Connections



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A quarterly newsletter for friends of IIT Gandhinagar

INSTITUTE HIGHLIGHTS

10TH CONVOCATION

IITGN hosted the landmark 10th Convocation on Aug 29, 2021, through a heartwarming virtual ceremony. The Institute conferred degrees to a total of 548 students, including 175 BTech students, 5 Dual Major BTech students, 1 BTech-MTech Dual



Dr Pawan Munjal Dr Sanjiv Goenka

Degree student, 155 MTech students, 95 MSc students, 30 MA students, 86 PhD students, and 1 PGDIIT student. Total 52 students received 58 medals, including 42 gold medals and 16 silver medals for excellence in various categories. This year, IITGN graduated the first batch of its five-year Dual Major BTech programme. **Dr Pawan Munjal**, Chairman & CEO of Hero MotoCorp Ltd, was the Chief Guest on the occasion. In his motivating Convocation address, Dr Munjal encouraged the graduating students to dream big and lead the India of the future. **Dr Sanjiv Goenka**, Chairman

THE RANKINGS 2022

The Institute ranked in the 601-800 band globally and 7th in India in the *Times Higher Education (THE)* World University Rankings 2022. IITGN has secured a global place in this prestigious international educational ranking for the third consecutive year. *THE* World University Rankings 2022 included more than 1,600 universities across 99 countries and territories. It measures the performance of universities/institutions based on 13 carefully calibrated performance indicators across four areas: teaching, research, knowledge transfer, and international outlook.

NIRF RANKINGS 2021

Strengthening its position year after year, IITGN has secured 33rd rank (compared to 35th rank last year) in the overall category and 22nd rank (compared to 24th rank last year) in the engineering category in the National Institutional Ranking Framework (NIRF) India Rankings 2021. The Institute also ranked at 39th position in the newly introduced research category. NIRF ranks Indian institutions based on the parameters of teaching, learning and resources; research and professional practices; graduation outcomes; outreach and inclusivity; and perception.

PARTNERSHIP WITH NIT SIKKIM AND NIT HAMIRPUR

IITGN has signed Memorandum of Understandings with NIT Sikkim (NITS) and NIT Hamirpur (NITH) to facilitate student exchange, academic

SUPPORT FOR THE INSTITUTE

DR T G VISWESWARAIAH SCHOLARSHIP

Aparna Tumkur, a BTech alumna of 2019, and **Avinash Tumkur**, a BTech alumnus of 2014, have set up **Dr T G Visweswaraiah Scholarship** in honour of their late grandfather. This scholarship of Rs 1 lakh per year will support BTech students of IITGN. After completing BTech in Electrical Engineering with a President's Gold medal from IITGN, Aparna went on to pursue Masters from Stanford University, USA. She is working

as a PMIC Systems Engineer at Qualcomm, USA. Avinash graduated from IITGN with a BTech in Mechanical Engineering and further completed his MBA from Duke University, USA. He is currently working as a Project Leader in Boston Consulting Group, USA.



Late Dr Visweswaraiah

Aparna & Avinash

of the RP-Sanjiv Goenka Group and Chairman of the Board of Governors of IITGN, congratulated all the degree recipients and medal winners. **Prof Sudhir K Jain**, Director, IITGN, gave a brief overview of the Institute activities and achievements during the year. He also lauded the student community's exceptional maturity, teamwork, and leadership skills in helping to manage the campus during the pandemic.

Prof Sudhir K Jain

Vraj Patel was awarded the President's Gold Medal for BTech, **Ananya Sharma** was awarded the President's Gold Medal for MTech, and **Joita Das** and **Krishnan Shruti** received the President's Gold Medal for MSc and MA. **Utkarsh Gangwal** received the Director's Gold Medal for BTech, Director's Gold Medal for MTech went to **Jain Jainendra Brijkumar**, Director's Gold Medal for MSc and MA was awarded to **Ekata Lahiri**, and Director's Gold Medal for PhD went to **Goldy Yadav**. The entire event was streamed online on IITGN's YouTube channel and Facebook page.

cooperation, and research collaboration among faculty members of both the institutes. Selected meritorious students of both the NITs can now be a part of the IITGN-SRIP, study a semester at IITGN, and apply for the Start Early PhD Programme at IITGN. Academic and research collaboration between faculty members will also be facilitated.



