visited IIT Gandhinagar on August 20, 2009. As Chairman, Board of Governors of IIT Bombay, the mentor Institute for IITGN, Dr Kakodkar also functioned as Chairman for IITGN. Dr Kakodkar visited the facilities and reviewed activities at the Institute. He addressed the students and faculty and later released "Palantir", the first issue of students' magazine. Dr Kakodkar emphasized the importance of natural sciences, social sciences and humanities in engineering education.



Prof. Satish Tripathi, Provost at the State University of New York at Buffalo visited the Institute during December 22-24, 2009. He is an internationally acclaimed computer scientist, with more than 200 scholarly papers and has supervised 25 doctoral theses. Prof. Tripathi held extensive discussions with IITGN faculty on the challenges and current trends in higher education.



Dr Srikumar Banerjee, Chairman, Atomic Energy Commission of India, and the then Director, Bhabha Atomic Research Centre, Mumbai visited the Institute on August 20, 2009. Besides visiting the various facilities, Dr Banerjee also addressed the faculty and students. In his address, Dr Banerjee emphasized the importance of training in research early in one's career.



Prof. S. P. Sukhatme, Distinguished Honorary Professor, IIT Gandhinagar, motivated faculty and students in their quest for excellence in teaching and research during his visit to the Institute on March 22-23, 2010. He also made two presentations on topics of great current relevance - "The Energy Scenario" and "Energy Alternatives – The Solar and Nuclear Options".



Shri Ashok Thakur, Additional Secretary, Ministry of Human Resource Development, Government of India was in Gandhinagar to chair a meeting of the committee to select a suitable site for IITGN on March 9, 2010. He also visited IITGN, addressed the students, staff and faculty, and expressed satisfaction at the progress of creation of facilities.



Dr R. A. Mashelkar, Chairman, Board of Governors, IITGN, visited the Institute on December 18, 2009 to chair the Board meeting and also visited the site at Palej, Gandhinagar on March 24, 2010, where the IITGN Campus is expected to come up.



Prof. Ashok Misra, Former Director of IIT Bombay, visited IITGN on March 26, 2010. Prof. Misra was also the mentor Director of IITGN in its early days. During his visit, Prof. Misra interacted with the faculty members and students and joined them for lunch.

Conferences/ Short Courses/ Symposia/ Workshops Organized

The Institute encourages its faculty to organize conferences, short courses, symposia and workshops on focus themes. These are considered important academic activities as they stimulate discussion on different areas of importance. Many of these activities invite and receive participation from other organizations, which brings the additional benefit of increasing the Institute's visibility to the outside world. The following activities were held during 2009-10:

- ✦ Curriculum Development Workshop was held on July 18, 2009. Thirty one academicians from the IITs across the country and other premier institutes participated in the workshop. The crucial roles of the basic sciences, humanities and social sciences, developmental issues, energy and environment, and engineering sciences in shaping the leadership for the emerging knowledge economy were recognized and discussed at length. The workshop was coordinated by Prof. S. L. Narayanamurthy.
- ✦ A one-day Brainstorming Workshop, Perspectives of Research at IITGN in the Near Future: a Vision, was organized on August 29, 2009. Prof. D. V. Pai coordinated the workshop. About thirty faculty members from across the country discussed and debated on issues related to research excellence at IIT Gandhinagar.
- ✦ IITGN conducted its first Continuing Education Program entitled Low-Cost High-Tech Automation (LCHA) from September 14-16, 2009. The event involved a comparison of various technologies and steps involved in their implementation. Many real-life problems were discussed to emphasize upon applications. There were 38 participants from various industry houses such as Mahindra & Mahindra, Larsen & Toubro (Mumbai), Bajaj Auto (Pune), Bharat Gears (Mumbai), Pennar Industries, Skoda Auto, Rajkamal Metal Industries, Sintex Industries, and Asia Motor Works. The course was coordinated by Prof. N. Ramakrishnan.





