

# Connections

A quarterly newsletter for friends of IIT Gandhinagar



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## INSTITUTE HIGHLIGHTS



### FOUNDATION PROGRAMME 2020

For the first time since its inception, IITGN conducted its flagship Foundation Programme (FP) in virtual mode for the BTech batch of 2020. Commencing on November 12, 2020, this year's FP was re-designed to be a six-week holistic development programme with a series of exciting activities to augment students' leadership skills, interactions, design thinking, values and ethics, creative expression, well-being, social awareness, and academic integrity. The programme concluded with 'Project Eureka' that helped students unleash their creativity through exciting virtual contests and encouraged critical thinking without precluding fun. **Profs Akshaa Vatwani, Pradipta Ghosh, and Udit Bhatia** were the coordinators for the programme.

### O-CEO PROGRAMME

Intending to build real job skills and leadership skills among students and also help them sustain themselves while studying, the Institute has launched a new initiative called 'On-Campus Employment Opportunities' (O-CEO) programme for eligible BTech and Master (MSc, MA and MTech) students. The initiative is designed to imitate a professional employment programme, with features such as specific work hours (with weekly limits during the semester and vacations), periodic appraisals, performance-based pay hike, appreciation and awards for excellent performance etc.

## SUPPORT FOR THE INSTITUTE

### SMT SUMITRABAI MANOHAR KANADE SCHOLARSHIP

**Mr Saurabh Vaichal**, a BTech alumnus of 2016, has set up Smt Sumitrabai Manohar Kanade Scholarship in honour of his maternal grandmother. The scholarship of Rs 1 lakh per year will support undergraduate students of the Institute. Saurabh completed his BTech in Mechanical Engineering from IITGN and went on to pursue his Master's in Industrial and Systems Engineering from Texas



### WORK AND STUDY MTECH PROGRAMME

In addition to the existing full-time two-year MTech programme, IITGN is introducing a Work and Study MTech programme to create a specialised workforce for major facilities/laboratories and research projects within the Institute as well as for various research establishments. While MTech graduation requirements will remain unchanged in this programme, enrolled students can complete it at a relatively slower pace while simultaneously working in the Institute.

### COVID-19 TESTING DRIVE

To complement the preventive measures against the global pandemic, the Institute organised a COVID-19 testing drive for its entire campus community in the second week of October 2020 with support from medical teams of the Government of Gujarat. About 1800 community members, including faculty, staff, residents, outsourced support staff, and students residing on campus underwent Rapid Antigen Tests. The Institute arranged testing for the campus construction workers as well. A token system was employed to ensure safety and social distancing at the testing venues. This initiative was led by the **Crisis Management Group**.



A&M University. Currently, he is working as a Senior Data Analyst at The Home Depot in Atlanta. While at IITGN, he was a winner of Underwriters Laboratories - IITGN Water Challenge 2013, which allowed him to visit UL, Chicago, during summer.

### VEGSHAKTI MAHILA KALYAN SANGATHAN SCHOLARSHIP

Vegshakti Mahila Kalyan Sangathan (VMKS), a registered society under the aegis of NHRCL, has established two scholarships at IITGN. An MoU was signed between **Ms Sarita Khare**, President, VMKS, and **Prof Sudhir K Jain**, Director, on October 8, 2020. **Vegshakti Mahila Kalyan Sangathan Scholarship** would provide financial support of Rs 75,000/- per student each year to two selected female students for four years of their BTech at the Institute.

## NEW COMPANIES IN RESEARCH PARK

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

Company Name	Specialisation
Everest Instruments	Engineering Products
Havi Technologies	Robotics



## FACULTY NEWS

### PATENTS FILED

- A catalyst composition and a process for its preparation: Inventors include **Prof Sudhanshu Sharma** and **Pradeep Kumar Yadav**.
- A fluorophore molecule and a process for its synthesis: Inventors include **Prof Sriram Kanvah Gundimeda**, **Tarushyam Mukherjee**, and **Prof Virupakshi Soppina**.

### SPONSORED AND CONSULTANCY PROJECTS

Follow this link to find the list of sponsored and consultancy projects: [https://iitgn.ac.in/newsletter/projects/q4\\_2020](https://iitgn.ac.in/newsletter/projects/q4_2020) or scan the QR code.