MEDICAL CAMPS IN LABOUR COLONIES

In yet another initiative towards community outreach, IITGN has started Medical Camps at the construction workers' colonies, which are held on a weekly and rotational basis in one of the labour colonies. Every time they serve approximately 40-50 workers and their family members. These camps are running successfully with persistent and diligent efforts by **Dr Riya Saini** and the medical staff of the Institute.

SHRI SATYANARAYAN **KAKRANIA AND** SHRI ANANDILAL BUBNA SCHOLARSHIPS

Rishi Bubna, a BTech alumnus of 2017, has set up Shri Satyanarayan Kakrania Scholarship in honour of his maternal grandfather. Ms Ngan



Shri Anandilal B

Le has set up Shri Anandilal Bubna Scholarship in honour of Rishi Bubna's paternal grandfather. Each of these scholarships is of Rs 1 lakh per year and will support BTech students at IITGN. After his graduation in Mechanical Engineering from IITGN in 2017, Rishi pursued his Master's degree at Georgia Institute of Technology, USA, and is currently working as a Data Scientist at Amazon, USA.



OUTREACH

Prof Sudhir K Jain, Director, shared the vision of IITGN and his thoughts on education in a number of forums. He delivered a talk in an event to felicitate him by the Indian Association of Structural Engineers (IAStructE) on July 10, 2021. Prof Jain participated in a panel discussion on 'Roadmap to Bridging Employability Gaps in India' organised by Harappa Education on Aug 14, 2021. On Aug 19, 2021, he participated in a webinar organised by Harappa Education, as part of its 'Harappa Bridge' series, to speak on 'Do Internships Matter?'. Prof Jain visited JK Lakshmipat University, Jaipur on Sep 04, 2021, and interacted with the faculty of JKLU on 'Institute Building'. Prof Jain, along with Prof Abhay Karandikar (IIT Kanpur), Prof V Ramgopal Rao (IIT Delhi), and Prof K N Satyanarayana (IIT Tirupati), participated in a panel discussion on 'IITs Gearing Up for New World', during the PAN IIT Global Virtual Technology Summit 2021. The session was moderated by Mr Raj Nair, Chairman, Avalon Consulting. Prof Jain also participated in another virtual panel discussion organised by Sci-ROI (Science and Research Opportunities in India) on Sep 26, 2021, on 'Upcoming Academic Institute Panel'.

PATENTS GRANTED

• Low-cost Hand-driven Bamboo-cored Incense-stick Making Machine: Inventors include Keshav Giriyapnavar (a BTech alumnus of 2012). Patent number is 375325.

FACULTY NEWS

FACULTY CHAIR POSITIONS



Three faculty members were awarded Faculty Chair positions with effect from Sep 20, 2021:

Prof Neeldhara

Prof Neeldhara Misra, Assistant Professor in Prof Sameer Computer Science &

Engineering (Smt Amba and Sri V S Sastry Chair), Prof Gaurav Srivastava, Associate Professor in Civil Engineering (Dr Vilas Mujumdar Chair), and Prof Sameer Dalvi, Professor in Chemical Engineering (Smt Meera and Prof Girish K Sharma Chair).

AWARDS AND RECOGNITIONS

Prof Gaurav

Prof Manish Kumar, Assistant Professor, Civil Engineering, IITGN, has been honoured with the Commendation Card by Lieutenant General Jai Singh Nain, AVSM, SM, General Officer Commandingin-Chief (GOC-in-C) of the Southern Command, Indian Army, for providing overall leadership and guidance in developing 3D printed defence structures for the Indian Army. This work was a part of his student Shashank Shekhar's PhD thesis. Dr Kumar also joined the Earthquake Engineering Research Institute's World Housing Encyclopedia committee. His role will be to review the reports on

housing types from different parts of the world with a focus on earthquake performance.

