

Connections

Connections is the quarterly newsletter for friends of IIT Gandhinagar



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INSTITUTE ACTIVITIES

NINTH CONVOCATION CEREMONY

IITGN hosted its 9th Convocation through a unique virtual ceremony on August 23, 2020, and became the first IIT to conduct the online Convocation. A total of 455 students were conferred their degrees in digital mode. These included 173 BTech degrees, 1 BTech-MTech Dual Degree, 1 BTech-MSc Dual Degree, 115 MTech, 84 MSc, 19 MA, 55 PhD, and 7 PGDIIT degrees. In addition, 25 gold medals, 15 silver medals, and 16 medallions were awarded to students for excellence in various categories. This year, IITGN also graduated its pioneer batch of BTech students in Computer Science and Engineering. Even in the online mode, the Institute made sure to imbue the graduation ceremony for its students with a personal touch. **Mr Nandan Nilekani**, Chairman and Co-Founder, Infosys Limited, graced the occasion as the Chief Guest. He encouraged students to continue their journey of life-long learning. **Prof Sudhir K Jain**, Director, IITGN, congratulated all the graduating students and medal winners and highlighted some of the remarkable programmes, initiatives and achievements of IITGN during the academic year 2019-20. He expressed his firm belief in the preparedness of IITGN students to take on the most difficult challenges and wished them wisdom and courage that would serve them in good stead for the future. The entire event was streamed online on IITGN's YouTube channel and Facebook page.



Mr Nandan Nilekani

Atishay Jain was awarded the President's Gold Medal for BTech, **Ashish Tiwari** was awarded the President's Gold Medal for MTech, and **Samruddhi Damle** received the President's Gold Medal for MSc and MA. **Animesh Rastogi** received the Director's Gold Medal for BTech, Director's Gold Medal for MTech went to **Ashish Tiwari**, Director's Gold Medal for MSc and MA was awarded to **Vasundhara Krishnan**, and Director's Gold Medal for PhD went to **Dwaipayan Ray**.

NEW ACADEMIC PLAN FOR FIRST-YEAR BTECH STUDENTS

Due to the pandemic, joining of the new batch of BTech students has been delayed to mid-November. Hence, IITGN has reconfigured the first-year curriculum for this particular batch, and split the year into three terms of 6 weeks, 15 weeks, and 8 weeks, respectively. The first term of six weeks consists of a course on Computing (3 credits), a course on Writing (2 credits), a pass-fail course "Learning to learn" (1 credit), and a pass-fail Foundation Programme (1 credit). The intent is to iron out in the first six weeks any challenges that the new students may have due to online teaching, and to synchronise academic schedule of all the students starting January 2021 semester.

EARLY-CAREER FELLOWSHIP

The Institute launched IIT Gandhinagar Early-Career Fellowship (IITGN-ECF) for recent doctorates from India with an outstanding academic track record. The fellowship strives to empower exceptional researchers in pursuing their long-term research and academic aspirations. Under IITGN-ECF, the young scholars will have an opportunity to work with IITGN faculty members on exciting research problems, transformative projects, and will also engage in other scholarly activities.

THE RANKINGS 2021

IITGN has been ranked among the top 800 educational institutes worldwide and 4th in India in the *Times Higher Education (THE)* World University Rankings 2021. IITGN has successfully secured a global place in this prestigious international educational ranking for the second successive year by ranking among the 601-800 band worldwide. In all, *THE* ranked nearly 1,500 universities and institutions from 93 countries. 63 Indian institutes qualified for the World University Rankings this year, of which IITGN ranked 4th. This prestigious ranking assesses the performance of research-driven universities on 13 carefully calibrated performance indicators, including teaching, research, citations, industry income and international outlook.



EAT RIGHT CAMPUS AWARD TO IITGN

IITGN has bagged Eat Right Campus Award with a five-star rating from the Food Safety and Standards Authority of India (FSSAI) for the second consecutive year. The third-party auditing by DNV GL Business Assurance India Pvt Ltd is done based on a checklist of following five parameters: a) Compliance to food safety and hygiene; b) Healthy diets; c) Food waste management; d) Promotion of local and seasonal foods on campus; e) Promotion and awareness on food safety and healthy diets in and around campus. IITGN ensures strict compliance of all food standards and safety guidelines in each of its dining halls, food joints and canteens on the campus.

