

Connections

A quarterly newsletter for friends of IIT Gandhinagar



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INSTITUTE HIGHLIGHTS



UNION EDUCATION MINISTER AT IITGN

Union Education Minister **Dr Ramesh Pokhriyal 'Nishank'** visited the Institute on February 23, 2021, and held a meeting with the heads and officials of centrally funded educational institutions of Gujarat. During the meeting, Dr Pokhriyal discussed current innovations, infrastructural facilities, and preparedness of the institutions to implement the New Education Policy (NEP). He also obtained information on some of the key projects and work by the Institute and particularly appreciated the activities by the Centre for Creative Learning (CCL).

UG TEACHING ASSISTANTSHIP

In yet another academic innovation, the Institute has introduced the Undergraduate Teaching Assistantship (UGTA) programme with a vision to enrich the educational experience of UG students. It aims to add a new dimension to their learning and develop their teaching and mentoring

skills. To facilitate effective student engagement and learning, the UGTAs will assist the instructors/tutors in conducting the course and will receive a stipend for their work. Interested students will go through a preparation programme that would help them become effective facilitators of learning.

SUPPORT FOR THE INSTITUTE

SARITA G GELOT ENDOWMENT FUND

Shri Gordhanbhai B Gelot has set up **Sarita G Gelot Endowment Fund** in honour of his wife. The Institute will use this endowment fund to encourage and support excellence in research and education among students and faculty of IITGN. In appreciation of this, the Institute will name one of its research laboratories as **Sarita G Gelot Laboratory for Intelligent Rehabilitation and Affective Computing Systems**. Shri Gordhanbhai has run 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.



Smt Sarita G Gelot and
Shri Gordhanbhai B Gelot

SMT MEERA AND PROF GIRISH K SHARMA CHAIR

Mrs Rashmi Sharma and **Mr Manish Sharma**, Bangalore-based well-wishers of the Institute, have made a generous gift to create a faculty chair in honour of their parents **Smt Meera and Prof Girish K Sharma** to support educational and research excellence. Prof Girish K Sharma is a Visiting Professor of Mechanical Engineering at IITGN, with vast experience in teaching and research at various prestigious institutes. Mr Manish Sharma is Group Chief Executive of operations services at Accenture and a member of Accenture's Global Management Committee. He holds a bachelor's degree in Mechanical Engineering and a master's degree in Operations Management from Mumbai University.



Mrs Rashmi and Mr
Manish Sharma



Smt Meera and Prof Girish K Sharma

DR VILAS MUJUMDAR CHAIR

Dr Vilas Mujumdar, an eminent engineering leader based in Virginia, USA, has made a gift to establish **Dr Vilas Mujumdar Chair** at IITGN. Dr Mujumdar has been an independent consulting engineer since 2009. Previously he was CEO, President and Partner in many large engineering firms and at the highest level in the public sector. He has worked in Design, Project Management, Teaching, and Research Management in Asia, Europe, Canada, and the US. He is also a recipient of many awards and recognitions, including Medal of Engineering Excellence by the WFEO (2020); NSF Director's Award (2009); Special recognition from California Governor "for making a significant contribution to enhancing seismic safety in California" (1999), among others.



Dr Vilas Mujumdar

KUTCH SCHOLARSHIP

A well-wisher of IITGN, who does not wish to be identified, has made a gift to establish **Kutch Scholarship** at the Institute. The scholarship of up to Rs 1 lakh per year will be awarded to one BTech student every year to support internships (international or domestic), special projects and opportunities, financial needs, etc.

LALITA & SHYAM BIHARI SCHOLARSHIP

Dr Ankita Arora, a PhD alumna of 2019 in Materials Science and Engineering, has set up **Lalita & Shyam Bihari Scholarship** in honour of her parents-in-law. This scholarship of Rs 1 lakh per year will support students at the Institute. Dr Ankita is currently working as Head-R&D (Innovation & IP) in a healthcare start-up 'Clensta' at IIT Delhi. During her doctoral study at IITGN, she secured an Overseas Research Fellowship to research at Health Science Center, Texas Tech University, USA, and received the Director's Gold Medal for outstanding overall performance.



Shri Shyam Bihari and
Late Smt Lalita Sharma

Dr Ankita Arora

RAMANUJAN SCHOLARSHIP

Mr Akash Bapat, a BTech alumnus of 2014, has set up **Ramanujan Scholarship** in honour of the great Indian mathematician Srinivasa Ramanujan. This scholarship of Rs 1 lakh per year will support students at IITGN. After completing his BTech in Electrical Engineering, Akash did his PhD from the University of North Carolina at Chapel Hill. He is currently working as a Research Scientist at Facebook, USA.