- Prof Vimal Mishra, Associate Professor, Civil Engineering, has been selected for the 2021 AGU's 'Devendra Lal Memorial Medal'. As an awardee, Professor Mishra will also become an AGU Fellow. He has also been appointed as an Editor of Earth's Future, a journal of the American Geophysical Union, for the period July 2021 to Dec 2024.
- Prof Neeldhara Misra, Assistant Professor, Computer Science and Engineering, has been selected as an Associate of the Indian Academy of Sciences, Bengaluru.
- Prof Michel Danino, Visiting Professor, HSS, has been selected as a member of the National Steering Committee for the development of four National Curriculum Frameworks (NCFs) focusing on all the recommendations of National Education Policy (NEP) 2020.

PATENTS FILED

Anode Material for Ultra High-rate Li-ion Batteries: Inventors include Varma Akash Kiran, Matsumi Noriyoshi, Badam Rajashekar, James Asha Liza, and Prof Jasuja Kabeer.

SPONSORED AND CONSULTANCY PROJECTS

To find the list of sponsored and consultancy projects, please follow this link: https://iitgn.ac.in/newsletter/projects/ q3_2021 or scan the QR code.



NEW FACULTY

Name	Designation	Discipline	PhD/Last Degree	Date of Joining
Dr Soumyabrata Chakrabarty	Visiting Professor	Electrical Engineering	IIT Kharagpur	01/07/2021
Mr Anand Kumar	Professor of Practice	Electrical Engineering	University of Roorkee and Lucknow University	12/07/2021
Dr Deepak Singhania	Assistant Professor	Humanities & Social Sciences	University of California, Riverside, USA	23/07/2021
Mr Sudhir Kumar Arora	Professor of Practice	Civil Engineering	IIT Kanpur and Karnataka State Open University	27/07/2021
Dr Tanya Srivastava	Assistant Professor	Mathematics	Freie Universitat Berlin, Germany	24/08/2021
Dr Anirban Mondal	Assistant Professor	Chemistry	JNCASR, Bangalore	27/08/2021
Dr Biswajit Mondal	Assistant Professor	Chemistry	IACS, Kolkata	13/09/2021
Dr Karthik Subramaniam Pushpavanam	Assistant Professor	Chemical Engineering	Arizona State University, USA	23/09/2021

ACTIVITIES AT IITGN

AAROHAN 2021

The Institute organised "Aarohan", an orientation programme for the new postgraduate students. The two-week online programme for MTech and PhD students and one-week programme for MSc and MA students was aimed at integrating these students into IITGN's ethos and culture through thought-provoking, creative, and sporting activities. **Profs Ashutosh Srivastava**, **Abhishek Bichhawat**, **Chandan Mishra**, **Sameer Patel**, and **Himanshu Shekhar** coordinated the programme.

LAUNCH OF 'REFLECTION OF A DECADE'

On Aug 23, 2021, IITGN launched 'Reflection of a Decade', a memory project book of the BTech Alumni batch of 2011. **Akash Keshav Singh**, an alumnus from this batch who conceived and executed the project, was present at the campus and released the book along with **Prof Sudhir K Jain**, Director. The book reminisces the memories, experiences, and growth journeys of some of the alumni from this batch over the ten years. It can be accessed at: https://bit.ly/3jcZGOo

CAMP HSS 2021

IITGN conducted a first of its kind free online event - 'Camp HSS' - for school students of classes 8-12 to help them develop critical thinking, empathy and creativity. The three-day virtual camp, held from July 30 to Aug 1, 2021, received more than 4,000 participant registrations from all over the country. Academics from India and abroad conducted the workshop. **Prof Jaison Manjaly** coordinated the event.

COURSE ON TOPOLOGY AND DIFFERENTIAL GEOMETRY

The discipline of Physics organised an online course on 'Topology and Differential Geometry for Physicists' by **Prof Sunil Mukhi**, Professor, IISER Pune. Starting from July 12, 2021, the 10-lecture course was conducted every Monday, Wednesday and Friday for 250 UG, MSc and PhD scholars. The course was coordinated by **Prof Sudipta Sarkar**.

COURSE ON HISTORY OF MATHEMATICS

As part of the 'History of Indian Mathematics' (HoMi) project, the Institute organised a 10-lecture course on the History of Mathematics by **Prof Amitabh Virmani** of Chennai Mathematical Institute. The course was conducted every Monday and Thursday, between Aug 09 and Sep 13, 2021. It presented a brief history of mathematical ideas related to Geometry from various civilisations. The course was coordinated by **Prof Sudipta Sarkar**.

