

Connections

IIT Gandhinagar



Connections is the quarterly newsletter for friends of IIT Gandhinagar

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January - March 2014

Institute News

UL - IIT Gandhinagar Water Challenge

Eight IITGN undergraduate students have been declared winners of the Underwriters Laboratories-IIT Gandhinagar (UL-IITGN) Water Challenge. Each student will receive prize money of \$500 cash and an opportunity to visit UL, Chicago, during the summer. The students competed in a project, titled “**Designing and developing a research platform for drinking water station for community use.**” **Mr August Schaefer**, senior Vice President (retd), UL, Chicago; and **Mr R A Venkitachalam**, vice president and Managing Director, UL, India announced the winners of Phase 1 of the challenge on March 26, 2014. In Phase 2 of the project, students will implement their ideas, and visit different community water purification units in India and UL’s water research lab in Bangalore. Since 2009, IITGN undergraduates have been enthusiastic participants in the UL-IITGN challenge. Past challenges have focused on fire safety, photo-



voltaic cells, and electric vehicles. The contest winners are: Group 1: **Manjot Singh, Monish Bhangale, Sanjit Jena, and Saurabh Vaichal.** Group 2: **Ch Suryavinay Koundinya, Rakesh Ranjan, Shubham Pachori, and Vidyanand Wagh.**

Faculty News

Awards and Recognition

Prof Bireswar Das has received the **IUSSTF research fellowship** from Indo-US Science and Technology Forum (IUSSTF), to work on **Complexity theory** at the Center for Discrete Mathematics and Theoretical Computer Science (DIMACS), Rutgers University from Jan-Dec 2014.



Sponsored Projects

- **Global stability analysis of spatially developing axisymmetric boundary layers** sponsored by Aeronautics Research and Development Board (ARDB). Principal investigator: **Prof Vinod Narayanan**, Mechanical Engineering.
- **Post-stroke tele-neurorehabilitation using an operant conditioning paradigm under volitionally driven transcantaneous neuromuscular electrical stimulation** funded by the DST, and Institut National de Recherche en Informa-

tique et en Automatique (INRIA) under the Indo-French Programme in Information and Communication Science & Technology (ICST). Principal investigator: **Prof Uttama Lahiri**, IITGN and **Dr Anirban Dutta**, Université Montpellier, France.

- **Exploring internationally collaborative projects where the arts meet technology**, student, faculty and institute exchanges, sponsored by British Council’s Knowledge Economy Partnerships (KEP) programme. Principal investigators: **Prof Achal Mehra**, IITGN and **Victoria Dean**, The School of the Arts, The University of Northampton, UK.



New Faculty

The following faculty joined IITGN: **Pranab Kumar Mohapatra**, Associate Professor, Civil Engineering, PhD, IIT Kanpur.
Date of Joining: 01.01.14

Superb Misra

Assistant Professor, MSE jointly with Mechanical Engineering, PhD, Imperial College London, UK.
Date of Joining: 03.03.14

Scholars in Residence

Jorge Louca
ISCTE-IUL Lisbon University Institute

Brian Brophy

Director, Theater Arts Program,
California Institute of Technology

Suresh Chandra

Professor Emeritus, College of Engineering, North Carolina A&T State University

Roddam Narasimha Distinguished Seminar Series, Engineering Education, Seismic Design



Dr John O Dabiri, director, Center for Bio-inspired Wind Energy, California Institute of Technology presented a seminar on **Bio-inspired Wind Energy: From Fish Schools and Seagrass to Better Wind Farms**, Jan 31, 2014. In his presentation he discussed cutting edge technology in vertical wind turbines which are more environmentally friendly compared to conventional horizontal wind turbines. **Dr Dabiri's** lecture is part of the Roddam Narasimha Distinguished Seminar Series, which aims at bringing young distinguished professionals to the institute to

present their work in areas of national importance. The series was instituted with support from **Prof Amrutur Anilkumar** of Vanderbilt University.

A two-day conclave to review the pedagogy in engineering institutions in Gujarat was held at IITGN during March 15-16, 2014. The workshop had about ninety participants from eight institutions across Gujarat. **TEQIP Conclave (Technical Education Quality Improvement Programme)** mainly focused bridging the gap between teacher and student. It covered various aspects of teaching environment in different types of courses. Besides showcasing model sessions in various categories, the conclave consisted of several brainstorming sessions followed by panel discussion to bring out the gap areas to improve upon.