ACADEMICS

- ◆ ISEA Workshop on Cyber Security was organized on October 1, 2009 to spread awareness about safely participating in Information Society. It was jointly organized by IIT Gandhinagar, NIT Surat, VGEC Chandkheda and was sponsored by C-DAC Hyderabad. Shri Devesh Jinwala, Assistant Professor, NIT Surat and Prof. Dhiren Patel, Visiting Professor, IIT Gandhinagar conducted the workshop at the Institute.
- ◆ A workshop on Basic Computer Skills was conducted for students of IITGN by Prof. Deven Shah and Shri Mayank Agrawal, Sardar Patel Institute of Technology, Mumbai on January 2, 2010.
- ◆ A short course on Strengthening of Democracy at the Grassroots in India was conducted during January 2-3, 2010 by Dr Sandeep Pandey, Social Activist and Magsaysay Award Winner. Forty-eight students of the Institute credited the course.
- ◆ A two-week Creative Writing workshop was conducted for IITGN students by Prof. Suchitra Mathur, IIT Kanpur during February 2-14, 2010.
- ◆ A continuing education programme on Nuclear Reactor Thermal Hydraulics and Safety coordinated by Dr Manmohan Pandey, IIT Gandhinagar was held during February 18-20, 2010 for participants from the industry.





- ✦ The Institute has launched IIT Gandhinagar Communication Skills Initiative to help the IITGN community improve communication skills. A brainstorming session was held on February 20-21, 2010 to define scope and specific contours of the facility. It was coordinated by Dr Sharmita Lahiri of IIT Gandhinagar with the participation of a number of renowned national experts in the field.
- ✦ A National Symposium on Mathematics at IIT Gandhinagar held during February 26-28, 2010 provided a platform for outstanding young mathematicians of the country to present their research work as an initiative to build a strong research group in Mathematics at IITGN. The symposium was sponsored by the Department of Science and Technology (DST) and the National Board for Higher Mathematics of the Department of Atomic Energy. Prof. D. V. Pai of IITGN was the Convener, and Prof. J. K. Verma of IIT Bombay was the Co-Convener.
- ✦ A workshop on Teaching and Grading was conducted for IITGN faculty on March 13-14, 2010 by Prof. Vijay Gupta, Vice-Chancellor, Lovely University, Jalandhar and a former professor of IIT Kanpur. He is well-known for innovations in teaching and evaluation methods and for his publications and teaching aids.
- ✦ An international conference Disaster Mitigation through Fire Safety and Earthquake Engineering was held on March 29, 2010 at Ahmedabad. The conference was collaboratively organized by the





Gujarat State Disaster Management Authority (GSDMA), IIT Gandhinagar and Underwriters Laboratory, USA. The Honourable Chief Minister of Gujarat, Shri Narendra Modi, in his inaugural address, emphasized the very high priority that Gujarat has placed on disaster mitigation since the earthquake in 2001.

Invited Lectures

Distinguished individuals were invited to speak to the students, faculty and staff on subjects of their expertise. These include -

- ✦ New Frontiers: Journey from Electrical Engineering to Bioengineering to Neuroengineering by Prof. Nitish V. Thakor, Professor of Biomedical Engineering, Johns Hopkins University, Baltimore, USA on August 18, 2009.
- ✦ Closed Loop Control System by Shri Bramh Awasthi, Founder and Chairman, Whirlybird Electronics, Mumbai, India on August 19, 2009.
- ✦ A Discussion about Acoustics: Why Systems Thinking Matters by Shri Rakesh Pandey, Independent Consultant and Former Director of Research, Bose Corporation on August 20, 2009.
- ✦ Application of Biomedical Engineering in Orthopedics by Dr Tarun Goswami, Joint Associate Professor of Biomedical, Industrial and Human Factors Engineering, Wright State University, Dayton, Ohio, USA on August 21, 2009.
- ✦ Robotics[AT]?" A RoC-BEE (Robotics Competition Based Education in Engineering) Concept by Prof. Subir Kumar Saha, Professor of Mechanical Engineering, IIT Delhi on September 5, 2009.
- ✦ Evolution of the Theory of Equations - A Journey through Renaissance by Prof. Sudhir R. Ghorpade, Professor of Mathematics, IIT Bombay on September 7, 2009.
- ✦ Particle Engineering for Creation of Next Generation Materials by Prof. Rajesh N. Dave, Professor of Chemical Biological and Pharmaceutical Engineering, New Jersey Institute of Technology, Newark, NJ, USA, on September 18, 2009.





