

Connections

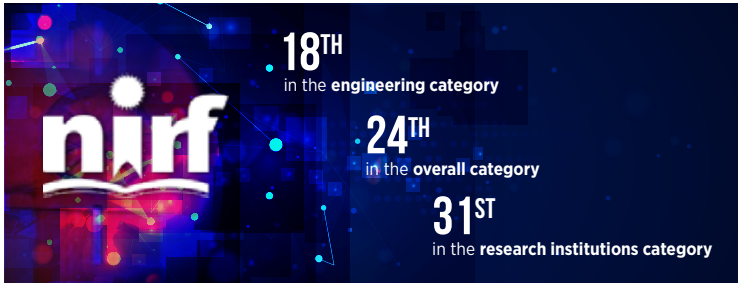
A newsletter for friends of IIT Gandhinagar



2022-2023, Volume XV, Issue III and IV
January - June 2023

INSTITUTE HIGHLIGHTS

NIRF'S INDIA RANKINGS 2023



Showcasing extraordinary progress in its pursuit of academic excellence, IITGN broke into the top 20 institutes in the engineering category by being ranked at the 18th spot (from 23rd rank in 2022) and jumped 13 positions from last year (from 37th rank in 2022), to be ranked 24th in the overall category of the India Rankings 2023 announced by the National Institutional Ranking Framework (NIRF) on June 5, 2023. The Institute has improved its rank in the research institutions category as well by reaching the 31st rank (from 34th rank in 2022).

TWO NEW UG COURSES

The Institute has launched two new courses, BTech in Artificial Intelligence (AI) and BTech-MTech Dual Degree in Mechanical Engineering, from the Academic Year 2023-24, adding about 80 new seats in the undergraduate programmes at IITGN. With the introduction of BTech in AI, the Institute will enable students to build systems that harness data collection and computation to solve important global challenges. Along with statistical and computational techniques, this programme emphasises responsible use of AI as well as development of interdisciplinary domain knowledge.

INAUGURATION OF TWO NEW LABS



Expanding our advanced research infrastructure in the emerging areas of science and technology, the Institute inaugurated two state-of-the-art laboratories on its campus on Apr 28, 2023. The '**Gordhanbhai B Gelot Laboratory for Artificial Intelligence and Data Science**' and the '**Sarita G Gelot Laboratory for Intelligent Rehabilitation & Affective Computing Systems**' were inaugurated by Smt Sarita G Gelot, wife of late Shri Gordhanbhai B Gelot, a generous supporter of IITGN, in presence of their family members.

EXEMPLARY ALUMNI CONTRIBUTION

IITGN is creating new records in alumni giving year after year. During the Financial Year (FY) 2022-2023 about 55 per cent of young alumni of IITGN have made financial contributions of nearly Rs 70 lakh to the Institute. With this, the Institute has achieved more than 50 per cent of alumni donors for the fourth consecutive year. Alumni donation at IITGN has grown exponentially and has almost doubled in the last three years from Rs 36 lakh in FY 2019-20 to Rs 69 lakh in FY 2022-23. Notably, out of 23 alumni-endowed scholarships at IITGN, nearly half of them have been set up in the last two financial years.

IITGN DELEGATION'S VISIT TO THE USA

A team of faculty members from IITGN including **Profs Rajat Moona, Amit Prashant, Jaison Manjaly, Pratik Mutha, Kabeer Jasuja, Chelva Kumar, Pallavi Bharadwaj,** and **Mr Nirmal Jha** visited several places and higher education institutes in the USA from June 5-27, 2023, with an aim to promote international collaborations, expand institutional networks, and strengthen alumni and well-wisher networks. During this visit, several meetings, interactive events, and panel discussions were held in San Diego, Tampa, California, Illinois, West Lafayette, and New Jersey, including '**Sabarmati Alumni & Faculty Research & Outreach Network**' held on June 23-24, 2023, at the University of Miami, USA, to bring together prospective faculty candidates and leading academia and industry leaders to interact with IITGN leadership, faculty, and alumni. Furthermore, IITGN also signed an **MoU with the University of South Florida** on June 26, 2023 to facilitate academic and research cooperation between the two parties.