A day-long series of talks and panel discussion on **Rethinking Engineering Educa-**

tion: A Case for Accomodating Multiple Discourses was organized on March 22, 2014. Participants included **Prof Rajeev Sangal**, IITBHU (through tele-link); **Prof Bijoy Boruah**, IIT Delhi; **Prof Vikram Gadre** (through tele-link), **Prof A K Suresh**, **Prof Milind Sohoni**, IIT Bombay; **Prof A Raghuramraju**, Central University, Hyderabad; **Prof B Subramanian**, IIT Mandi; **Prof Raghubir Sharan**, **Prof Atul Bhargav** and **Prof Mona Mehta**, IIT Gandhinagar.

A short course on **Seismic Design of Reinforced and Confined Masonry Buildings** was conducted by **Dr Durgesh Rai**, IIT Kanpur; **Dr Juan Jose Perez Gavilan**, UNAM, Mexico; **Dr Svetlana Brzev**, BCIT, Canada; **Prof Sudhir K Jain**, and **Prof Dhiman Basu**, IIT Gandhinagar, Feb 17-21, 2014, 58 persons participated. The short course followed by a brain storming workshop on **Confined Masonry** during Feb 22-23, 2014.

Activities at IITGN

Short Courses/ Workshops/ Panels

- Short course on **Reliability & Availability Quantification** by **Dr Kishor S Trivedi**, Duke University and **Dr Andreo Bobbio**, Universit del Piemonte Orientale in Alessandria, Italy, Jan 20-22, 2014.
- Short course on **Soil-Structure Interaction, Computer Applications and Material Models** by **Dr Chandrakant S Desai**, University of Arizona; **Prof Dhiman Basu**; **Prof Gaurav Srivastava**; and **Prof Amit Prashant**; IIT Gandhinagar, Jan 21-24, 2014.
- Workshop on **Women in the Field: A Trans-disciplinary Approach to Fieldwork** by **Prof Rosa Maria Perez** and **Prof Lina Fruzzetti**, Jan 21, 2014.
- A workshop on **Industrial Hydraulics and Pneumatics** for practicing engineers from Industry was conducted by **Prof N Ramakrishnan**, Feb 14-16, 2014. A total of 17 engineers from industries across India attended the workshop.
- Short course on **Self Exploration** by **Meenakshi Kirtane**, founder-director of Maanas, psychotherapy and self awareness organization, March 8-9, 2014.
- Workshop on **Applications of Remote Sensing to Archaeological Investiga-**

tions by **Dr M B Rajani**, fellow, Nalanda University, March 15, 2014.

- Workshop on **Effective Self Management** by **Dr Anjali Joshi**, March 22-23, 2014.

Lectures

- **Physical-cyber-social computing** by **Dr Amit Sheth**, Ohio Center of Excellence in Knowledge-enabled Computing, Wright State University, USA, Jan 3, 2014.
- **Seismic margin of building structural system** by **Dr P C Basu**, former director C&SED, Atomic Energy Regulatory Board (AERB), Mumbai, Jan 7, 2014.
- A series of lectures on **Electron microscopy** by **Prof T R Ramachandran**, former Director, JNARDDC, Nagpur, Jan 20-28, 2014.
- **Measuring the impact of court judgments: Evidence from the Indian Supreme Court** by **Vinay Sitapati**, a PhD candidate in Politics at Princeton University, Jan 27, 2014.
- **Plugging into 72 trillion economy: Cultural and communication best practices for international trade** by **Mr Harsh Bhargava**, founder, I-Create Inc, Jan 28, 2014.
- **Phenomenal woman: Designing a**

masterpiece for your life by **Dr Aruna Bhargava**, honorary executive director, I-Create Inc, Jan 29, 2014.

- **Peoples' linguistic survey of India** by **Prof Ganesh Devy**, founder of BHA-SHA, Feb 3, 2014.
- **Crossing the valley of death; bridging the gap between academia and industry** by **Dr Chelva Kumar**, president, EPIR Technologies Inc, Chicago, Feb 10, 2014.
- Screening of award-winning Canadian documentary film **World Before Her** followed by discussion with filmmaker **Nisha Pahuja**, Feb 12, 2014.
- **Mapping of brain oxidative stress and pH with alzheimer disease progression: A novel brain imaging approach** by **Prof Pravat Mandal**, National Brain Research Center, Manesar, Haryana, Feb 14, 2014.
- **Vitamin D and breast cancer: Emerging concepts** by **Prof Rajendra G Mehta**, Illinois Institute of Technology Research Institute, Chicago, Feb 17, 2014.
- **Veda to Ayurveda** by **Dr Kenneth Zysk**, University of Copenhagen, Feb 18, 2014.
- **Climate change and Himalayan glaciers** by **Dr Anil Kulkarni**, IISc Banga-

lore, March 3, 2014.