- ✦ Introduction to Fire Protection Engineering by Dr Pravinray D. Gandhi, Director of Corporate Research at Underwriters Laboratories Inc., Northbrook, IL, USA, and Corporate Fellow on September 29, 2009.
- ✦ Our Role in Society by Dr Sandeep Pandey, National Convener, National Alliance of People's Movements and President, People's Union for Human Rights on November 3, 2009.
- ✦ Cognitive Robotics: Eliza Effect and a Therapeutic Role for Robots by Prof. Bipin Indurkha, IIIT Hyderabad on November 5, 2009.
- ✦ Generation of National Wealth Through Education and Research by Prof. J. B. Joshi, Distinguished Honorary Professor at IITGN, and Homi Bhabha Distinguished Chair Professor, DAE, Mumbai, on November 12, 2009.
- ✦ Biometrics and its Applications by Dr Shimon Modi, Purdue University on November 19, 2009.
- ✦ Reducing Seismic Risk: A New Zealand Approach by Shri Jitendra Bothara, Beca Carter Hollings and Ferner Ltd, New Zealand on December 7, 2009.
- ✦ Software Aging and Rejuvenation by Prof. Kishor S. Trivedi, Chair Professor, Department of Electrical and Computer Engineering, Duke University, Durham, NC, USA on January 1, 2010.

- ✦ Pursuit of Knowledge: A Personal Pilgrimage of an Engineering Scientist by Dr Kiran R. Magiawala, Retired Research Faculty, California Institute of Technology and Jet Propulsion Laboratory, Pasadena, USA on January 12, 2010.
- ✦ Energy and the Environment - A Global Challenge Area for Collaborative Research and Education: How Engineers and Scientists Can Help? by Prof. Pratim Biswas, the Stifel and Quinette Jens Professor and Chair of the Department of Energy, Environmental and Chemical Engineering at Washington University, St Louis, USA on January 17, 2010.
- ✦ Imperatives of Technology & Design Interface by Shri Shashank Mehta of the National Institute of Design, Ahmedabad on February 2, 2010.
- ✦ Energy Security in India through Nuclear Power by Dr Om Pal Singh, Secretary, Atomic Energy Regulatory Board (AERB), and Director, ISTD, AERB on February 8, 2010.
- ✦ The Polymer Industry in India: Opportunities and Challenges for Engineers by Prof. D. D. Kale, Visiting Faculty – Chonnam National University and Chosan University, South Korea on February 10, 2010.
- ✦ Astroparticle Physics by Dr Raghavan Rangarajan of the Physical Research Laboratory, Ahmedabad on February 15, 2010.
- ✦ My Electronics by Prof. S. C. Sahasrabudhe, Director, Dhirubhai Ambani Institute of Information & Communication Technology, Gandhinagar on February 16, 2010.
- ✦ A Vision of the Future of Television by Dr Nikhil Balram, Former Vice President and General Manager, SONICblue, Digital Entertainment Business Unit, California, USA on March 8, 2010.





ACADEMICS

- ✦ Building a World Class IIT at Gandhinagar by Shri Abhay Bhushan, President of IIT Kanpur Alumni Association, President of IIT Kanpur Foundation, Board Member of IIT Gandhinagar Foundation and past President of Pan-IIT- USA on March 9, 2010.
- ✦ Scaling Issues in VLSI by Prof. D. K. Sharma, Head, Department of Electrical Engineering, IIT Bombay on March 12, 2010.
- ✦ The Energy Scenario and Energy Alternatives - The Solar and Nuclear Options by Prof. S. P. Sukhatme on March 22-23, 2010. Prof. Sukhatme is a Distinguished Honorary Professor, IIT Gandhinagar and Professor Emeritus, Department of Mechanical Engineering, IIT Bombay.

