



# Connections

Connections is the quarterly newsletter for friends of IIT Gandhinagar

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## INSTITUTE ACTIVITIES



### IITGN ESCALATES IN NIRF INDIA RANKING 2020

IITGN has climbed 16 positions and ranked 35th in the overall category and retained its 24th rank in the engineering category in the latest India Rankings 2020 by the National Institutional Ranking Framework (NIRF). This reflects IITGN's commitment to educational excellence and meaningful research with a focus on interdisciplinarity, liberal arts, design and creativity, which are at the core of all its academic programmes.

### INITIATIVES FOR GRADUATING STUDENTS

IITGN has taken up several initiatives to help its graduating students whose future plans may be interrupted by COVID-19 pandemic. The Institute has launched a One-Year Postgraduate Diploma Program (PGDIIT) in several streams for the upcoming Academic Year (2020-21) for students of the current graduating class. This Postgraduate Diploma will also help graduating students who are interested in exploring, but are not fully committed to a Master's Program. A candidate who completes the PGDIIT can subsequently apply to enrol for the MTech degree. In addition, IITGN is also offering two Fellowships - 'IIT Gandhinagar Junior Fellowship in Leadership' and 'Sabarmati Bridge Fellowship' to enable graduating students to make use of this time to develop career-enhancing leadership skills or embark on cutting-edge research.

### ONLINE CLASSES AND NEW GRADING SYSTEM

IITGN commenced online classes from June 08 to complete the courses of the second semester for the academic year 2019-20. The Institute has also introduced a new grading system for the disrupted academic term, under which no letter grades will be awarded this semester for any course. Instead, two new grades are being introduced - 'P(E)' (Pass Emergency) and 'I/F' (Incomplete/Fail) for all courses this semester. All students who get an 'I/F' grade will have one more opportunity to complete the course requirement and improve their performance to earn a 'P(E)' grade. This revised grading policy is designed to reflect continuous learning, ensure fairness and reflect the disruptive impact of the pandemic on the educational system.

### MATERIALS SCIENCE AND ENGINEERING TO BE RENAMED AS MATERIALS ENGINEERING

Considering expert recommendations, the Institute Senate has approved the name change of Discipline and Degrees from Materials Science and Engineering to Materials Engineering. This change would not affect the existing curriculum or research practices. The name change will be effective from the graduating batch of 2021.



### PHYSICAL EDUCATION REQUIREMENTS FOR BTECH AND POST-GRADUATE STUDENTS

With an aim to encourage physical activities and sports among all the students for its multiple benefits for overall well-being and personality development, the senate of IITGN has decided to revise the Physical Education (PE) requirements for all BTech and post-graduate students. As per the modified PE requirements, instead of two compulsory PE courses only during the first two semesters of the BTech program, now the students will be required to take a total of six PE courses during the first six semesters as part of their graduation requirements. Likewise, the Institute senate has decided to introduce PE requirements to post-graduate courses as well, which will further enhance interaction between UG and PG students. Now all post-graduate students (including MA, MSc, MTech, PGDIIT and PhD) will be required to complete two PE courses (one each in their first two semesters) as part of their graduation requirements. The Institute will provide several sporting and other physical activity sessions to cater to the diverse interests of the students.

### CERTIFICATION IN SCIENTIFIC WRITING

Considering the significance of effective research communication skills among the Master's and Doctoral students, IITGN is going to start a certification program in scientific writing. The programme intends to gauge students' skills and knowledge in scientific writing and to promote skill development. The proposed 'Certification in Scientific Writing' would encourage research scholars to work on scientific writing from an early stage in their tenure, serve as a milestone for measuring student progress, facilitate emergence of tutors in scientific writing, contribute to skill-building of IITGN students, and enable students to use scientific writing competencies during their life-long learning process. The certification process will be conducted twice every year in two phases, and the doctoral students will be eligible to apply.