SUPPORT FOR THE INSTITUTE

ENDOWMENT FUNDS BY GORDHANBHAI B GELOT



Shri Gordhanbhai B Gelot has set up **Kankuben Bakshiram Gelot Endowment Fund** in honour of his late mother. The Institute will use this endowment to support **Kankuben Bakshiram Gelot Chair** for a woman faculty, and **Kankuben Bakshiram Gelot Scholarship** for a woman undergraduate student in any area of engineering or natural sciences at IITGN. Shri Gordhanbhai has generously made

another major gift to establish **Gordhanbhai B Gelot Endowment Fund**. In appreciation of this, IITGN shall name its research laboratory for Artificial Intelligence as **Gordhanbhai B Gelot Laboratory for Artificial Intelligence and Data Science**. Shri Gordhanbhai runs a Small Scale Industrial (SSI) unit in Umargam (South Gujarat) for more than four decades. He has a postgraduate degree in Industrial Microbiology from Gujarat University and has also worked with American and French pharma multinational corporations.

DR DINESH O SHAH CHAIR



Dr Dinesh O Shah, Professor Emeritus in the Department of Chemical Engineering at the University of Florida, USA, has made a large gift to establish **Dr Dinesh O Shah Chair** at the Institute. Dr Shah did BS and MS from the University of Bombay and PhD in Biophysics from Columbia University, USA. He is a passionate educationist, scientist, philanthropist and

was reported to be among the top one percent of most frequently cited scientists in the World (1999) by the Institute of Scientific Information, UK. He has received numerous teaching, research and service awards during his tenure of more than three decades at the University of Florida. He has also contributed significantly to promote education, research and cultural activities at educational institutions in India and Florida.

OUTREACH

PROF JAIN INVITED AS SPEAKER

IIT Alumni Centre Bangalore invited **Prof Sudhir K Jain** as a speaker to discuss 'Educational Innovation for a Post COVID-19 World', in a webinar held on July 4, 2020. **Prof P D Jose** (IIM Bangalore) and **Dr Susheela Venkataraman** (Asian Development Bank) moderated the e-seminar. The webinar can be seen on the following link: https://youtu.be/_ZAJZ4wXBMI.

FACULTY NEWS

AWARDS & RECOGNITIONS



Prof Neeldhara Misra, Assistant Professor, Computer Science and Engineering, has been selected for the prestigious Indian National Academy of Engineering (INAE) Young Engineer Award for the year 2020.

Prof Nishaant Choksi, Assistant Professor, Humanities and Social Sciences, has won a Rapid-Response Grant on COVID-19 from the prestigious Social Science Research Council

(SSRC) to study the 'Effects of reverse migration among the indigenous communities following India's COVID-19 induced lockdown'.

PATENTS GRANTED

Pharmaceutical Composition and Process for Preparing the Same: Inventors Include **Prof Sivapriya Kirubakaran**, **Prof Vijay Thiruvengatam**, **Kapil Juvale**, **Vijay Singh**, **Gayathri Purushothaman**, and **Althaf Shaik**. Patent no.: 347060

PATENTS FILED

• A System for Monitoring Hand and Finger

Movements: Inventors include **Chandan Kumar Jha** and **Prof Arup Lal Chakraborty**.

- Anti-viral Surface Coating and A Process for Coating: Inventors include **Prof Emila Panda**, **Prof Virupakshi Sopinna**, **Ravi Teja Mittireddi**, and **Nishaben M Patel**.

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/q3_2020 or scan the QR code.



EMPATHY FUND

The way in which COVID-19 pandemic has unexpectedly changed our lives is huge, and for some of us, it is drastic. In order to show empathy and support to numerous individuals attached to IITGN who have been adversely affected economically and psychologically, IITGN has created an **Empathy Fund** with strong support from the **IITGN Foundation** in the United States. This Fund is being utilised to provide financial support for online learning and subsistence to students undergoing difficulties due to their current family circumstances; to extend livelihood support for essential service staff, housekeeping personnel, daycare personnel, dining hall workers, and construction workers from challenging socio-economic backgrounds; and to provide medical care to individuals affected by COVID-19. The IITGN Foundation, under the leadership of its president **Mr Ruyantn Mehta**, exceeded its own target of raising US \$1,50,000 for the Empathy Fund.

