

Connections

Connections is the quarterly newsletter for friends of IIT Gandhinagar



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INSTITUTE ACTIVITIES



PROF SUDHIR JAIN REAPPOINTED AS DIRECTOR

Prof Sudhir K Jain, the founding director of IITGN, has been reappointed for a third term as director of IITGN. His appointment for the next five years was approved by the President of India. Prof Jain was on the faculty of IIT Kanpur for 35 years from 1984-2019 and is an internationally reputed scholar of earthquake engineering. He served as President of the International Association for Earthquake Engineering from 2014-18, was elected Fellow of the Indian National Academy of Engineering in 2003, and was conferred Life Membership by the New Zealand Society for Earthquake Engineering (NZSEE) in 2013.

RANKED = 7th
IN INDIA

RANKED 501-600

THE WORLD
UNIVERSITY
RANKINGS
2020

IITGN RANKED AMONG THE WORLD'S TOP 600 INSTITUTIONS

IITGN has been ranked among the top 600 educational institutes worldwide and ranked 7th in India, in the 2020 Times Higher Education (THE) World University Rankings. This year, THE World University Rankings, one of the most prestigious educational rankings worldwide, ranked 1,396 institutions from 92 countries on 13 performance indicators, including teaching, research, knowledge transfer, and international outlook. IITGN, an 11-year-old institution, entered the global rankings for the first time this year in the 501-600 band worldwide.

EIGHTH CONVOCATION CEREMONY

The 8th Convocation Ceremony of the Institute was held on July 27, 2019. A total of 394 students graduated this year, including 145 BTech, 2 BTech-MTech Dual Degree, 1 BTech-MSc Dual Degree, 105 MTech, 86 MSc, 21 MA, 27 PhD, and 7 PGDIIT. A total of 25 students were awarded gold medals, 13 students were awarded silver medals, while 15 students were awarded medallion for excellence in various categories.

Dr Swati Piramal, Vice-Chairperson, Piramal Group, and Director of Piramal Enterprises, was the Chief Guest on the occasion. She encouraged the students to dream big and aim for higher purpose in their life. **Prof Amit Prashant**, the then Officiating Director, IITGN, highlighted key initiatives and programs by IITGN during the academic year 2018-19. He urged students to identify their true strengths and capabilities to focus on and get the best out of them.



Aparna Tumkur received the President's Gold Medal for BTech, **Kimti Manawa** received the President's Gold Medal for MTech, and **Rajes Ghosh** was awarded the President's Gold Medal for MSc and MA. The Director's Gold Medal for BTech went to **Anusha Kamath**, Director's Gold Medal for MTech was received by **Rasikh Nazir**, Director's Gold Medal for PhD was awarded to **Ankita Arora**, and Director's Gold Medal for MSc and MA went to **Rajes Ghosh**.

FOUNDATION PROGRAM



IITGN's flagship five-week Foundation Program kick-started on July 22, 2019, for the BTech batch of 2019. The program included many exciting events and activities like improvisational theatre workshop, sketching, dance, sessions with IITGN-CCL, fun with grammar, sessions on self-defence, cleanliness drive, conflict resolution, paper engineering, voice personality, design workshop, mental health workshop, juggling, drum circle, and many more. The program concluded with Intramural, a sports event, and Eureka, a cultural evening organised by the

TOWN HALL WITH NEW JERSEY GOVERNOR PHIL MURPHY

New Jersey Governor **Phil Murphy** visited IITGN on September 21, 2019, and participated in a Town Hall and a Q&A with IITGN students and the community. Gov Murphy, who was on a week-long trade mission to India, was accompanied by his wife, First Lady **Tammy Murphy**, and a trade and educational delegation. IITGN exchanged MoUs with four New Jersey public universities, including New Jersey Institute of Technology, New Jersey City University, Rutgers University and Rowan University on the occasion.



SUPPORT FOR THE INSTITUTE

ESTABLISHMENT OF SMT AMBA AND SRI V S SASTRI DISTINGUISHED VISITING CHAIR

IITGN established **Smt Amba & Sri V S Sastry Distinguished Visiting Chair** at the Institute on August 5, to promote institutional excellence. **Prof Amrutur Anilkumar**, an aerospace engineer and a faculty member at Vanderbilt University, Nashville, Tennessee, USA, has established this Chair in honour of his parents, **Smt Amba** and **Sri V S Sastri**. Under this Chair, every year, an active distinguished academic of international



stature from the field of science, engineering, or humanities, will be invited to spend at least a month at IITGN for lectures, interactions, and research collaborations.