- **Low energy computing; and Approximate computing for energy-efficient error-resilient multimedia systems; and Spin as state variable for computation: Prospects and perspectives** by **Prof Kaushik Roy**, Purdue University, March 3-5, 2014.
- **Systems engineering approach to the design of complex engineered systems and Design of a modern combat aircraft: Lessons from India's LCA Programme** by **Dr Kota Harinarayana**, Dr D S Kothari DRDO Chair Professor at Aeronautical Development Agency (ADA) Bangalore, March 5-6, 2014.
- **Oxidative damage to DNA, and Modular self-assembly of DNA encoded nanostructures** by **Prof Gary Schuster**, Georgia Institute of Technology. Atlanta, March 7 & 10, 2014.
- **KIM-1 as a novel biomarker and therapeutic target of kidney disease** by **Dr Venkata S Sabbiseti**, Harvard Medical School, March 10, 2014.
- **Emperor Ashoka: Between archaeology and texts** by **Dr Nayanjot Lahiri**, University Of Delhi, March 11, 2014.
- **Conditioning of bases of finite dimensional normed spaces** by **Prof B V Limaye**, IIT Bombay, March 11, 2014.
- **Enhancing video lectures** by **Dr Viraj Kumar**, PES University, Bangalore March 18, 2014.
- **The joy of being a global engineer-Strategies to negotiate cross cultural issues** by **Mr Ajay Mehta**, Managing

Partner, Strategic Global Partners LLC, Arizona, March 20, 2014.

- **Fluorescence investigation of molecules and materials** by **Prof Anindya Datta**, IIT Bombay, March 20, 2014.
- **Funding options for a Tech start-up at IITGN** by **Mr Sushanto Mitra**, CEO, Lead Angels and **Dr Hiran Vedam**, IITGN, March 28, 2014.
- **Yogacara Buddhism and cognitive science: Constructing and deconstructing dualistic experience** by **Prof William S Waldron**, Chair of the Religion Department at Middlebury College, March 28, 2014.
- **Control of systems of differential equations** by **Prof Mythily Ramaswamy**, TIFR-CAM, Bangalore, March 28, 2014.

Student and Staff Activities

Awards & Recognition

- **Payal C Mukherjee** has been awarded the **Graduate Student Paper prize** at the 14th Annual South Asian Literary Association Conference (SALA 2014) in Chicago, IL, USA for the paper (co-author: Prof Arnapurna Rath) entitled **Emergence of the cosmopolitan-national in Midnight's Children and Maximum City**.



Ms Payal C



Mr B V Puvar



Mr Ashwin R



Ms Komal



Mr P Vankar



Mr I Thakor

- **Mr B V Puvar**, Security Advisor; **Mr Ashwin R Kubasadgoudar**, Junior Technical Superintendent; **Ms Komal Vadhvani**, Junior Assistant; **Mr Piyushbhai P Vankar**, Junior Assistant; and **Mr Ishvarji Thakor**, Library Attendant were awarded the **Excellence Award for Non-Teaching Staff** for the year 2013 for exemplary service.

REFECO '14

Researchers' Ferret Confab 2014 (REFECO), an interdisciplinary platform for young researchers aimed at showcasing scientific and technical concepts/ideas and to provide a platform to cultivate keenness for cutting edge research and a passion for out of the box solutions was organized by PhD research scholars at IIT Gandhinagar during March 8-9, 2014. Organized for the third consecutive year, it was attended by the student community of IITGN along with students from IIT Roorkee, GEC Rajkot etc. A total of 69 oral and 41 posters were presented.

Felicitation of Students on Dean's List

Based on the performance during Semester-I of Academic Year 2013-14, a total of 147



BTech students were felicitated by Director, **Prof Sudhir K Jain** with a letter of appreciation and a topical book (**To Kill a Mocking Bird** by Harper Lee), March 7, 2014.

Life Skill Series

An interactive session on **Understanding people, A look through Maslow's lens** was conducted for around 40 students by **Ms Meenakshi Kirtane**, a practicing psychotherapist and behavioural trainer, Jan 17, 2014.

Blithchron-14



Blithchron, the two-day cultural festival of IIT Gandhinagar was back with its sixth edition during Jan 25-26, 2014. Started 5 years ago, Blithchron has surpassed all expectations and gained immense popularity over the years. Solely organized by the students of IITGN, Blithchron acts as a catalyst for budding talents from various universities, colleges and institutes from across the country. This year it showcased 25 events over two days with events like fashion shows, The Butler Did It, Antarganee, Panache, Jobless, String Theory-a rock band competition, and Synchronize-a dance competition; among others. A live performance by Pentagram with Vishal Dadlani as the lead singer was its major attraction. The entire event saw a total footfall of about 22,000 students from colleges in Ahmedabad, Gandhinagar, Surat, and Vadodara. Boond, the Blood donation drive organized by Blithchron '14 collected 83 units of blood from over 110 students, staff, and faculty.