4TH NATIONAL CONFERENCE IN CHEMISTRY

IITGN organised the 4th National Conference in Chemistry (N-ConC 2021) during Aug 6-7, 2021. The two-day virtual conference hosted 14 invited lectures from distinguished faculty of several prestigious institutions in India and abroad, 17 flash presentations from PhD students, and three special talks from IITGN alumni pursuing their doctoral degrees abroad. More than 100 delegates from different parts of the globe participated in the event. **Prof Sivapriya Kirubakaran** and **Prof Sriram Kanvah** were the convenors of the conference.

WORKSHOP ON ULTRASOUND CONTRAST AGENTS

IITGN, with support from GSBTM, organised a two-day workshop on 'Ultrasound Contrast Agents: Application of Gas-filled Microbubbles in Biomedical Engineering' during July 22-23, 2021. In addition to the lectures, about 80 participants were also exposed to virtual lab demo sessions focusing on microbubble synthesis and characterisation. Instructors from different parts of the world taught during the workshop. **Profs Sameer Dalvi, Karla Mercado-Shekhar**, and **Himanshu Shekhar** were the organisers of the event.

WORKSHOP ON HUMAN-ANIMAL RELATIONS

IITGN organised an online workshop on 'Human-animal Relations at the Margin: A Quest for Social Justice' on Aug 17, 18 & 20, 2021. **Prof Suryakant Waghmore**, Professor of Sociology at IIT Bombay, delivered the keynote talk. The three-day workshop, sponsored by ICSSR, hosted scholars from several prestigious institutions. The workshop was coordinated by **Prof Ambika Aiyadurai** and **Prashant Ingole** (PhD Scholar).

INT'L WORKSHOP ON QUANTUM INFORMATION

IITGN, along with IIT Hyderabad and IISc Bangalore, organised a virtual 'International Workshop on Quantum Information in QFT and AdS/CFT-II' during Aug 18-20, 2021. The workshop brought together some of the leading global experts. It featured 14 talks by international speakers and 4 talks by students/postdocs from India. More than 100 participants attended the workshop from all over the world. The event was jointly organised by **Profs Arpan Bhattacharyya** (IITGN), **Aninda Sinha** (IISc Bangalore), and **Shubho Roy** (IITH).

SEMINAR SERIES ON INDIAN SCIENTISTS

The Institute hosted the fourth edition of the Seminar Series on Indian Scientists on Aug 21, 2021, with two online seminars on the life and works of **Salim Moizuddin Abdul Ali** and **Amal Kumar Raychaudhuri. Tara Gandhi**, a noted Ornithologist and Conservationist delivered the first seminar "Sálim Ali – Father of Indian Ornithology". The second seminar, "Raychaudhuri and His Equation", was delivered by **Prof Sudipta Sarkar**. Nearly 100 scholars, students and researchers from around the world participated in the seminar. The series is being curated by **Prof Sudipta Sarkar** and **Prof Michel Danino**.

WORKSHOP ON "CAPTIVE MIND"

The discipline of Humanities and Social Sciences, in collaboration with the Centre for Southeast Asian Studies, Kyoto University, Japan, organised an online workshop on 'Revisiting the "Captive Mind": Intellectual Imperialism in the Contemporary Asian Academy' on Sep 25, 2021. A total of 40 scholars, students and researchers from across the globe attended the event. The programme was coordinated by **Prof Nishaant Choksi** (IITGN) and **Takamichi Serizawa** (Kyoto University).

MEDICAL HUMANITIES COLLOQUY

The discipline of Humanities and Social Sciences initiated the Medical Humanities Colloquy. The first talk in the series was delivered by **Dr Vinia Dakari**, Adjunct Lecturer, National and Kapodistrian University of Athens, Greece, on Aug 13, 2021, and the second talk was delivered by **Dr Arthur Rose**, Postdoctoral Research Fellow, University of Exeter, UK, on Sep 14, 2021. **Prof Arka Chattopadhyay** and HSS doctoral candidate **Swati Joshi** are the coordinators of the colloquy.