MATCHING GRANT FOR ALUMNI SCHOLARSHIPS

Mr Parimal Karani, an Ahmedabad based businessman, contributed towards matching grant for alumni scholarship at the Institute. This scholarship grant will be combined with alumni donors' scholarship grants to support needy and deserving students of the Institute. It will also encourage young alumni to become donors at an early stage of their career. Mr Karani holds a B.Tech in Civil Engineering from IIT Bombay (1975 batch).

DISTINGUISHED VISITORS

SHRI RAVI SHANKAR PRASAD'S VISIT

On September 11, 2019, Shri Ravi Shankar Prasad, Hon'ble Union Minister for Law and Justice, Communication and Electronics and Information Technology, inaugurated NASSCOM Centre of Excellence - IoT & AI at the Research Park of IITGN. He also interacted with start-ups and IT industry leaders from Gujarat.

OUTREACH

PROF JAIN INVITED AS THE CHIEF GUEST

Prof Sudhir K Jain, Director, IITGN, was invited as the Chief Guest at the 4th Convocation of the School of Planning and Architecture, Vijayawada, on September 13, 2019. He also inaugurated some laboratories there.

FACULTY NEWS

PATENTS

- Polymer Reinforced Metal Matrix Composites and a Process for Fabricating the Same: Inventors include **Amit Arora, Chandra Sekhar Tiwary, Arpan Rout, Anurag Krishnakedar Gumaste** and **V. P. Mahesh**.
- Carrier for Anti-cancer Drugs and a Process for Preparing the Same: Inventors include **Chinmay Ghoroi, Jai Prakash Chaudhary, Sophia Varghese**.
- A Filter for Water Purification and a Process for its Manufacture: Inventors include **Chinmay Ghoroi, Deepa Dixit**.
- Composite Propellant: Inventors include **Kabeer Jasuja, Chinmay Ghoroi** and **Harini Gunda**.

- A Physiology-sensitive System for Managing Physical Behavior and a Method Thereof: Inventors include **Uttama Lahiri** and **Dhaval Solanki**.
- An Apparatus and Method for 3D Printing of Concrete Structures: Inventors include **Shashank Shekhar** and **Manish Kumar**.

AWARDS AND RECOGNITIONS

- **Prof Kabeer Jasuja**, Assistant Professor, Chemical Engineering, IITGN, has been selected as the Associate of the Indian Academy of Sciences.
- **Prof Jaichander Swaminathan**, Assistant Professor, Mechanical Engineering, IITGN, has been selected as the 2019 International Desalination Association (IDA) Fellow.
- **Prof Vikrant Jain**, Professor, Earth Sciences,

IITGN, received the prestigious National Geoscience Award for the year 2018 in the category of Applied Geosciences by the Ministry of Mines, Government of India (GoI).

- **Prof Raj Srinivasan** of the University of Saskatchewan, and a Visiting Professor in Mathematics, IITGN, was declared the winner of the 2019 Provost's College Award for Outstanding Teaching in the College of Arts and Science by the University of Saskatchewan.

SPONSORED AND CONSULTANCY PROJECTS

To find the list of sponsored and consultancy projects at IITGN, please go to this link: https://iitgn.ac.in/projects#q3_2019 or scan the QR code.



NEW FACULTY

The following faculty members joined the institute during this quarter:

Name	Designation	Discipline	PhD/ Last Degree	Date of joining
Dr N Ladhawala	Adjunct Professor	Mathematics	Purdue University, West Lafayette, Indiana	01-07-2019
Dr Mohd Mabashshir Ahsan	Lecturer	Humanities	Jawaharlal Nehru University, New Delhi	01-07-2019
Dr Arnab Saha	Assistant Professor	Mathematics	University of New Mexico, Albuquerque, New Mexico	02-07-2019
Dr Raghavan Ranganathan	Assistant Professor	Materials Science & Engineering	Rensselaer Polytechnic Institute, Troy, New York	04-07-2019
Dr Pradipta Ghosh	Assistant Professor	Materials Science & Engineering	IISc Bangalore	04-07-2019
Dr Paresh Date	Visiting Professor	Mathematics	University of Cambridge, UK	10-07-2019
Dr Sarma Rani	Visiting Associate Professor	Mechanical Engineering	University of Illinois at Urbana-Champaign, USA	18-07-2019
Ms Tina Chaudouet	French Language Trainee Teacher	Humanities	University of Franche-Comte-Besancon, France	01-08-2019
Dr Sarvesh Chandra	Visiting Professor	Civil Engineering	IIT Kanpur	14-08-2019
Dr Bala Natarajan	Fulbright Distinguished Expert		Kansas State University, USA	22-08-2019
Dr Vladan Prodanovic	Visiting Professor	Dr Kiran C Patel Centre for Sustainable Development	University of British Columbia, Vancouver, Canada	30-09-2019