SECRETARY HILLARY CLINTON AT IITGN



Former First Lady and Secretary of State of the United States of America **Hillary Rodham Clinton** visited the IITGN on Feb 7, 2023, as a part of her India visit. During an interactive town hall titled "Insights from Her Journey", Secretary Hillary Clinton interacted with faculty, students, and the larger IITGN community. Earlier to this, she also visited Palaj village and appreciated significant efforts of the Desai Foundation and their partnership with IITGN's social outreach programmes, NEEV and NYASA, in impacting rural youth, women, and communities through skilling, entrepreneurship, and health programmes.

10TH ACADEMIC ADVISORY COUNCIL



The 10th Academic Advisory Council (AAC) was held on Jan 6, 2023, with nearly 15 distinguished academicians from India and overseas. The day-long deliberations churned out effective strategies to recruit the best faculty members, attract more international students, introduce newer academic programmes to meet future industries' needs and promote entrepreneurship and technology transfer among students and faculty at the Institute.

COLLABORATION WITH TCS

IITGN signed a Memorandum of Understanding (MoU) with Tata Consultancy Services (TCS) Limited on May 2, 2023. The MoU will facilitate collaborative research and its publications; exchange of scholars for research through inbound and outbound sabbaticals, seminars, conferences, and workshops; internship for students with TCS Innovation Labs, and participation in call for proposals by TCS for specific industry problem(s).

MoU WITH NIXI-CSC

IITGN and the National Internet Exchange of India-CSC Data Services Limited (NIXI-CSC) entered into an MoU on Mar 22, 2023, to utilise various Information Technology and Cloud Services under the Government of India's "Digital India" mission. NIXI-CSC has agreed to provide a host of advanced IT services to IITGN such as various cloud services, managed kubernetes, online security services, disaster recovery, active archival, application modernisation, and high performance computing.

MoU WITH UNIVERSITY OF CAMBRIDGE

IITGN and the University of Cambridge have signed an MoU on Jan, 9, 2023 to promote and advance mutual academic links through collaborative work for mapping of archaeological heritage in South Asia; training of students and researchers in GIS-based mapping, remote sensing, and field surveying techniques; research in the specific areas of archaeological sciences and documenting endangered archaeological sites and monuments; exchange of faculty and scholars for research and sharing of experience, among others.

RESEARCH AND ACADEMIC COLLABORATIONS

IITGN signed four MoUs with the **Gujarat Council on Science & Technology (GUJCOST)** between May and June, 2023 to carry out research work on four different projects funded by GUJCOST at IITGN.

The Institute has agreed to provide administrative, academic, and technical support to the **Vivekananda Institute of Professional Studies-Technical Campus (VIPS-TC)** through an MoU signed on May 25, 2023, to foster cooperation in education and R&D activities between the two institutions.

IITGN has entered into an MoU with the **All India Council for Technical Education (AICTE)** as well on May 26, 2023, to enhance the skills of students through internships and research scholarships. As a part of this collaboration, IITGN will enrol interns from higher education institutes of Jammu, Kashmir and Ladakh and various AICTE accredited institutions under the Prime Minister's Special Scholarship Scheme for internships during their summer and winter breaks.

The Institute has also partnered with the **Education Division of Taipei Economic and Cultural Centre in India (TECC)** on June 1, 2023, for

11TH LEADERSHIP CONCLAVE



The 11th Leadership Conclave (LC), held on Jan 7, 2023, brought together nearly 30 eminent thinkers, industry experts, academicians, and startup mentors from around the world. They shared their expertise to form effectual plans to augment the engagement with IITGN alumni, accelerate startup culture and commercialisation of technologies at the Institute, enhance the Institute's visibility at domestic and global levels, and advance globalisation.

establishment of a Taiwan Education Centre at the Institute and to disseminate knowledge about Mandarin language through courses and seminars.

PARTNERSHIPS WITH GOVERNMENT BODIES AND INDUSTRIES

IITGN has entered into an MoU with the **Indian Council for Cultural Relations (ICCR)** on Jan 7, 2023, to accept international students under the ICCR scholarship programmes.