SWACHHATA PAKHWADA

IITGN observed 'Swachhata Pakhwada' during Sep 1-15, 2021, with several events and activities, including a Swachhata pledge, cleanest hostel competition, e-waste collection drive, plogging drives, swachhata awareness in neighbouring village and labour colonies, painting and essay writing competitions for children and students, among others. The events were coordinated by the **Green Office team**, IITGN.

WRITERS AT WORK

The Writing Studio at IITGN launched a new flagship lecture series -'Writers at Work' in Sep 2021. The series invites eminent writers, novelists, biographers, essayists, and nonfiction authors to discuss the art and craft of writing. The first session of the series was held on Sep 17, 2021, with **Prof Chinmay Tumbe**, Assistant Professor, Economics, IIM Ahmedabad, in conversation with **Prof Jooyoung Kim** of IITGN.

30-30 EKLAVYA SERIES

CBSE and the Centre for Creative Learning (CCL) have launched 30-30 Eklavya series on Sep 26, 2021, an online interactive education programme to decode effective implementation of the National Education Policy across the schools. The weekly interactive series, streamed every Sunday on CCL's YouTube channel, covers the curriculum with interesting real-world examples and stories.

INTELLECTUAL PROPERTY CLINICS

With an aim to guide students, faculty and research staff on various aspects of Intellectual Property (IP), the IIT Gandhinagar Innovation and Entrepreneurship Center (IIEC) has started an initiative called 'Intellectual Property Clinic'. The first IP Clinic was organised on July 3, 2021, with **Mr Nilesh Pandit**, IPR Lead, Tata Consultancy Services (TCS). **Dr Malathi Lakshmikumaran**, Executive Director and Practice Head, Lakshmikumaran & Sridharan Attorneys conducted the second IP Clinic on July 10, 2021.

STARTUP'S ACHIEVEMENT

InfyU Labs, an agritech startup pre-incubated at IIEC and supported under the Nidhi Prayas programme, has raised Rs 1.8 crores in a seed round from Indian Angel Network (IAN). The company, currently part of IITGN Research Park, specialises in creating portable devices that determine the internal quality of fresh fruits without cutting them open.

ONLINE WORKSHOPS

- Scientific Illustration Workshop by **Rafeeque Mavoor**, Science Illustrator, IISER Pune, July 09 to 16, 2021.
- Deform-3D Software Demonstration by Bikash Musib, Manager, Business Development, Advanced Forming, July 23, 2021.
- 3D Scanning Workshop by Avneet Kumar, Application Engineer- 3D Scanning, Pelf Infotech Pvt Ltd, Pune, July 26-27, 2021.
- Improving Academic Writing & Research Output with Grammarly by Ratish Iyer, Expert Trainer, Bridge People Technology Solutions Pvt Ltd, Aug 31, 2021.
- J-Gate as a Search and Discovery Tool to Access Journal Literature by Ravi Shankar, Trainer, Informatics Publishing Ltd, Sep 03, 2021.
- What's Your Story?: a Workshop Series on Life Writing by Nivid Desai, Teaching Associate, Writing Studio, IITGN, Sep 04, 11 & 18, 2021.
- Web of Science: Taking Your Research to a Next Level on Sep 06, 2021, and EndNote-reference Management made Easy & Publons on Sep 07, 2021, by Dr Subhasree Nag, Solution Consultant, Clarivate Analytics.

- Power of Your Research with Scopus & Mendeley by Dr Shubhra Dutta, Customer Consultant (Core Content) -South Asia A&G Team, ELSEVIER, Sep 15, 2021.
- Workshop on Advanced Excel by Raj K Singh, Microsoft Certified Trainer, Sep 18-19, 2021.
- Micro Milling Workshop by Tanvir Khorajiya, Maker Bhavan, IITGN, Sep 20-21, 2021.