SCHOLAR-IN-RESIDENCE

Name	Discipline	Affiliation	Date of joining
Dr Alok Laddha	Physics	Chennai Mathematical Institute	04-07-2019
Dr Rosa Maria Perez	Social Sciences	ISCTE, Lisbon	05-08-2019

Name	Discipline	Affiliation	Date of joining
Dr Shahrzad Haddadan	Computer Science & Engineering	Sapienza University of Rome, Italy	05-08-2019
Dr Nuno Guimarães	Humanities	ISCTE-University Institute of Lisbon	14-08-2019
Dr Shungo Kawanishi	Humanities	Japan Advanced Institute of Science and Technology (JAIST)	26-08-2019

ACTIVITIES AT IITGN

GIAN COURSE

Dr Rajiv S. Mishra, University Distinguished Research Professor at the University of North Texas, USA, conducted a GIAN Course on Microstructural Evolution during Friction Stir Processing from September 16-21, 2019. Faculty and students from various IITs, NITs, and engineering colleges, and researchers from industry and government R&D organizations participated in this course. The course was coordinated by **Prof Amit Arora**, IITGN.

ACM-W SUMMER SCHOOL ON ALGORITHMIC GAME THEORY

IITGN in partnership with ACM-India and ACM-Women India, and with support from Oracle, organized a two-week summer school on Algorithmic Game Theory from July 2-14, 2019. The school had over 50 participants from all over the country. The summer school was coordinated by **Prof Neeldhara Misra**.

AICWiC 2019

The Institute hosted ACM India Celebrations of Women in Computing (AICWiC 2019) on July 13, 2019, by inviting **Dr Gargi Das Gupta**, Director of IBM Research India and the CTO of IBM India and South Asia; and **Prof Joycee Mekie**, Assistant Professor, Electrical Engineering, IITGN for two keynote lectures. This was followed by a panel discussion on 'Soft Computing for Global Development / Women in Computing'.

73RD INDEPENDENCE DAY

On August 15, 2019, IITGN celebrated the 73rd Independence Day with a flag hoisting ceremony by **Prof Amit Prashant**, the then Officiating Director, IITGN. Later, he addressed the IITGN community, followed by Dean's list felicitation program and a cultural program.

BOEING BUILD PROGRAM

IIT Gandhinagar Innovation and Entrepreneurship Center (IIEC) partnered with Boeing India to implement BUILD (Boeing's University Innovation Leadership Development program). For which, IIEC conducted a five-day bootcamp for students and early stage startups during August 2-6, 2019. Twelve student teams and early stage startups from Gujarat, Madhya Pradesh, and Rajasthan were exposed to different aspects of startup such as Design Thinking, Defining Value Proposition, Business Model Canvas, Startup Life Cycle, Entrepreneurial Finance. The program ended with a regional pitching competition on August 7, 2019.

RODDAM NARASIMHA LECTURE

The eighth Roddam Narasimha Distinguished Lecture was delivered on August 5, 2019, by

Prof Jayant R Haritsa, a data Scientist and Professor in the Department of Computational & Data Sciences at IISc Bangalore, on the topic of 'Data Science: The Good, the Bad and the Ugly'.



THIRD DECENNIAL LECTURE

The third decennial lecture under the IITGN Decennial Lecture Series was delivered by **Dr Aravind Srinivasan**, Director, Aravind Eye Care Systems, Tamil Nadu, on August 23, 2019. He gave a talk on 'Infinite Vision: Story of Greatest Business Case for Compassion'.



ADVISORY COUNCIL MEETING

The third meeting of the Advisory Council for IIT Gandhinagar Innovation and Entrepreneurship Center (IIEC) and Research Park took place on August 13, 2019. The external members who attended the meeting include: **Mr Kris Gopalakrishnan**, **Mr Maulik Jasubhai**, **Mr Vijay Kumar Ivaturi**, **Mr Anand Parekh**, and **Mr Sanjay Randhar**.



HIGH-SPEED RAIL SEMINAR

The National High-Speed Rail Corporation (NHSRCL) organized a seminar on 'High Speed Rail & Related Research Projects' at IITGN on August 27, 2019. Keynote speakers at the seminar, **Shri Achal Khare**, Managing Director, NHSRCL, and **Dr Norimichi Kumagai**, President, Railway Technical Research Institute (RTRI), Japan, discussed the first HSR project in India and technical aspects associated with it. The keynote speeches were followed by a panel discussion.