The **Center for Creative Learning (CCL)**, IITGN has signed an MoU with the **State Council of Educational Research and Training (SCERT), Delhi**, on Mar 13, 2023, to conduct residential capacity-building workshops and supply STEM activity box - 'Khoji boxes' - for around 4,000 teachers of Delhi to promote experiential pedagogy.

The **Centre for Safety Engineering (CSE)**, IITGN has partnered with the **Fire Safe Build India (FSBI)** to collaborate on various projects in the areas of fire protection.

Aludecor, a premium ACP sheet manufacturer in India, teamed up with IITGN's **Fire Engineering Research Laboratory's (FERL)** to conduct detailed research on the fire retardant properties of the aluminium composite panel (ACP).

COLLAB FOR CAPACITY BUILDING



Ingersoll-Rand (India) Limited, a Bangalore-based company; **Agastya International Foundation**, a Bangalore-based Trust; and IITGN joined hands to conduct a week-long 'Training of Trainers (ToT)' programme by **CCL-IITGN** for capacity building of 50 instructors of the Agastya International Foundation in making Mathematics and Science engaging for learners.

AWARD FOR CENTRAL ARCADE

IITGN's **Central Arcade-Student Activity Centre** building bagged the '32nd JK Architect of the Year Award' in the public building category on Mar 4, 2023. The building has been designed by Mitimitra Consultants.

SUPPORT FOR THE INSTITUTE

ASI ARCHAEOLOGY CHAIR

With an aim to boost scientific, multidisciplinary, fact-based approach to advance research in archaeological sciences, the **Ministry of Culture, Government of India (GoI)**, and the **Archaeological Survey of India (ASI)** have established the 'ASI Archaeology Chair' at the Archaeological Sciences Centre, IITGN. The Chair was inaugurated on Feb 10, 2023. Along with promoting research in various aspects of archaeology through collaborative and scholarly activities, the resources under this Chair will also be used to deepen research in multiple facets of the ancient Harappan/Indus/Sindhu-Saraswati Civilisation.

BIS CHAIR

IITGN and the Bureau of Indian Standards (BIS) have joined hands on Feb 16, 2023, for establishing BIS Standardisation Chair to develop collaborative activities for research and development and teaching and training in the field of Standardisation and Conformity Assessment in various areas of engineering, development and management of water resources and renewable energy projects, infrastructure development, medical biotechnology and nanotechnology, and biomaterials. Both entities will also host joint seminars, conferences, workshops, symposia or lectures on topics of common interest for dissemination of knowledge.

CSR DONATION

L&T Technology Services Limited has provided CSR funding to undertake R&D on Smart Farming of Cotton using Aerial Imagery and Computer Vision.

OUTREACH



Prof Rajat Moona, Director, was invited as a Special Guest at the 12th Convocation of Gujarat Technological University, Ahmedabad, on Feb 2, 2023. He was invited to interact with school students at the 30th National Children's Science Congress held on Jan 29, 2023, at Science City, Ahmedabad. Prof Moona was also invited as a Guest Speaker at several events, including in an online seminar on 'Future Engineering Education' by the Society for Engineering Education-India on Apr 29, a virtual seminar on 'Natural Language Processing: An aid for Inclusion' by SVNIT on May 2, and at the SRK Sustainability Conclave in Surat on May 20, 2023.



Prof Sharmita Lahiri, Assistant Professor, Humanities and Social Sciences, was invited as one of the plenary speakers in the conference - 'The Global Indian Diasporas: Literary, Cultural and Socio-Economic Perspectives in the 21st Century' - organised by the Centre for Diaspora Studies, Central University of Gujarat on Feb 23, 2023.