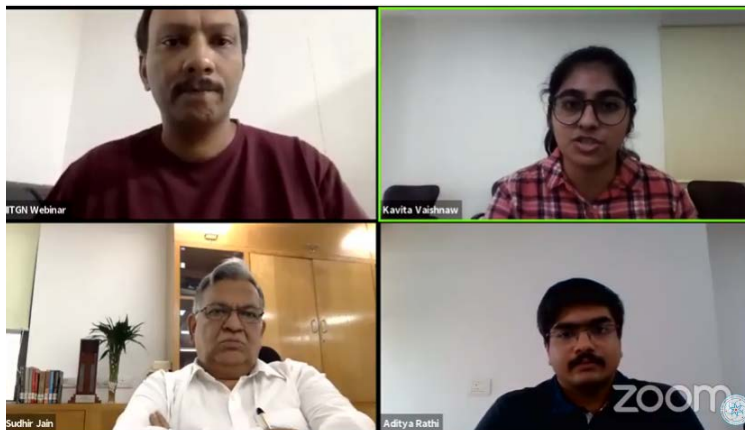


### NEW FACULTY

The following faculty members joined the Institute during this quarter:

Name	Designation	Discipline	PhD	Date of Joining
Dr Fatma Cicek	Assistant Research Professor	Mathematics	University of Rochester, USA	13-11-2020
Dr Sutapa Roy	Assistant Professor	Physics	JNCASR, Bangalore	02-12-2020
Dr Balagopal Komarath	Assistant Professor	Computer Science & Engineering	IIT Madras	21-12-2020
Dr Ashutosh Srivastava	Assistant Professor	Biological Engineering	CSIR Centre for Cellular and Molecular Biology, Hyderabad	29-12-2020

## ACTIVITIES AT IITGN



### JEE OPEN HOUSES

Following the precautionary measures against COVID-19, the Institute hosted three virtual interactive JEE Open House sessions for guiding IIT aspirant students and their parents. The first live JEE Open House was held with **Prof Sudhir K Jain**, Director, on October 4, 2020. The second JEE Open House was held with the Dean of Academics, **Prof Kabeer Jasuja**, and Dean of Student Affairs, **Prof Harish P M** on 'Academic and Student Life at IITGN' on October 8, 2020. The third 'Open House with Students and Alumni of IITGN' was organised on October 9, 2020.

### 2ND LEADERSHIP CHAT



The second talk in the Leadership Chat series under the Indira Foundation Leadership Development Initiative at IITGN was held on October 22, 2020, with **Mr Anshu Gupta**, Social Entrepreneur and Founder of Goonj, who is also the recipient of the 2015 Ramon Magsaysay Award. The session was moderated by **Prof Achal Mehra**. View this chat on: <https://youtu.be/HJ05q1NvyqU>.

### WORKSHOP ON PREPARING EFFECTIVE GRADUATE SCHOOL APPLICATIONS

**Career Development Services (CDS)** organised three different sessions of a six-hour workshop on 'Preparing Effective Graduate School Applications' on October 24, 31, and November 1, 2020. The workshop aimed to equip the students and Research/Project Fellows with strategies for preparing effective applications for higher studies. The sessions were conducted by **Prof Himanshu Shekhar**.

### WRITING STUDIO AT HOME

Given the prevailing situation, the **Writing Studio** reached out to students at home by providing a virtual learning setting for writing and communication in a multifaceted way. In addition to the usual one-on-one meetings, the Writing Studio launched 'Writing Buddy Programme' to provide long-term support to students struggling with writing. Moreover, it also organised Friday Conversation Clubs from September 18 to November 13, 2020, and Foodie's Workshop on November 6-7, 2020, to cater to various communication needs of students.

Writing Studio.

### SEMINAR SERIES ON INDIAN SCIENTISTS

The second edition of the Seminar Series on Indian Scientists was held online on November 21, 2020, with two virtual seminars on the lives and works of Harish-Chandra and C V Raman. **Prof C S Aravinda** from TIFR CAM, Bengaluru, delivered a lecture on "Harish-Chandra: The Mathematician and the Artist". **Prof Rupak Banerjee** from IITGN, talked on "The Life, Works and Legacy of Prof C V Raman". The seminar series was curated by **Prof Sudipta Sarkar** and **Prof Michel Danino**.