NEW COMPANIES IN RESEARCH PARK

The following companies have established their activities at IITGN's Research Park during the third quarter of 2020:

| Company Name | Specialisation |
|-----------------|---|
| Redpine Signals | Chipset and system level products in AI space |
| Jay Chemicals | Specialty Chemicals |

NEW FACULTY

The following faculty members joined the Institute during this quarter:

| Name | Designation | Discipline | PhD | Date of Joining |
|----------------------|---------------------|------------------------------|------------------------|-----------------|
| Dr Satyajit Pramanik | Assistant Professor | Mathematics | IIT Ropar | 10-07-2020 |
| Dr Dyotana Banerjee | Lecturer | Humanities & Social Sciences | IIT Gandhinagar | 10-08-2020 |
| Dr V N Prabhakar | Associate Professor | Humanities & Social Sciences | Kurukshetra University | 16-09-2020 |

ACTIVITIES AT IITGN



FIRESIDE CHAT WITH PROF JAIN

Prof Sudhir K Jain, Director, IITGN, led an online **Fireside Chat** webinar on faculty recruitment on July 9, 2020. The webinar featured a free-wheeling conversation with Professor Jain on IITGN's ambitious journey to become an institution of global repute and its innovative strategies to recruit numerous world-class faculty across all disciplines.

He also discussed IITGN's global vision, academic innovations, research aspirations, interdisciplinarity, programme objectives and award-winning campus. The event was moderated by **Prof Achal Mehra** and **Prof B Prasanna Venkatesh**.

INTRODUCTION OF BSC (ENGINEERING) DEGREE

IITGN has introduced a three-year Bachelor of Science (BSc) degree in Engineering from the academic year 2021-22. As a part of this option, any existing undergraduate student may apply for conversion to this program any time after the end of his/her fourth active semester.

LEADERSHIP CHAT WITH MUKTESH PANT

The Indira Foundation Leadership Development Initiative at IITGN has launched a new series called **Leadership Chat**, which would bring prominent leaders from various fields to IITGN to share their experiences,

perspectives and thoughts on leadership with students as well as external participants. The series kick-started on September 17, 2020, with the inaugural talk with **Mr Muktesh Pant**, who has worked with brands like Yum! China, KFC, Taco Bell, Reebok, and PepsiCo, among others. More than 159 people, both from within and outside IITGN, participated in the online talk. The session was moderated by **Prof Achal Mehra**.

74TH INDEPENDENCE DAY

IITGN celebrated the 74th Independence Day with minimal physical gathering following utmost precautions. Most of the IITGN community members remotely joined in the live webcast of the programme on the Institute's YouTube channel. Keeping their spirits high and paying tribute to the nation, IITGN students from all over the country unleashed their creative side with patriotic songs, dance, poetry, paintings, and messages on a virtual cultural platform provided by the Cultural Council of the Institute.



30-30 STEM PROGRAMME

The **Centre for Creative Learning (CCL)** at IITGN, in collaboration with the Central Board of Secondary Education (CBSE) and IISER Pune, launched '30-30 STEM', a 30-week online education programme for teachers as well as students and their parents. Its objective was to unlock the beauty, mystery and magic of Science and Math around us and make STEM learning more engaging. Since its launch on August 16, 2020, the Sunday-weekly programme has received an overwhelming response from all over the country, with each episode's viewership touching lakhs. **Prof Manish Jain** is the main facilitator of the programme.



ACM-W GRAD COHORT 2020

The third edition of the **ACM India Grad Cohort**, a pan-India virtual workshop for women in computing, was hosted by IITGN from July 24 to 26, 2020. This first-ever virtual ACM-W Grad Cohort aimed to reach out to Indian women graduate students in the field of computing

to help them deal with various situations through their graduate years and beyond. The workshop was co-organised by IITGN, ACM-W India Council, and ACM India Council, and was supported by Google and TCS. The three-day online event received an enthusiastic response, as over 200 women graduate students registered for the workshop, and more than one hundred participants attended each of the 16 sessions. **Prof Neeldhara Misra** coordinated the workshop.