Srinivasa Ramanujan

Mr Akash Bapat

consulting for six years. Then he did his MBA from INSEAD, France in 2019 and is currently working at Restaurant Brands International with their coffee brand Tim Hortons in Singapore.



Late Smt Sugni Devi Agarwal and Late Shri Gauri Lal Agarwal

Mr Ravi Agarwal

OUTREACH

NEW COMPANIES IN RESEARCH PARK

Two more companies have established their activities at the IITGN Research Park during the first quarter of 2021. Among these, KriGen Pharmaceutical Pvt Ltd specialises in Pharmaceutical Research and InfyU Labs Pvt Ltd works in the AgriTech sector.



FACULTY NEWS

AWARDS AND RECOGNITIONS

- Prof Sudhir K Jain**, Director, has been elected as an International Member of the US National Academy of Engineering (US NAE). Professor Jain was cited by the organisation for his “leadership in earthquake engineering in developing countries.” He is among 23 international members elected in 2021 and the only Director of IITs to ever be elected to this prestigious body.
- Prof Atul Dixit**, Assistant Professor of Mathematics, has been selected for the membership of the Indian National Young Academy of Sciences (INIAS) for a period of five years, i.e., from 2021-25. Professor Dixit has also been selected for the Gábor Szegő Prize 2021 awarded by the Society of Industrial

and Applied Mathematics (SIAM), USA. He is the first Indian mathematician to win the prestigious award.

- Prof Sivapriya Kirubakaran**, Associate Professor of Chemistry, and her team have received a Biotechnology Ignition Grant (BIG) in the category of ‘Drugs & Drug Delivery’ from Biotechnology Industry Research Assistance Council (BIRAC).
- Prof Uttama Lahiri**, Associate Professor of Electrical Engineering, has been selected for the TATA Innovation Fellowship for 2020-21 by the Department of Biotechnology, Ministry of Science and Technology, Government of India; for her proposed work on finding technology-based solution for rehabilitation of gait and mobility in Parkinson’s Disease (PD) patients.
- Prof Arup Lal Chakraborty**, Associate Professor of Electrical Engineering, has been

selected for the Distinguished International Associates Award by the Royal Academy of Engineering, UK, to undertake collaborative research with the City University of London.

- Prof Himanshu Shekhar**, Assistant Professor of Electrical Engineering, has been awarded the Har Gobind Khorana-Innovative Young Biotechnologist Award by the Department of Biotechnology, Ministry of Science and Technology, Government of India.
- Dr Achintya Bhowmik** has been named a fellow of the Institute of Electrical and Electronics Engineers (IEEE), the world’s largest technical professional organisation for the advancement of technology. Dr Bhowmik has been associated with IITGN for many years as one of the Guest Professors in the discipline of Electrical Engineering.

PATENTS GRANTED

Smart Eye System for Visuomotor Dysfunction Diagnosis and its Operant Conditioning: Inventors include **Prof Uttama Lahiri** and her collaborators. The US patent number is 10,973,408.

PATENTS FILED

Indazole Derivatives and a Process for its Preparation: Inventors include **Prof Sivapriya Kirubakaran**, **Kapil Juvele**, **Prof Vijay Thiruvengatam**, **Sachin Puri**, **Namita Hegde**, **Aishwarya Menon**, and **Althaf Shaik**.

SPONSORED AND CONSULTANCY PROJECTS

Follow this link List of sponsored and consultancy projects https://iitgn.ac.in/newsletter/projects/q1_2021 or scan the QR code.



NEW FACULTY

Name	Designation	Discipline	PhD	Date of Joining
Dr Sameer Patel	Assistant Professor	Civil Engg	Washington University in St Louis, USA	05-01-2021
Dr Hari Ganesh	Assistant Professor	Chemical Engg	The University of Texas at Austin	27-01-2021
Dr Chandan Kumar Mishra	Assistant Professor	Physics	JNCASR, Bangalore	01-02-2021
Dr Abhishek Bichhawat	Assistant Professor	Computer Science & Engg	Universität des Saarlandes, Germany	30-03-2021

ACTIVITIES AT IITGN

LEADERSHIP CHAT SERIES

The Institute continued its Leadership Chat series with three engaging sessions. The third session was held with **Ms Elena L Botelho**, partner at gSMART, co- author of the bestseller “The CEO Next Door”, on January 28, 2021. The fourth session was held on February 28, 2021, with **Mr Raj I Gupta**, Chairman of APTIV, and Chairman & CEO of Rohm and Haas.