### SUSTAINABILITY SEMINARS

The **Dr Kiran C Patel Centre for Sustainable Development** organised a total of 11 webinars between September and December 2020, as a part of the Sustainability Seminar Series. The online series invited various prominent scholars and professionals to discuss their works on sustainable development covering broad topics of water, pollution, and climate change. The webinars were attended by nearly 900 participants from all over the world.



## INDO-UK VIRTUAL CONFERENCE

IITGN hosted 'Indo-UK Virtual Conference on the 5C's of Water Vulnerability: Climate Change, Contaminants, Co-occurrence, Conflicts, and COVID-19' from December 14-16, 2020. The three-day event attracted more than 200 participants from all over the world. The conference was co-organised by the discipline of Earth Sciences, KPCSD, UKIERI, Newcastle University, British Council, and the Department of Science and Technology, Government of India. **Dr Manish Kumar (ES)** from IITGN and **Dr David Werner** from Newcastle University were the conveners of the workshop.



## NPSC 2020

The 21st edition of National Power System Conference (NPSC 2020) was hosted online by the Electrical Engineering discipline during December 17-19, 2020, on the theme 'Sustainable Energy and Resilient Future Grid'. The conference featured 14 Keynote talks, two industry-academia panel sessions, four tutorial sessions, and 132 technical paper presentations. More than 200 participants from India and abroad participated. **Prof Naran Pindoriya** was the organising chair for the conference.

## INDIAN SYMPOSIUM ON MACHINE LEARNING

IITGN and IIT Kharagpur jointly organised the first Indian Symposium on Machine Learning (IndoML) on the theme "AI for Science and Science for AI" during December 16-18, 2020. More than 20 experts from all over the world discussed state-of-the-art Machine Learning research and related topics during the event. Around 3000 participants registered for the virtual event from across the globe. The event was coordinated by **Profs Anirban Dasgupta, Mayank Singh, and Udit Bhatia** of IITGN, and **Profs Animesh Mukherjee and Niloy Ganguly** of IIT Kharagpur.

## 31ST IAGRG MEETING

The discipline of Physics organised the 31st meeting of Indian Association for General Relativity and Gravitation (IAGRG) as a web conference on December 19-20, 2020. The broad theme of the web conference was - 'Quasinormal Modes from Black Holes'. National and international scholars and subject experts were invited as speakers during the conference. **Profs Sudipta Sarkar, Arpan Bhattacharya, and Anand Sengupta** coordinated the conference.

## WEBINAR ON GANDHI AND THE ADIVASI QUESTION

IITGN and Flinders University, Australia, with support from SPARC, Ministry of Education, Government of India, organised a one-day international webinar on 'Gandhi and the Adivasi Question', on October 1, 2020. Many Gandhian experts, scholars and Adivasi activists participated in the webinar. The event was coordinated by **Prof Nishaant Choksi** and **Prof Alok Kumar Kanungo**.

## WEBINAR SERIES ON STORYTELLING

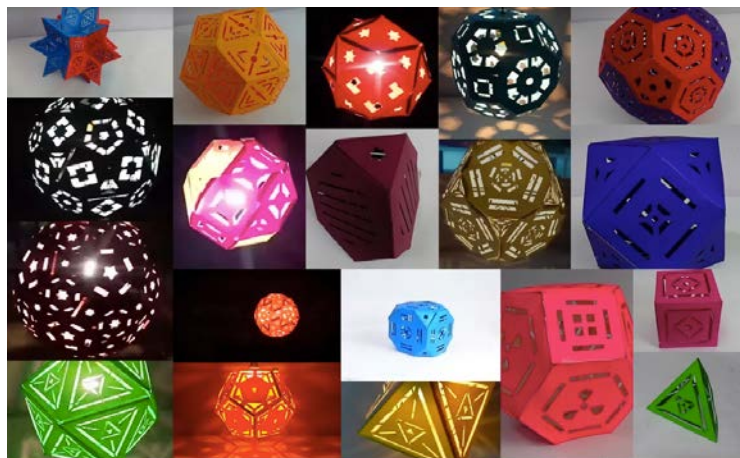
IITGN organised a webinar series titled 'Storytelling, Transmediality, and the Aesthetics of Visuality' from November 3-9, 2020, under the aegis of Continuing Education Programme (CEP). The week-long virtual event included immersive lectures, talks, critical/creative insights and lec-dems on the wonders of storytelling across different mediums. The event was coordinated by **Prof Arnapura Rath**.