CHEMCATCON 1.0

The discipline of Chemistry virtually organised ChemCatCon 1.0 during July 11-12, 2020. The conference offered a platform for young researchers to acquire knowledge in the area of heterogeneous catalysis, which is considered as the central science for a sustainable future. The two-day event invited eminent speakers from prestigious institutions like IITs, CSIR labs, TIFR and BITS, among others, to talk about the current and future research implications in energy conversion and fuel cell research. The event was coordinated by **Prof Sudhanshu Sharma**.

WORKSHOP ON QUANTUM INFORMATION IN QFT AND ADS/CFT

The discipline of Physics at IITGN organised a two-day international online workshop on Quantum Information in QFT and AdS/CFT from August 6-7, 2020. The workshop brought together some of the leading global experts to discuss recent developments on quantum information and computation applied to field theory and holography. About 100 participants attended the online workshop. The workshop was co-organised by **Prof Arpan Bhattacharyya** (IITGN), **Prof Shubho Roy** (IITH) and **Prof Aninda Sinha** (IISc Bangalore).

WORKSHOP ON TESTING GENERAL RELATIVITY USING GRAVITATIONAL WAVES

The gravity groups at the IACS, Kolkata and IITGN jointly organised a two-day workshop on Testing General Relativity using Gravitational Waves during August 13-14, 2020. The aim of the workshop was to understand the constraints on physics beyond general relativity from gravitational wave observations. The event also hosted a special colloquium by **Prof Abhay Ashtekar**, Director, Institute for Gravitational Physics and Geometry, Pennsylvania State University, USA. **Prof Sudipta Sarkar** (IITGN) and **Prof Sumanta Chakraborty** (IACS, Kolkata) co-organised the event.

FIRST DNA NANOTECHNOLOGY INDIA VIRTUAL SYMPOSIUM

A virtual Symposium on DNA Nanotechnology India, co-organised by IITGN and IISc Bangalore, was held on September 4-5, 2020. More than 3,000 participants virtually attended the two-day programme. Several eminent speakers and scholars shared their knowledge and expertise

with the audience. The meeting provided participants a platform to connect with each other and collaborate for scientific exchanges. The event was coordinated by **Prof Dhiraj Bhatia** (IITGN) and **Prof Banani Chakraborty** (IISc Bangalore).

WEBINAR SERIES ON TRANSLATIONAL RESEARCH IN NEUROENGINEERING AND NEUROREHABILITATION

In association with the University at Buffalo (SUNY) USA, IITGN is organising a webinar series on Translational Research in Neuroengineering and Neurorehabilitation. During this quarter, the series has hosted ten webinars delivered by eminent speakers from USA, UK, France and India. The webinar series concentrates on emerging applications of Neuroengineering with focus on rehabilitation. Experts on cerebrovascular and neurological disease and neurological disability from different countries have been disseminating their research during these webinars. The ongoing webinar series has lined up a few more interesting talks in coming weeks. **Prof Uttama Lahiri** (IITGN) and **Prof Anirban Dutta** (SUNY) are coordinating the event.

DEVELOPING HIGH GROWTH VENTURES IN TURBULENT TIMES

In August 2020, **IIT Gandhinagar Innovation and Entrepreneurship Council (IIEC)** started an intensive three-month programme on Developing High Growth Ventures in Turbulent Times. The programme aimed to identify startups whose operations have been disrupted and work with them to rethink and rebuild a strategy to sail through this phase and grow. Out of total 51 applications, 14 teams were selected to receive mentorship from successful entrepreneurs, business leaders and technologists. The programme included guest lectures and focused one-to-one mentoring by a very distinguished panel of experts.

KALA SAMANVAY BY SPIC MACAY

The **Cultural Council** at IITGN and the **SPIC MACAY IITGN** chapter organised *Kala Samanvay*, a series of live online cultural events from September 12 to 14, 2020. Renowned artists and Padma Shri recipients **Geeta Chandran** performed Bharatanatyam, and **Prahlad Tipaniya** presented Kaber Sangeet, on September 12 and 13 respectively. Besides, an acclaimed Japanese movie, *Kumonosu-jō* (Throne of Blood) by Akira Kurosawa was screened and discussed on September 14.

ONLINE SHORT COURSES

- Communicative English by **Writing Studio**, IITGN, conducted during four weekends in the span of July to August 2020.
- Tensor Mathematics in Constitutive Modeling by **Dr Gyan Vikash**, Assistant Professor, Civil

Engineering, Shiv Nadar University, Noida, July 27 - August 2, 2020.