DR A N KHOSLA LECTURE

IITGN hosted the fourth Dr A N Khosla lecture organized by IIT Roorkee Alumni Association Ahmedabad Chapter (IITRAAA) on September 7, 2019. **Shri Dilip Kumar Gupta**, MD, Sagarmala

Development Company Limited (SDCL) and Director Projects, delivered a lecture on 'Vision of Sagarmala and the Role of SDCL'.

DST-FIST MEETING

IITGN hosted a DST-FIST- Earth and Atmospheric Sciences meeting on August 23, 2019.

EXPLORER FELLOWSHIP OPEN HOUSE

Explorer Fellowship at IITGN is a unique annual summer program which allows its students to discover India's cultural diversity by exploring the length and breadth of the country on a very limited budget. This year, a total of 84 students in 27 different teams undertook the fellowship. The students shared their experiences from the journey of discovery through short video-documentaries on September 21, 2019.

WORKSHOPS BY CCL-IITGN

Center for Creative Learning, IITGN, in collaboration with Directorate of Employment and Training (DET), Government of Gujarat conducted five 2-day residential, hands-on experiential workshops for ITI Instructors of the state. The center also conducted workshops at all 19 District Institute of Education and Training (DIET) centres of Gujarat and introduced BEd students to new pedagogy. Government of India has sought involvement of CCL in improving the country's performance and ranking in the 2021 Program for International Student Assessment (PISA) exam. The team of CCL has already trained around 200 KVS teachers, 70 teachers of NCR CBSE schools. CCL has offered four months internship to ten students from various ITIs of Gujarat under the initiative- 'Makers and Communicators'. These ten students were also felicitated by the Hon'ble Chief Minister of Gujarat, **Shri Vijay Rupani**, on September 19, 2019.



NEEV SUMMER SKILL COURSES

During the summer of 2019, NEEV, IITGN organized an eight-week Summer Skill Courses to provide entrepreneurship and vocational skills training to more than 100 youth and women from nearby villages. They were trained in wiring and CNC machining, basic computer course, spoken English, hardware and networking, and stitching. The valedictory event of the program was organized on July 05, 2019.

WORKSHOPS

- Elemental Analysis with ICP-MS and Isotopic Analyses with MC-ICP-MS and TIMS by **Dr Laure Dussubieux**, Chicago Field Museum, and **Dr Thomas Fenn**, University of Oklahoma, July 2-5, 2019.
- 'Effective use of Web of Science' Citation Database and 'EndNote' Reference Management System by **Dr Subhasree Nag**, Solution consultant, Scientific Research Division, Clarivate Analytics, August 24, 2019.
- SciFinder Database for Academic Research by **Mr Vinit Kunte**, Application Specialist and an expert trainer from ACS International (American Chemical Society, USA), September 4, 2019.
- Innovations and Patenting: InnovationQ Plus- a tool for determining patentability (IEEE) by **Dr Dhanu Pattanashetti**, Client Services Manager at IEEE, USA, September 6, 2019.
- On-site microbial water quality surveying with a portable sequencing device workshop by **Dr Kishor Acharya**, Research Associate, Newcastle University, UK, September 9-12, 2019.

- Quantum Thermal Machines by **Bijay Agarwalla**, IISER Pune; **Arnab Ghosh**, IIT Kanpur; Saikat Ghosh, IIT Kanpur; **Sibasish Ghosh**, IISc Chennai; **Ramandeep Johal**, IISER Mohali; **T S Mahesh**, IISER Pune; **Victor Mukherjee**, IISER Berhampur; **Umakant Rapol**, IISER Pune; **R Vijay**, TIFR Mumbai; **B Prasanna Venkatesh**, IIT Gandhinagar; **Sai Vinjanampathy**, IIT Bombay, September 21-22, 2019.

SHORT COURSES

- Juggling Based Mathematics and Algorithms by **Mr Mahit Warhadpande**, a Social Worker and Juggler, August 11-17, 2019.
- Anthropology and Human Rights by **Dr Rosa Maria Perez**, Visiting Professor, IITGN, August 26-30, 2019.
- Introduction to Statistical Analysis using Bayesian inference by **Dr Arindam Bhattacharjee**, a postdoctoral fellow at the Werner Reichardt Center for Integrative Neuroscience in Tuebingen, Germany, August 29-31, 2019.
- Foundations of State Estimation by **Dr Bala Natarajan**, a faculty member with the Mike

- Wiegiers Department of Electrical and Computer Engineering, Kansas State University and Fulbright Specialist at IITGN, September 3-12, 2019.
- Understanding Diversity by **Prof Shungo Kawanishi** and **Dr Kotona Motoyama** from JAIST (Japan Advanced Institute of Science and Technology), September 9-13, 2019.
- FLY (Finding the Leader in You)-Scholar program by **Dr Viraj Vora**, a Soft Skills & Life Skills trainer, **Ms Uma Oza**, external committee member of the Internal Complaints Committee of The National Stock Exchange (Gujarat), September 14-15, 2019.
- Basics of Fire Engineering by **Prof Pravin Gandhi**, Guest Professor in Mechanical Engineering at IITGN and the Director of R&D at UL, USA; **Prof Gaurav Srivastava**, Assistant Professor, IITGN; **Prof Chinmay Ghoroi**, Associate Professor, IITGN, September 18-19, 2019.