## KVS AND JNV IN-SERVICE WORKSHOPS

The **Centre for Creative Learning (CCL)** conducted their second spell of online in-service workshops in November and December 2020. About 400 high school teachers of Kendriya Vidyalaya Sangathan (KVS) and Jawahar Navodaya Vidyalaya (JNV) from across the country participated in the workshops on Math, Science, Computer Science, and Chemistry.

## JOY OF ENGINEERING

CCL-IITGN conducted two online sessions on 'The Joy of Engineering' for about 65,000 first-year students of nearly 150 engineering colleges of the APJ Abdul Kalam Technological University, Kerala, on November 30 and December 2, 2020. Both sessions were conducted as a part of the training for the newly-inducted engineering batch of the University. The sessions aimed to motivate students about engineering by focusing on problem-solving, algorithmic and critical thinking. The team conducted two similar sessions for the students of IIT Gandhinagar and IIT Jammu as well.



## 20-20 LAMPS SERIES

CCL-IITGN launched a '20-20 Lamps' series to illuminate Diwali with environment-friendly DIY decorations in the shape of geometric solids. Under this innovative video series, on each of the 20 days from Dussehra to Diwali, the CCL team released a video on its YouTube channel on how to make a new paper lamp using interesting mathematical concepts. These easy-to-make paper lamps were exclusively designed by the CCL team and received an overwhelming response from all over the country.

## NIDHI SEED SUPPORT PROGRAMME

**IIT Gandhinagar Innovation and Entrepreneurship Center (IIEC)** has received a sanction of funds worth Rs 10.50 crores from the Department of Science and Technology, Government of India under the Nidhi Seed Support Programme. The funds can be utilised to support promising startups incubated at IIEC by providing them seed funding to the order of Rs 25 to 50 lakhs.

## NIDHI PRAYAS PROGRAMME

As a part of the Nidhi Prayas programme supported by the National Science & Technology Entrepreneurship Development Board (NSTEDB), under the aegis of Department of Science and Technology, Government of India, IIEC received a total of 93 applications in its first call for proposals. Following a procedure of initial screening, virtual presentations, and evaluation by a panel of experts, ten teams were shortlisted to receive product development grants worth Rs 50 lakhs.

## START-UPS' ACHIEVEMENTS

- MiCoB**, a start-up in 3D concrete printing, incubated at IIEC, was among the teams shortlisted under Global Housing Technology Challenge 2019.
- Necesario Innovations (Snapper)** and **MiCoB**, start-ups incubated at IIEC have received seed grants of Rs 23 lakhs and Rs 20 lakhs, respectively, for their startup idea.

## ONLINE WORKSHOPS

- Filming and Audio Production workshop for IITGN staff members by **Mr Devarsh Barbhaya**, Communication Assistant, External Communications, IITGN, September 30 - October 1, 2020.
- EQAL- Emotional Quotient for Authentic Leadership by **Ms Rashmi Datt**, an Organisation Development Consultant and Coach, October 3, 2020.
- Understanding Gender by **Ms Manvita Baradi**, Director, UMC Asia, October 16, 2020.
- Future Faculty: A Life of a Scientist behind the Shadow of Science by **Prof Hardik Pandya**, Assistant Professor, Department of Electronic Systems Engineering, IISc Bangalore, October 25, 2020.
- Balancing Research and Teaching at a

Teaching Intensive Institution by **Dr Mayuri Rege**, DST-INSPIRE Faculty, Department of Microbiology, Ramnarain Ruia Autonomous College, Mumbai, November 7, 2020.

- Basic 3D Modelling Workshop using Rhinoceros (Version 6) by **Mr Singhara Kannappan**, Design and Innovation Centre, IITGN, November 21, 2020.
- Instrumentation and Control for Technical Staff by **Prof S Rajendran**, **Prof Gopinadhan Kalon**, and **Mr Pragnesh Parekh**, December 14-24, 2020.

## ONLINE SHORT COURSES

- 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.

- Workplace Leadership for Millennial by **Prof Rajeesh Rajan Sharma**, Professor at International Management Institute (IMI), New Delhi, October 24 to November 29, 2020.
- Chemical Processes by **Dr Subhash Deodhar**, Senior Consultant, Fisher International, USA, October 26 to December 4, 2020.
- Communicative English for Staff (Basic) by **Ms Akanksha Tripathi**, former Teaching Associate, Writing Studio, IITGN, in the span of four weeks during November and December 2020.