### INSTALLATION OF 650 TF SUPER COMPUTING SYSTEM

The Department of Science and Technology (DST) has approved the installation of 650 TF Super Computing System (70:30 CPU & GPU), with appropriate data centres with storage capacity at IITGN. The selection has been made based on the available infrastructure at the Institute to operationalise the system. DST along with the Ministry of Electronics and Information Technology (MeitY) is coordinating the National Super Computing Mission (NSM) with the aim of consolidating efforts for achieving self-reliance in super-computing for India.

## SUPPORT FOR THE INSTITUTE

### KANAKIA YOUNG RESEARCHER SEMINAR SERIES



**Dr Hemant Kanakia**, Co-Founder and former Chief Executive Officer, Gemplex Internet, Inc, USA has committed a significant donation to support the Kanakia Young Researcher Seminar Series at IITGN with the aim of attracting and recruiting top-notch faculty at the Institute. This initiative will support visits of young doctoral students nearing completion of their degree, recent PhD graduates, and postdoctoral scholars from internationally reputed research organisations to IITGN to deliver seminars, short courses, and other substantive engagements at the Institute.



Abhishek Kandoi



Mr Shri Kishan K & Mrs Rajkumari K

course in Public Policy at The Takshashila Institute during 2017-2018. He has also been an entrepreneur and worked on a social venture TinkerTank Design and Technology Pvt Ltd, which was incubated at IIT Gandhinagar.

### SHANTI SAROOP AGARWAL SCHOLARSHIP



Ankit Agarwal



Late Shri Shanti Saroop Agarwal

**Mr Ankit Agarwal**, a BTech alumnus of 2017, has set up **Shanti Saroop Agarwal Scholarship** in honour of his late grandfather. The scholarship of Rs 1 lakh per student per year will support undergraduate students of the institute. Ankit is the co-founder of Agmaco Industries in Ghaziabad. While at IITGN, Ankit was the founding

President of the Shastrarth Socratic Society, a student-run organisation that focuses on important issues, events and trending topics. He was the recipient of the Director's Silver Medal in BTech, Mechanical Engineering.

### ARUNA SCHOLARSHIP

**Mr Abhishek Kandoi**, a pioneer batch BTech graduate, has set up **Aruna Scholarship** in honour of his parents. This scholarship of Rs 1 lakh per year will support undergraduate students at IITGN. Abhishek started his career with Underwriters Laboratory (UL), USA, and is currently working with Applus Laboratories UAE as Business Head. He has pursued a

### ANJNA AND ANIL TARA CHANDRA SCHOLARSHIP



Shivani Rani



Mrs Anjna & Mr Anil Chandra

**Ms Shivani Rani**, an MTech alumna of 2013, has set up **Anjna and Anil Tara Chandra Scholarship** in honour of her parents. This scholarship of Rs 1 lakh per year will support postgraduate students at IITGN. Shivani had received the President's Gold Medal (MTech), Institute Gold Medal (Civil Engineering, MTech), and the Award for

Overall Outstanding Performance in Sports at the 2013 Convocation. She received her PhD degree in the area of the asphalt mix design and pavement construction from the University of Oklahoma, Norman, USA. Currently, she is an Associate Civil Engineer at the City of Lawton, Oklahoma, USA. Shivani was also recognised as one of the "Most Inspiring Women in India" by Engineering Watch Magazine in the year 2014.

### CHETAN DHANDE SCHOLARSHIP



Late Chetan Dhande

Fifteen alumni of the class of 2013 at IITGN have jointly established a scholarship in the loving memory of their beloved batchmate **Late Chetan Dhande** who passed away on February 10, 2018, in an unfortunate hiking incident. The scholarship is of Rs 1 lakh per year and will support undergraduate students of the institute. Chetan was a BTech (Mechanical Engineering) undergraduate from the Class of 2013. He had worked at Honda Cars, India for two-and-a-half years after his graduation and at Honda R&D, Japan for two years.

## OUTREACH



### PROF JAIN INVITED AS SPEAKER

Pan IIT Alumni USA invited **Prof Sudhir K Jain** as a Keynote Speaker in the

inaugural virtual conference series for discussing the impact of COVID-19 on education ("The New Education Norm: Post COVID-19") held on June 25, 2020. The other speaker was **Prof Pradeep Khosla**, Chancellor of the University of California, San Diego. **Prof Prabhat Hajela**, Provost of Rensselaer Polytechnic Institute, New York, was the moderator.