The fifth session was conducted with **Mr Nitin Rakesh**, CEO of Mphasis and **Dr Jerry Wind**, Lauder Professor Emeritus



Ms Botelho

Mr Gupta

Mr Rakesh

Dr Wind

and Professor of Marketing at Wharton, on March 17, 2021. All three conversations were moderated by **Mr Mukul Pandya**, Former Editor in Chief, Knowledge@Wharton and **Prof Achal Mehra**.



PROJECT ISAAC SHOWCASE

IITGN organised 'Project Isaac Showcase' on January 29, 2021, an exciting and fun-filled event to celebrate and reward the talent and creativity of students. The virtual show exhibited the best and most creative works generated by students during the COVID-19 induced lockdown in India. The event was coordinated by Prof Achal Mehra, Visiting Professor, HSS.

JAIST-IITGN INT'L WORKSHOP

The Japan Advanced Institute of Science and Technology (JAIST) and IITGN jointly organised an online international workshop on 'Education under the Pandemic and Post-pandemic Era' during March 8-9, 2021. The inaugural ceremony was attended by Prof Sudhir K Jain, Director, IITGN, and Prof Terano Minoru, President, JAIST. Prof Shungo Kawanishi, Research Professor, Global Communication Centre, JAIST, delivered the keynote lecture. A total of eight faculty members, eight staff members, and 16 students from both the institutions took part in the two-day workshop.

INTERNATIONAL WORKSHOP ON ADVANCED CELL CULTURE, MICROSCOPY AND BIOIMAGING

IITGN, in association with Gujarat State Biotechnology Mission (GSBTM), hosted the first phase of an International Workshop on Advanced Cell Culture, Microscopy, and Bioimaging on February 20, 2021. Nearly 50 participants from various colleges in Gujarat attended the workshop. Prof Dhiraj Bhatia coordinated the workshop.

3RD SUSTAINABILITY FAIR

The Dr Kiran Patel Centre for Sustainable Development hosted its third annual Sustainability Fair online on March 26, 2021. Shri Vijay Rupani, Hon'ble Chief Minister of Gujarat, graced the occasion virtually and gave the inaugural speech. The event featured keynote talks, online interactive networking sessions, and about 50 virtual exhibition stalls by industries and organisations working on renewable energy, water and sustainability issues. More than 600 participants attended the event from all over the world. The event was coordinated by Prof Achal Mehra and Ms Falguni Tailor.



WEBINAR SERIES ON ROBOTICS FOR REHABILITATION

The Human-centered Robotics Lab at the Institute initiated a Spring'21 webinar series on the subject

'Robotics for Rehabilitation and Elderly Care'. The series hosted five webinars with national and international experts from medical, social science, and engineering domains to cover a variety of topics like biomechanics, dynamics of human-robot cooperation, movement disorders, robotic exoskeletons, etc. About 600 students, professionals, and researchers attended these webinars. The series was coordinated by Prof Vineet Vashista.

5TH EDITION OF IKS COURSE

IITGN started the 5th edition of its unique elective course, Introduction to Indian Knowledge Systems (IKS), online from January 13, 2021, on the theme - 'The Indian Web of Arts and Aesthetics'. About 13 eminent scholars, practitioners and cultural proponents from India and overseas, including the course coordinators Prof Michel Danino and Ms Mana Shah from IITGN, explored the processes of Indian arts and aesthetics.

TEQIP-III

The Institute conducted a total of four online short courses under TEQIP-III from January to March 2021. The four short courses were titled as - 1) 'Data Science & Analytics'; 2) 'Frontiers in the Energy-Water Nexus'; 3) 'Design of CMOS Operational Amplifier ICs- A unique pedagogical approach'; and 4) 'Role of Power Electronics in Power Engineering'. About 100 engineering faculty of the country participated in these courses.

COURSE IN COMMUTATIVE ALGEBRA

The Discipline of Mathematics, in association with IISc Bangalore, virtually hosted an NCM Advanced Instructional Course in Commutative Algebra from January 2 to May 2, 2021. A total of 26 lectures and 26 tutorials were conducted between January 2 and March 31, 2021. Each session was attended by about 50 participants. The event was coordinated by Prof Indranath Sengupta of IITGN and Prof Dilip P Patil of IISc Bangalore.

BRAIN AWARENESS WEEK

The Centre for Cognitive and Brain Sciences celebrated Brain Awareness Week from March 15 to 21, 2021. The virtual event included a variety of talks, panel discussions, workshops, and competitions by the scholars and practitioners of cognitive and brain sciences from India and abroad. The event was coordinated by Prof Pratik Mutha and Ms Shriya Naidu.