- Active Tectonics & Earthquake Geology: A tool for Seismic Hazard Assessment by **Prof Javed N Malik**, Professor, Department of Civil Engineering, IIT Kanpur, September 21-

30, 2020.

- Scientific Writing (Module 1-5) by **Dr Monal K Desai**, Writing Studio, IITGN, conducted every Monday and Tuesday in the span of five weeks during September and October 2020.

VIRTUAL LECTURES

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



STUDENTS AND STAFF ACTIVITIES

AWARDS AND RECOGNITIONS

- **Pradipbhai Dahyabhai Prajapati**, a BTech student of Electrical Engineering, has been selected as a Cargill Global Scholar. Every year, only 10 second-year undergraduate students from all over India are selected for the prestigious program.
- **Deepika Meena**, a PhD scholar in Humanities and Social Sciences, has been selected for a National Fellowship by the Ministry of Tribal Affairs, Government of India.
- **Kailash Prasad**, a PhD scholar in Electrical Engineering, has received Intel PhD Fellowship for year 2019-2020. It is a highly competitive fellowship that gives students the opportunity to work with top-notch researchers at Intel.



UDAAN 2020

Udaan, the signature farewell event for graduation students of IITGN was held virtually on August 16, 2020. The Institute bid adieu to the 9th BTech, 8th MTech, 6th MSc, 5th MA batches and the seventh set of PhD students of IITGN. The online event was filled with songs, poems and nostalgic anecdotes as the students completed their academic journey at IITGN. It was an opportunity for students and faculty members to connect virtually and reflect over their time at IITGN.

SPORTS NEWS

WEBINAR ON NATIONAL SPORTS DAY

On the occasion of National Sports Day, the **IITGN Sports Council** organised a webinar by **Mr Ashok Dhyanchand**, former Indian professional field hockey player and son of well-known Indian hockey player Dhyanchand. The session focused on the importance of sports and physical activities in our daily life. More than 100 participants joined the webinar including faculty members, staff, and students.

FITNESS BOOT CAMP

A one-month fitness boot camp was started for the campus community in September 2020 that included several types of exercises including running, stretching, cross fitness training, squats, crunches, jumping jack, sit-ups, push-ups, and so on. Throughout the month, the Physical Fitness team used to conduct one-hour sessions for the community every morning and evening.

STAFF DEVELOPMENT

The **Staff Development Cell (SDC)**, IITGN organised various virtual events/sessions for overall development of the staff members of the Institute. These programmes included Choice is Yours- a motivational session; Art of Creating First and Lasting Impression; My Key to the Lockdown- an interactive experience sharing session; and Building Resilience and Reaching out to Others.

ITGN RISE

During this quarter, the **Student Council** at IITGN launched 'IITGN RISE' with an objective to motivate students to participate in various activities and to provide a platform for interaction across various years and disciplines. Meant to be an overarching structure that would cover almost all the major events and competitions organised by various clubs this semester, the entire student body (around 1600 students) has been divided into four groups based on their disciplines. They would earn various points and a leaderboard would be maintained throughout the semester.

PLAYPRO COMPETITION

During this semester, DigiS, the game development club of IITGN, organised a PlayPro competition for the student community to play the games developed by the members of DigiS and compete for the highest scores. All 64 student members of the club took part in the game development challenge, a few of which have cleared the development stage.

CULTURAL ACTIVITIES

The **Cultural Council** of IITGN organised a series of online activities for the community, including Radio Rangmanch, Aalap - singing competition, Comic Strip competition, Incredible - culinary competition, and a theme-based photography competition. Each of these events saw a good turnout of participants from students, faculty and staff.

ONLINE FITNESS CHALLENGE

With the start of an overall competition among various branches with 'IITGN-RISE', the **Sports Council** brought in the first online challenge of RISE, featuring exercises like push-ups, squats, leg raises, and mountain climbing, among others. The participants were given points depending on the number of workouts they do, either as a team or individually. There were also prizes based on performance in different categories such as the most improved, the most regular etc.

WEEKLY CYCLE RIDES

With an aim to inculcate the habit of fitness, IITGN's **Sports Council** is organising cycle rides for the community members on every Sunday. So far, two rides of about 15 and 25 kms have been organised and around 15 people have joined in each trip.