### PROF JAIN CHAIRED A SESSION ON LEADING IN THE PANDEMIC

**Prof Sudhir K Jain** chaired a session on "Crisis as an Opportunity: Leading in the Pandemic", in a virtual conference "The Republic of Letters: Groundbreak 2020", during June 24-26, 2020. The conference was organised by Ashoka University and Harappa Education to reimagine a new world of learning in India.

## FACULTY NEWS

### FACULTY CHAIR POSITIONS

Three faculty members were awarded Faculty Chair positions with effect from May 1, 2020: **Prof Anirban Dasgupta**, Professor in Computer Science and Engineering (N Rama Rao Chair), **Prof Shanmuganathan Raman**, Associate Professor in Electrical Engineering jointly with Computer Science and Engineering (Jibaben Patel Chair in Artificial Intelligence), and **Prof Pratik Mutha**, Associate Professor in Biological Engineering (Jibaben Patel Chair).

### PATENTS

- Magnetic hybrid nanocomposites and a process for preparation thereof: Inventors include **Manish Kumar Singh** and **Niravkumar Praduman Raval**.
- A Smart Gesture Tracker Band: Inventors include **Ruzan Areez Khambatta** and **Chandan Kumar Jha**.

### AWARDS & RECOGNITIONS

- Prof Himanshu Shekhar** was re-appointed as a member of the Technical Committee of Biomedical Acoustics (term: 2020 - 2023) by the president of the Acoustical Society of America.

- Prof Srinivas Reddy**, Guest Professor, Humanities and Social Sciences, IITGN has authored a new book "RAYA", a critical biography of Krishnadevaraya, Emperor of Vijayanagara Kingdom. The book portrays Krishnadevaraya's life, who is considered one of the greatest rulers of India.

### SPONSORED AND CONSULTANCY PROJECTS

To find the list of sponsored and consultancy projects at IITGN, please go to this link: [https://iitgn.ac.in/newsletter/projects/q2\\_2020](https://iitgn.ac.in/newsletter/projects/q2_2020) or scan the QR code.



## NEW FACULTY

The following faculty members joined the institute during this quarter:

Name	Designation	Discipline	PhD	Date of joining
Dr Sameer Kulkarni	Assistant Professor	Computer Science & Engineering	The University of Gottingen, Germany	06-04-2020

## ACTIVITIES AT IITGN



### WELFARE MEASURES FOR MIGRANT WORKERS

The Institute has been at the forefront of construction worker welfare since its inception. In the wake of the COVID-19 pandemic, IITGN joined hands with the Central Public Works Department (CPWD) to launch a series of welfare measures for the benefit of migrant workers in the construction projects at the Institute. The Shramik Kalyan Samiti (Labour Welfare Committee), under the leadership of **Prof Gaurav Srivastava**, and with participation of numerous volunteers, regularly sensitise the workers and create awareness about preventive measures against COVID-19, such as frequent hand washing and social distancing. Other measures launched by IITGN include access to first aid kits, free medical support and consultation in the medical centre, ambulance services, mobile recharge, distribution of relief materials and sanitary napkins, distribution of cloth masks, regular disinfection of the colonies and frequently-touched surfaces, etc.



### PADOSI GRAM SAHYOG SAMITI

Continuing its commitment for the welfare of the neighbouring villages, IITGN stood by its nearby villages Palaj and Basan during the national lockdown due to COVID-19 pandemic. The Institute constituted a Padosi Gram Sahyog Samiti under the Chairmanship of **Prof B Prasanna Venkatesh**, to address the challenges faced by the villagers, identify their needs, and undertake various welfare activities to provide some relief to the needy families during COVID-19 crisis. The Samiti members carefully identified 152 financially weak families from Palaj and Basan villages and conducted a drive to distribute kits containing daily essentials like oil, rice, flour, pulses, salt, red chilly powder, turmeric powder, sugar, and soap along with a handout of safety precautions to be followed.