Republic Day Celebrations

The 65th Republic Day celebrations on Jan 26, 2014 began with flag hoisting by **Prof Sudhir K Jain**, director, IITGN and **Dr A K Prabhakar**, principal, VGEC. A cultural programme by IITGN students as well as poem recital by Nyasa kids, a social initiative of IIT community members was appreciated by everyone present.

Music Symposium

A two-day music symposium held during Jan 3-4, 2014 included a performance of **Hindustani classical ragas** with **Dr Matthew Rahaim**, University of Minnesota (vocal); **Nitin Mitta**, former faculty at the Learn Quest Academy of Music, Waltham, Massachusetts (tabla); and **Prof Srinivas Reddy** (sitar); a lecture titled **Authority, critique, and revision in the Sanskrit music-theoretic tradition: Re-reading the Svaramela-kalanidhi**, a working paper by **Dr Matthew Rahaim**, **Prof Srinivas Reddy** and **Lars Christensen**, PhD student at University of Minnesota; and an interactive workshop on the art of tabla (solo and accompaniment) with **Nitin Mitta** (tabla).

Aero Modeling Workshop and Air Show

The first **Aero modeling workshop and**



Air show, 'Let's Fly' was organized at IIT Gandhinagar, March 16, 2014. **Abhishek Ranjan**, electrical engineering and **Prashant Shekhar**, chemical engineering, both second year B.Tech students conducted a workshop for 42 students, divided into 7 teams. The participants learnt designing and fabricating an RC glider and understood the aerodynamics, controls and stability in the simplest manner. All the 7 gliders were seen flying after the event.

Sports News



Halla Bol '14

The 4th edition of Halla Bol, the all-night intra-college sports festival, was organized from March 14-23, 2014. **Mr A C Joshi**, ONGC (International Chess Arbiter) and **Mr Gulab Singh Chohan**, ex FIFA Referee and Gujarat State Football Association Secretary, were the chief guests for the opening ceremony. The festival comprised 11 entertaining games played over 10 days. More than 400 matches attracted 2953 registrations from students, staff and faculty, who formed mix teams. The event was coordinated by **Surya Kiran**, sports secretary and **Joy Narang**.

Gujarat State Athletics Championship 2014

In the Men's category **Pradeep Diwakar** won gold medal in shot put & silver medal in discus throw. In Women's category **Shivani Rani** won gold medal in discus throw & silver medal in shot put.

Justice League '14

Taruna Yadav won gold medals in shot put & discus throw; **Pradeep Diwakar** won gold medal in shot put & silver medal in discus throw; **Pardeep Phullay** won bronze medal in javelin throw; and **Abhimanyu Singh** won bronze medal in triple jump at the Justice Cup'14 Annual Sports Festival, GNLU Gandhinagar, March 8-10, 2014.

PDPU Petro Cup '14

In the Men's category, **Naveen Kumar Endla** won gold medal in javelin throw; and **Aditya Shah** won gold medal in triple jump. In the Women's category, **Silky Agrawal** won gold medal in discus throw; **Taruna Yadav**

won silver medal in discus throw & bronze medal in shot put; and **Sanchayni Bagade** won silver medal in long jump.



Cricket Combat League (CCL) 2013-14

IITGN started its own **Cricket league** comprising of B.Tech, M.Tech, and PhD students. A total of 187 students were auctioned and formed 8 teams. Apart from this, 18 members from staff and faculty formed a separate team named **Maroon Gladiators** under the captaincy of **Rohit Chaudhary**. **Maroon Gladiators** defeated **White Wolves** (Captain- **Hare Lal Mahato**) in the finals. **Pawan**

Kumar was declared as best player of the league, scoring more than 200 runs and taking 14 wickets; and **Krishna Manwani** took more than 16 wickets and was adjudged the best bowler. The event was facilitated by the core team of **Durgesh Bagri**, **Mohit Bajaj** and **Ankur Meena**, **Yash Mehta** and **Vishvendra Singh** supported by 25 team members.

Inter Department Tournament

- The finals of Basketball (Men's) were played between Chemical & Electrical teams. The Electrical team became the first time IDC Champion and registered a victory by 26-16. **Sanjay Meena**, **Prince Kumar Singh** and **Darshil Doshi** displayed a great game and were the center of applause for the evening.
- Mechanical branch defeated Chemical (2-0) in football finals and won the title for the fourth time. **Ojas Joshi** was the top scorer of the tournament. Performance of **Rajat Chand** was also noteworthy.