WORLD WATER DAY 2021

The Dr Kiran C Patel Centre for Sustainable Development, in collaboration with the International Association of Hydrogeologists - Indian National Chapter, organised an event to celebrate World Water Day 2021, on March 22, 2021. The event included two fascinating keynote talks by domain experts. A total of 91 people attended the session.

REPUBLIC DAY 2021

The Institute celebrated the 72nd Republic Day with limited community gathering and a live webcast of the programme on the Institute's YouTube channel. Following the flag hoisting ceremony and address by the Director, the Institute presented awards to the community members in various categories. The celebration ended with virtual cultural performances by students and other community members. The Faculty Excellence Awards were received by Prof Sudipta Sarkar for Excellence in Teaching, Prof Pratik Mutha for Excellence in Research, Prof Kabeer Jasuja for Excellence in Institution Building, and Prof Chinmay Ghoroi for Excellence in Outreach Activities.



Prof Sarkar Prof Mutha Prof Jasuja Prof Ghoroi

Following staff members received the Staff Excellence Awards: Dr Deepa Shah, Ms Bhavna Dharani, Ms Anjanaba Zala, Mr Devarsh Barbhaya, Mr Lal Sinh Zala, Mr Shailesh Thakor, Mr Dasharathbhai Makwana, and Ms Gitaben Ramesh Thakor.



Dr Shah Ms Dharani Ms Zala Mr Barbhaya



Mr Zala Mr Thakor Mr Makwana Ms Thakor

Recipients of the Campus Development Awards are: Ms Berawala Timirben Yakunaj, Mr Chirag Patel, Mr Vishnu Deth J J, Mr Mohsin Kureshi, Mr Gagan Singh Thagunna, Mr Deepak Agnihotri, and Mr Bharatkumar V Parmar.



Ms Berawala Mr Patel Mr Deth Mr Kureshi



Mr Singh Mr Agnihotri Mr Parmar

NATIONAL TOY FAIR

CCL-IITGN participated in India's first Virtual Toy Fair conducted by the Ministry of Education from February 27 to March 2, 2021. CCL also played a very active role in planning and guiding the themes included in Toyathon 2021. CCL had 3 virtual stalls and was contacted by a lot of people for CCL's Science/Math toys.

30-30 STEM REACHES MILLIONS

'30-30 STEM', the weekly live educational programme, started by the Centre for Creative Learning (CCL), in collaboration with CBSE and IISER Pune, has reached around 3.8 million views in its second season. A live survey conducted during the programme revealed that on an average, one episode is watched by a family of four (sometimes by the whole class),

taking the total number of views to around one crore in less than eight months. It is also being dubbed in Tamil, Kannada, Bengali, and English by volunteers from around the country.

MENTOR CLINICS BY IIEC

IITGN Innovation and Entrepreneurship Center (IIEC) organised a total of 20 'Mentor Clinics' for 14 teams of IITGN students to discuss their

ideas, provide feedback and connect them to the mentors. Each session spanned for around 1-1.5 hours, which helped many of them to work on the market research, idea validations, and so on. In addition, a mentorship session of 40+ hours was also conducted for existing startups on the campus and Nidhi Prayas supported teams.

ONLINE WORKSHOPS

- Think. Design. Print. - 3D Printing Workshop by **Mr Tanvir Khorajiya**, Maker Bhavan, IITGN, January 21 & 22, 2021.
- Inspiring Research & Innovation Using IEEE Publications (IEEEExplore) by **Dr Dhanukumar Pattanashetti**, Senior Client Services Manager at IEEE, January 25, 2021.
- Advance Your Research Using SciFinder-n by **Mr Rohan Kohok**, Customer success specialist, ACS India (Chemical Abstract Services, USA), January 27, 2021.
- Web of Science: Taking Your Research to a Next Level by **Dr Subhasree Nag**, Solution consultant, Scientific Research Division, Clarivate Analytics (Publisher of Web of Science & EndNote), February 1, 2021.
- EndNote-Reference Management Made Easy by **Dr Subhasree Nag**, Solution consultant, Scientific Research Division, Clarivate Analytics (Publisher of Web of Science & EndNote), February 05, 2021.
- Natural Dye Workshop by **Mr Nirav Patel**, Designer, Design and Innovation Centre (DIC), IITGN, February 20, 2021.
- Workshop on Moodle by **Ms Neha Maheshwari**, IMS,

IITGN, February 22, 2021.