FACULTY NEWS

AWARDS AND RECOGNITIONS

- **Prof Arka Chattopadhyay**, Assistant Professor, Humanities and Social Sciences, has been awarded the '2023-2024 Harry Ransom Center Research Fellowship in the Humanities', for his project titled 'Beckett and Coetzee: Mathematical Modernisms'.
- **Prof Vinod Narayanan**, Associate Professor, Mechanical Engineering, has been awarded the 'Fulbright-Nehru Academic and Professional Excellence Fellowship' for 2023-24.
- **Prof Neeldhara Misra**, Smt. Amba and Sri V S Sastry Chair Associate Professor, Computer Science & Engineering, and **Prof Dhiraj Bhatia**, Assistant Professor, Biological Engineering, have been selected as members of the Indian National Young Academy of Sciences (INYAS) for the year 2023. **Prof Neeldhara Misra** has also been awarded the 'National Academy of Sciences, India (NASI)-Platinum Jubilee Young

Scientist Award - 2022' in the Electronics, Computer Science & Engineering category.

- **Prof Vikrant Jain**, Professor, Earth Sciences, has been elected as a Fellow of the esteemed National Academy of Sciences, India (NASI).
- **Prof Indranath Sengupta**, Professor, Mathematics, has received the prestigious 'INSA Teachers Award' for the year 2022.
- **Prof Sivapriya Kirubakaran**, Kankuben Bakshirambhai Gelot Chair Associate Professor, Chemistry, has been elected as a member of the Council of the Chemical Research Society of India (CRSI) for three years. Professor Kirubakaran has also been nominated as a member of the Royal Society of Chemistry (RSC) in the field of chemical biology as an emerging leader.
- **Prof Naran Pindoriya**, Associate Professor, Electrical Engineering, and his research team has won the India Smart Grid Forum (ISGF) Innovation Platinum Award 2023 in the Smart Technology - Electricity Distribution category for their innovation named "SMART AGENT - a Universal IoT-based Smart Energy Management Device".
- **Prof Jaichander Swaminathan**, Assistant Professor, Mechanical Engineering, and **Prof Uddipta Ghosh**, Assistant Professor, Mechanical Engineering, have been selected as INAE Young Engineer Awardees 2022.

PATENTS GRANTED

- Phosphate Derivatives of Myo-Inositol as Ras Inhibitors: Inventors include **Prof Sivapriya Kirubakaran**, **Prof Vijay Thiruvekatam**, **Javeena Hussain**, and **Gayathri Purushothaman**. The Indian patent number is 428697.
- A Process for Preparing Boron Based Nano-Accordions and Nano-Sheets: Inventors include **Prof Kabeer Jasuja** and **Saroj Kumar Das**. The Indian patent number is 432027.
- A Walking Aid System for a Parkinson's Disease Affected Person: Inventors include **Prof Uttama Lahiri**, **Sai Rama Krishna G**, and **Megh Patel**. The Indian patent number is 432194.
- Substituted 1,2-DIHYDRO-3H-PYRAZOLO[4,3-C]QUINOLIN-3-ONE as ATR KINASE INHIBITORS: Inventors include **Prof Sivapriya Kirubakaran**, **Prof Vijay Thiruvekatam**, **Althaf Shaik**, and **Rashmi Bhakuni**. The Indian patent number is 435171.
- Multi-parameter Patient Monitoring System: Inventors include **Prof Uttama Lahiri**, **Dhaval Solanki**, and **Poojan Oza**. The Indian patent number is 427385.
- Nanocatalyst for Detection of Organophosphorus Herbicides: Inventors include **Prof Bhaskar Datta**, **Sanjay Kuma**, and **Pramila Sharma**. The Indian patent number is 418926.

PATENTS FILED

- Apparatus to form a Reinforced Concrete Structure and a Method Thereof: Inventors include **Prof Manish Kumar**, **Prof Venkata Madhukanth Vadali**, and **Chaman Modi**.
- Catalyst Composition and a Process of its Preparation: Inventors include **Prof Sudhanshu Sharma**, **Chandrashekhar Tiwari**, and **Bhanu Pratap Singh Gangwar**.
- Surfactant-based Nanocomposite Emulsion and a Process for its Preparation: Inventors include **Prof Mukesh Dhanka** and **Hemant Singh**.
- A Wearable Single Sensor-based Gait Behavior Characterization Device: Inventors include **Prof Vineet Vashista** and **Yogesh Singh**.
- A Device for Facilitating Collaborative Interface between Humans and Robots: Inventors include **Prof Vineet Vashista** and **Pratik Prajapati**.
- A Hydrogel Composition and a Process of Preparation Thereof: Inventors include **Prof Mukesh Dhanka**, **Mohammad Muzammil Yusufbhai Kuddushi**, and **Hitasha Vithalani**.
- A Process for Thermochromic Coating: Inventors include **Prof Emila Panda** and **Mayank Dotiyal**.