## VIRTUAL LECTURES

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



## STUDENTS AND STAFF

### AWARDS AND RECOGNITIONS

- **Rajesh Hadiya**, a PhD scholar in Biological Engineering, has been selected for the prestigious SERB-CII Prime Minister's Fellowship for Doctoral Research.
- **Pankaj Pandey**, a PhD scholar in Computer Science and Engineering has been selected for the SERB-DST Prime Minister's Fellowship for Doctoral Research, coordinated by FICCI.
- Six PhD scholars - **Prasanna Kulkarni** and **Yogesh Singh** from Mechanical Engineering; **Ashish Tiwari**, **Sachinkumar Suthar**, and **Kailash Prasad** from Electrical Engineering; and **Rajes Ghosh** from Physics - have bagged the prestigious Prime Minister Research Fellowship (May 2020 cycle).
- Two PhD students, **Jaydeepsingh Chavda** from Chemistry discipline, and **Shanti Shwarup Mahto** from Earth Sciences discipline have been selected for the DST-INSPIRE Fellowship.
- **Dr Deepa Dixit**, a PhD alumna of Chemical Engineering, has been selected for SITARE-

Gandhian Young Technological Innovation (GYTI) Award 2020 for the development of non-electric and affordable surface engineered particle-based point-of-use water disinfection.

- Two PhD students, **Chandan Kumar Jha**, Electrical Engineering, and **Nakshi Desai**, Biological Engineering, have won the Student Startup Grant Challenge from the CIIE at IIM Ahmedabad. **Chandan Kumar Jha** has also won the BIRAC cash prize of Rs 3 lakhs in the student-team innovation category at the National Bio Entrepreneurship Competition 2020.
- **Dr Ankita Arora**, a PhD alumna of Materials Science and Engineering, has received Prof Sabu Thomas Best Doctoral Thesis Award 2020 in the category of Polymer Sciences & Engineering.

### STRIDES 4.0

The **Staff Development Cell (SDC)** organised the fourth edition of 'Strides' on October 31, 2020. The theme for this year's virtual cultural event was 'Unrelenting Steps'. The IITGN community,

including staff, faculty, and their families participated and showcased their talents in dance, singing, poetry recitation and quiz.

### INCREDIBLE 2.0

The **Cultural Council** organised IncrEdible 2.0, the second edition of culinary competition at the Institute, on October 31, 2020. A total of seven teams comprising students and staff members showcased their culinary skills and prepared a variety of mouthwatering dishes with proper hygiene and precautionary measures. The teams also got a chance to sell their items and win some exciting prizes.

### YOUR HOME YOUR DESIGN

The **Welfare Council** organised 'Your Home Your Design' competition in September 2020, which invited the students to design and do a makeover of their hostels. Five teams of students competed and displayed their amazing skills in designing the nooks and corners of the 'Ijokha' (I) hostel corridors within a span of two weeks.

## SPORTS

### ONLINE CHESS TOURNAMENTS

The **Chess Club of IITGN** organised multiple training sessions and conducted various chess tournaments. Members of the Institute's chess club participated in various competitions such as a triple-team battle between students of IIT Gandhinagar, IIT Tirupati and NIT Bhopal; and All India Chess League conducted by IIT Bombay. In the 'Beat the Warden' challenge, the Hostel Warden **Prof Raghavan Ranganathan** challenged the students to compete with him in a game of chess. The club also organised an inter-college team battle in collaboration with IIT BHU, which saw participation of around 300 players from 13 institutes across the country.

### CHILDREN'S DAY OUT

In an attempt to revisit the memories of carefree childhood days, the **Sports Council** and **Cultural Council** jointly organised 'Children's Day

Out'. The four-day event that started on October 29, 2020, received a highly encouraging response from the Institute community. As many as 100 students, staff, faculty, and their family members participated in various traditional games and activities.

### FITNESS BOOT CAMP

The **Physical Education section** organised a one-month fitness bootcamp from September 24 to October 24, 2020, comprising several fitness activities such as weekly sessions of running, cross-fit training, team spirit building games, cool-down exercises etc.

### WEEKLY CYCLE RIDES

With the aim of forming a good fitness habit among the campus community, the Physical Education section resumed its weekly cycling event in December 2020. Going beyond the target of 25km set in September 2020, the participants were given a target of 40 km to ride every Sunday within or outside IITGN campus.