### E-SRIP

This year, due to the COVID-19 pandemic, the annual internship programme of IITGN, SRIP, was conducted virtually only for the institute's students. A total of 20 students from IITGN participated in the online programme which kick-started on April 22, 2020, with students interning on a wide range of research projects under the guidance of 17 faculty members from the institute. The six-week-long programme concluded on June 7, 2020. The programme was coordinated by **Prof Manish Kumar** (CE) and **Prof Iti Gupta**.

### VIRTUAL SEMINAR SERIES

Echoing the thought that learning should never stop, IITGN started a virtual seminar series by its faculty members that commenced from April 24, 2020, and continued till the end of the summer vacation. It covered diverse topics in a total of 11 seminars that were designed to be non-technical in nature for a general audience. The exciting line up of topics included fascinating aspects of black hole physics, nanotechnology, culture and tradition of the Nagas, the relationship between humans and viruses, Ramanujan's advances in the theory of partitions, properties of glassy materials, languages and scripts of India, fluid mechanics etc. The series was coordinated by **Prof Sudipta Sarkar**. Lectures from this series can be accessed from the following link: [https://](https://www.iitgn.ac.in/academics/lectures/virtual_seminar_series)

[www.iitgn.ac.in/academics/lectures/virtual\\_seminar\\_series](https://www.iitgn.ac.in/academics/lectures/virtual_seminar_series).

### NAVIGATING THE FACULTY APPLICATION PROCESS

Three online sessions were conducted for the Institute's PhD students and postdocs as part of the workshop 'Navigating the Faculty Application Process'. The first two sessions on May 15 and June 13, 2020 were conducted by **Prof Himanshu Shekhar**. **Prof Harish P M** delivered the third session on June 20, 2020. Over 70 participants attended the first session, whereas nearly 35 participants attended the second and third sessions.

### IGRIP WEBINAR SERIES ON GEOSTRUCTURES

Initiative for Geotechnical Research and Innovative Practice (iGrip) at IITGN launched a webinar series on Geostrutures from April 27, 2020, which provided a forum for exchanging experiences and learning from the experts. So far, the series has organised six webinars with global experts of Civil Engineering, including **Dr Naresh C Samtani**, **Mr Vivek Kapadia**, **Prof Michel Danino**, **Dr R Chitra**, **Dr Kenji Watanabe**, and **Mr Vinay Kumar Singh**. In total, nearly 2800 students, professionals, and researchers attended these six webinars. The series is coordinated by **Prof Ajanta Sachan**.

### ENTREPRENEURIAL MINDSET 101

The IITGN Innovation and Entrepreneurship Center (IIEC) conducted 'Entrepreneurial Mindset 101' - an online mentorship programme for students interested in entrepreneurship. The program was conducted between April 30 and June 02, 2020, to equip students with the fundamentals of the startup world. 23 BTech, MTech, MA, MSc and PhD students completed the programme, which was delivered by **Mr R A Venkitachalam**. The students also had the opportunity to interact with a cross-section of entrepreneurs, including some of the IITGN startups from earlier batches.



### ONLINE INSERVICE COURSES FOR KVS TEACHERS

Centre for Creative Learning (CCL) conducted two 12-day online in-service courses for teachers of Kendriya Vidyalaya Sangathan (KVS). The objective was to train them about ways to engage students online. The online course was conducted from May 26 to June 6, 2020, and June 29 to July 10, 2020 for Mathematics and Science teachers respectively.

## FALL IN LOVE WITH MATHS WORKSHOP

With support from Science International Forum (Kuwait), CCL-IITGN conducted an online five-day workshop for more than 250 CBSE school students in Kuwait from June 21-25, 2020. The objective of this course was to let students from grade 8 to 12 explore the beauty of Mathematics.

## VIRTUAL PHYSICS COLLOQUIA

The discipline of Physics organised a series of online colloquia by some of the leading

physicists during May and June 2020. Leading experts from India and abroad such as **Prof Sunil Mukhi**, IISER Pune, **Prof Tadashi Takayanagi**, Kyoto University, Japan, **Prof Kazi Rajibul Islam**, University of Waterloo, Canada, **Prof Ted Jacobson**, the University of Maryland, USA, gave engaging talks to about 330 participants, including students, researchers, faculty members and postdoctoral fellows. This series was organized by **Prof Sudipta Sarkar** and **Prof Arpan Bhattacharya**.