LECTURES

Follow this link: events.iitgn.ac.in or Scan the QR code to see the lectures held at IITGN.



STUDENT AND STAFF ACTIVITIES

AWARDS AND RECOGNITIONS

- Dr Bibekananda Maji**, a Postdoctoral Fellow in Mathematics Discipline, IITGN, received the Best Paper Presentation Award at the International Conference on Number Theory and Graph Theory held at the University of Mysore from June 27-29, 2019.
- Mandar Bhoir**, a PhD student in the discipline of Electrical Engineering, IITGN, received the Outstanding Graduate Teaching Fellow Award as a recognition for the exceptional performance of PhD students at IITGN as GTFs.
- Chandan Kumar Jha**, a PhD student in the discipline of Electrical Engineering, IITGN, won the first prize (Individual Category) in the "Dare to Dream DRDO Innovation Contest", in the challenge area of Wearable Communication Technologies for Special Operations Soldiers for his project on a high-sensitivity optical contact microphone.

UNDERGRADUATE RESEARCH CONCLAVE

IITGN, on August 31, 2019, organized its fourth Undergraduate Research Conclave (UGRC).



50 undergraduate students of IITGN, who did their summer internships at various prestigious institutions/organizations around the world, presented their research work to the IITGN community. The Conclave was organized by **Prof Manish Kumar** and **Prof Iti Gupta**. The Best Poster Award was received by **Shreyas Sreeram** and **Pratik**. The posters by the following four students named, **Amit Kumar Singh Yadav**, **S. Vinu Sankar**, **Tejas Wani**, and **Varun Gohil**, received Special Mention by the jury.

TECH RADIO

Tech Radio at IITGN is a student tech talk series that gives an opportunity to the students to showcase their technical work/projects to the community. This semester, a total of three teams displayed their projects namely, **Team TelescoGalvans**, who designed an "Automated Telescope System"; **Team Brainy Buddies**, who developed a 'Ball Tracking Bot'; and **Team**

ChemRover, who designed a model car that derives power from temperature gradient developed between a chemical reaction and a physical reaction.

A SERIES OF SESSIONS BY SDC

The Staff Development Cell (SDC), IITGN organized various events/sessions for the development of the staff members of the Institute. These events include familiarization session on NPS; sessions on stress management, demonstration & practice of Yoga; sessions by professional trainers on self-improvement, motivation and team building.

BLOOD DONATION CAMP

The Health Committee at IITGN along with Ganeshotsav'19 students team organized a blood donation camp on September 05, 2019. A total of 95 units of blood were donated by students, faculty, staff and their family members.

FOOD WASTE CHALLENGE

The first-year BTech students at IITGN took up a challenge to reduce food wastage by their batch to less than 10 kgs in a single day to create awareness among students to not take more food than what they can eat. The students achieved the target successfully as the total food wasted by the entire BTech 2019 batch was 2 kg 160 g.

SPORTS NEWS

TRACK & FIELD EVENT

The Sports team of IITGN organized the first-ever "Track & Field Event" (TAFE) 2019 with a theme of "Finding the Speed and Power in You", from August 17 to September 7, to encourage everyone to identify their potential in the athletic events. Games like Shot Put, Discus Throw, Javelin, Sprints, Mid-distance Run, Long & Triple Jump etc. were part of the event.

OPEN CHESS TOURNAMENT

An Open Chess Tournament was organized on September 8 for the students of IITGN. The tournament had six rounds of 10+0 minutes each.

NATIONAL SPORTS DAY

IITGN organized different sports and physical activities on the occasion of National Sports Day on August 29, 2019 to commemorate legendary

Hockey Wizard **Major Dhyan Chand's** birthday and his immense contribution to sports.

INTRA MURAL

IITGN hosted the 6th Intra-Mural ceremony in the concluding week of Foundation Program 2019. Different groups performed acrobatic moves, zumba dance, and formed a human pyramid. Team Naag stood as the overall winner of the tournament, whereas Team Akash was named as the Runner-up.