ONLINE SHORT COURSES

- Scientific Writing (Module 1-5) by **Dr Monal K Desai**, Teaching Associate, Writing Studio, IITGN, every Thursday and Friday from July 15 to Aug 13, 2021.
- Writing Mathematics in the Sciences (Module 1-4) by Dr Monal K Desai, Teaching Associate, Writing Studio, IITGN, on Mondays and Tuesdays from July 19 to Aug 10, 2021.
- Understanding of Financial Market by Mr Vipin Chaudhary, Head, Market Risk Data and Analytics, Deutsche Bank, Mumbai, every Saturday and Sunday from Aug 14 to Sep 19, 2021.
- Digital Terrain Model (DTM): Data Sources and Processing by **Prof Pradeep Srivastava**, Adjunct

- Professor, Earth Sciences, IITGN, Aug 16-30, 2021.
- Research Methods & Skills for Engineers by Dr Raj Chhabra, Professor & Mentor, IIT Ropar, every Tuesday and Thursday from Aug 17 to Sep 02, 2021.
- Management of Domestic Wastewater Conveyance, Treatment and Reuse: Paradigm Shift in Approach by Prof Sudhir K Arora, Professor of Practise, Civil Engineering, IITGN, on Thursdays, Fridays and Saturdays from Aug 20 to Sep 24, 2021.
- Demand Side Management & Energy Efficiency "Policies & Regulations" by **Prof Anand Kumar**, Professor of Practise, Electrical Engineering, IITGN, on Sundays, Mondays and Wednesdays from Aug 29 to Sep 19, 2021.
- Flash Fiction: Storytelling On-the-Go by Nivid Desai, Teaching Associate, Writing Studio, IITGN, on Sep 13, 15, 17, 20 & 22, 2021.

ONLINE LECTURES & COLLOOUIA

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



STUDENTS AND STAFF

UDAAN 2021

One of the most awaited programmes of IITGN - Udaan - was held on July 17, 2021, amid great cheer and fervour. Students and faculty gathered online to bid adieu to the tenth BTech, ninth MTech, seventh MSc, sixth MA batches, and the eighth set of PhD students. The participants recalled the moments spent together over the years, especially amid the challenges of the global pandemic.

AAGMAN

The Staff Development Cell (SDC) organised "Aagman" during July 2-3, 2021, an orientation programme to welcome and acquaint new staff members with the Institute, its functions and campus culture. **Mr Saumil Shah** coordinated the event.

TECHNICAL COUNCIL

The Technical Council organised numerous events, including 'Sharing

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SPORTS

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IITGN STUDENT IN DISTRICT FOOTBALL TEAM

🔰 @iitgn

Saniya Patwardhan, a BTech student at IITGN, was selected as the main goalkeeper in the Gandhinagar District Football Association's Senior Women's team for the inter-district tournament held from Sep 21-27, 2021.



Saniya Patwardhan

💽 iitgn1

My US Patent Journey', a talk by **Prof Uttama Lahiri** on July 24; a twoday introductory workshop on 'Cybersecurity' by India Cyber Security Solution (ICSS) on Aug 7 & 8; a workshop on 'Basics of MATLAB' for UG and PG students by Research Society, IITGN on Aug 12; a talk titled 'Research 101' by **Prof Anamika Dubey**, Assistant Professor at WSU, on Aug 21; a workshop on 'Using Git and GitHub for Projects' by the **Coding Club** on Sep 6. The Council released TORQUE 3.0 - IITGN's student-run annual campus magazine on Sep 24. **Dishank Goel** (a BTech student of CSE) was ranked second in the Inter-IIT CTF (Capture The Flag) event organised by IIT Roorkee on Aug 28-19.

CULTURAL COUNCIL

The **Cultural Council** organised 'Inspireclipse', a short video-making competition on the theme "Vaccine Awareness" from July 12 to 30; 'Drawasaurus', an online scribble tournament by **Palette Club** on July 26 and 27; 'Battle of Quizzards', an entertainment-based quiz by the **Cinematheque Club** on July 25; and a 'Matki Phod competition' on Aug 30, on the occasion of Janmashtami.

SUMMER CHAMPIONSHIP

The Physical Education Section organised a virtual Summer Championship from June 28 to July 31, 2021. For this, the entire student community was divided into four groups namely: Aakash, Agni, Naag, and Prithvi. Each week, the participants competed amongst each other by performing several fitness exercises. Moreover, the championship also conducted competitions such as chess tournament, running challenge, and sports quiz through various online platforms.

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