## ONLINE WORKSHOP

Workshop on Emotional Resilience by **Ms Rashmi Datt**, an organisation development consultant, May 27, 2020.

## VIRTUAL LECTURES AT IITGN

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



## STUDENT AND STAFF ACTIVITIES

### AWARDS AND RECOGNITIONS



**Camellia Chakraborty** and **Debarpan Ghosh**, MTech students in Biological Engineering, have received one of Europe's most prestigious fellowships for PhD, the Curie EuReCa fellowship, for doing PhD at Institute Curie, Paris, France.

**Shivani Sharma**, a PhD Scholar in Humanities and Social Sciences, IITGN, has been awarded the Shastri Research Student Fellowship (SRSF) by the Shastri Indo-Canadian Institute in the second round of programmes for the year 2019-2020.



She has also received the prestigious Charles Davis Award 2020 for the Outstanding Graduate Student Presentation at the 73rd Rocky Mountain Modern Language Association Annual Convention held in Texas in October, 2019. The research paper she presented is a collaborative study with **Dr Arnapura Rath**.



**Soumen Roy**, a PhD student in Physics at IITGN, **Prof Anand Sengupta**, Associate Professor of Physics at IITGN, and **Prof K G Arun** from CMI Chennai, have jointly made a key contribution by developing a new technique that helped in extracting fainter components (higher-harmonics) of the astrophysical gravitational-wave signals from the merger of two asymmetric black holes.

## SPORTS NEWS

### FIT IITGN CAMPAIGN

IITGN's Sports Council had initiated 'Fit IITGN' campaign from April 04, 2020, with an aim to help the community stay fit while staying indoors amid the lockdown. Virtual fitness sessions were held everyday from 6-7 PM, including warm-up, basic/core exercises, a combination of exercises as per planned schedule, tabata training, cool down exercises along with yoga and meditation. The council had also arranged weekly guest lectures by renowned sports personalities and fitness instructors from across the country, including **Mr Virbhawal Khade** (Arjuna Awardee Indian Olympian swimmer), **Mr Anshul Kothari** (Asian and Commonwealth Games swimmer), **Mr Harmeet Desai** (Arjuna Awardee Table Tennis player), **Mr Devendra Jhajharia** (Indian Paralympic javelin thrower), **Mr Aaron Tyler** (a UEFA (B) licensed coach), **Mr Gulab Chauhan** (ex-FIFA referee), **Mrs Amanat Kagzi** (a nutritionist), and **Dr Harish Padinjarethil** (a senior sports officer at IIT Bombay).

### WININDIA CAMPAIGN

In the wake of the COVID-19 Pandemic, all the 23 IITs across India, under the mentorship of Mr Sunil Shetty, a renowned Bollywood actor, had taken a joint initiative to promote fitness and mental health. IITGN also participated in the campaign. The sports secretaries from all IITs had planned an online fitness/health campaign for their institute's community. Online challenges were floated regularly and people had to record and share their videos on social media to get points.

### ONLINE CHESS TOURNAMENT

Amid the COVID-19 crisis and lockdown situation, IITGN's The Knight Players brought an online chess tournament for the institute community. The first round of the online tournament saw more than 55 participants and announced exciting prizes for the top performers.

## GIVING TO IIT GANDHINAGAR

IIT Gandhinagar relies on the sustained generosity of its friends for support of many of its exciting and innovation initiatives.

IITGN partners share our dream and vision of excellence. The Institute has developed a reputation for thinking outside traditional disciplinary boundaries, experimenting with various facets of education and research and fostering a culture of free inquiry, innovation and excellence. We invite you to join us in this journey of a young Institute and its pursuit of developing into a world-class university.

For more information on giving to IIT Gandhinagar, please see [donate.iitgn.ac.in](https://donate.iitgn.ac.in)

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