- Basics of Writing and Getting Published A Quality Technical Paper by **Dr Dhanukumar Pattanashetti**, Senior Client Services Manager at IEEE, February 23, 2021.
- Integrating Scopus in Research Workflow by **Dr Shubhra Dutta**, Customer Consultant (Core Content) - South Asia A&G Team, ELSEVIER Publisher, February 25, 2021.
- Basic 3D Modelling Using Rhinoceros by **Mr Singhara Kannappan**, Product Designer, Design and Innovation Centre (DIC), IITGN, March 8, 10, 12, 2021.
- Demystifying the PhD: Managing Expectations and Reality by **Prof Himanshu Shekhar**, Assistant Professor, Electrical Engineering, IITGN, March 13 & 14, 2021.
- Think. Design. Cut. - Laser Cutting Workshop by **Mr Tanvir Khorajiya**, Maker Bhavan, IITGN, March 17-19, 2021.
- Integrating MENDELEY - Reference Management Software in Your Research Workflow by **Dr Shubhra Dutta**, Customer Consultant (Core Content) - South Asia A&G Team, ELSEVIER Publisher, March 18, 2021.

Akanksha Tripathi, former Teaching Associate, Writing Studio, IITGN, in the span of four weeks in the month of January 2021.

- Governance Structure in India by **Mr Jagdish Prasad Gupta**, an Indian Administrative Services (IAS) Officer of 1991 batch of Gujarat Cadre, every week on Saturday during January 23 to March 06, 2021.
- Spoken Word Poetry - From Page to Stage by **Mr Nivid Desai**, a writer, translator, editor, public speaker and research scholar, March 16, 18, 20, 22, and 24, 2021.
- Scientific Writing by **Dr Monal K Desai**, Teaching Associate, Writing Studio, IITGN, two sessions per week for a total of five weeks during March 19 to April 17, 2021.
- Nature-Inspired Design, **Mr Sanjay Jain**, Professor, SAGE Institute of Design, 2 hours/ week during March 20 to April 24, 2021.

ONLINE LECTURES & COLLOQUIA

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 ACHIEVEMENTS

- IITGN students **Chandan Kumar Jha**, a PhD scholar in Electrical Engineering, and **Aishna Agrawal**, a BTech student in Computer Science and Engineering, were among the 50 meritorious students from across the country, who were invited to watch the Republic Day Parade 2021 from the Prime Minister's box in recognition of their excellent academic performance. They were also felicitated by the Union Education Minister **Dr Ramesh Pokhriyal 'Nishank'** with a certificate of appreciation.
- **Pratyush Bhatt**, a third-year BTech student in Chemical Engineering, has published his first book titled 'MBA: May The Boom Be Avoided'. The book is up on Amazon in its e-book and Kindle: <https://amzn.to/3oLfuXb>

STUDENT LEADERSHIP CONCLAVE

The fourth edition of the Student Leadership Conclave was organised by IITGN students in a virtual mode on January 9-10, 2021. Students from all 23 IITs participated in the two-day conclave to discuss various emerging issue.

IGNITE 7.0

Ignite - the annual intra-college technical fest of IITGN - returned with its seventh edition this year during March 13-29, 2021. Ignite 7.0 brought a gamut of exciting online and offline events and activities, which provided students with a platform to highlight their technical skills.

AMALTHEA 2020-21

Amalthea, the annual student-driven technical summit of the Institute, was conducted virtually on the central theme of 'Connect. Collaborate. Create.' The 11th edition of Amalthea included five webinars with renowned personalities and

industry experts, a half-day virtual symposium, and many exciting online events over a period of four months, from October 2020 to January 2021. The event received tremendous response, with about 2000 participant registrations from across the globe.



YOUR HOME, YOUR DESIGN

The **Welfare Council** organised the second edition of 'Your Home Your Design' competition in January 2021, which invited the students to design and do a makeover of their hostel balconies. Five participating teams competed to design the most creative, robust and weather-resistant balcony decor within a span of two weeks.

SPORTS

REPUBLIC DAY QUIZ

The **Sports Council** and the Quizzing Society jointly organised the Republic Day Sports Quiz on IITGN Sports Council's Instagram page. The online event saw enthusiastic participation from the student body.

BEAT THE WARDEN IN CHESS

The Physical Education Section organised the second edition of 'Beat the Warden Chess Challenge' with Hostel Warden **Prof Raghavan Ranganathan** on January 26, 2021. The event received an overwhelming response from the chess enthusiasts of the community.

BEAT THE FORMER DEAN IN RUN

The **Sports Council** organised the 'Beat the Former Dean' challenge on March 14, 2021. The Institute community participated enthusiastically to complete a 5 km run in less than the time taken by the former dean **Prof Jaison Manjaly**. The event was organised using the strava app to avoid crowding and maintain social distancing.