SPONSORED AND CONSULTANCY PROJECTS

Please follow these links to see the list of sponsored and consultancy projects: https://iitgn.ac.in/newsletter/projects/q1_2023 and https://iitgn.ac.in/newsletter/projects/q2_2023.

NEW FACULTY

Name	Designation	Discipline	PhD/Last Degree	Date of Joining
Dr Naveen Sisodia	Assistant Professor	Physics	IIT Delhi	01/06/2023
Dr Yogesh Kumar Meena	Assistant Professor	Computer Science and Engineering	Ulster University, UK	15/02/2023
Dr Shouvik Mondal	Assistant Professor	Computer Science and Engineering	IIT Madras	01/02/2023
Dr Mukul Chandorkar	Visiting Professor	Electrical Engineering	University of Wisconsin-Madison, USA	01/02/2023
Dr K Chelvakumar	Visiting Professor	Mechanical Engineering	California Institute of Technology, USA	24/01/2023
Prof Peter Isackson	Visiting Professor	Humanities and Social Sciences	Oxford University	06/01/2023

SCHOLAR-IN-RESIDENCE

Name	Discipline	Affiliation	Date of Joining
Dr Maria Amante	Humanities and Social Sciences	Portuguese Parliament Library, Portugal	11/04/2023
Dr Edgard Gnansounou	Electrical Engineering	Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland	23/03/2023
Dr R Sharan	Humanities and Social Sciences	LNMIIT, Jaipur	09/03/2023
Dr Lestuzzi Pierino	Civil Engineering	EPFL-ENAC-IIC-IMAC, Switzerland	06/02/2023
Dr Jean-Philippe Ansermet	Physics	Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland	04/02/2023
Dr Erika Hoffmann-Dilloway	Humanities and Social Sciences	Oberlin College, USA	31/01/2023
Prof Brian Brophy	Humanities and Social Sciences	California Institute of Technology, USA	09/01/2023
Dr Raghavasimhan Thirunarayanan	Humanities and Social Sciences	IIT Gandhinagar and 3db Access AG, Switzerland	06/01/2023

ARTIST-IN-RESIDENCE

Name	Discipline	Last Degree	Date of Joining
Ms Cynthia Campoy Brophy	Humanities and Social Sciences	Harvard Graduate School of Education	09/01/2023

ACTIVITIES AT IITGN

INVENTION FACTORY INDIA 2023



IITGN hosted the fourth edition of the Invention Factory India, a one-of-its-kind intensive summer programme in inventing, from May 29 to July 14, 2023. This year's edition hosted 20 students from 16 IITs and four NITs, who worked in teams of two for six-weeks to conceive, prototype, and pitch ten unique inventions to address various societal and consumer needs. Each team has also filed Indian provisional patent applications for their inventions, which will be followed by filing of provisional patent applications in the USA. The teams were directly mentored by **IITGN Profs Madhu Vadali, Tanya Srivastava, and Tarun Agarwal.**

IITGN-DAKSHANA LEADERSHIP PROGRAMME

The Institute conducted the second edition of the IITGN-Dakshana Leadership Programme for about 70 IIT and engineering aspirant students from rural and humble backgrounds from 16 Indian states, during June 7-30, 2023. The programme was supported by **Mr**

Ruiyantn (Ron) Mehta and **Maker Bhavan Foundation** and also brought together teams from Foundation for Excellence, Dakshana Foundation, and Competitive Mindset Institute to train the students in leadership, critical thinking, and communication skills to help them reach their full potential. The programme was coordinated by **Prof Jaison Manjaly.**

G20-IGNITE FAIR



IITGN organised 'G20-Ignite', a uniquely designed Science & Technology Fair, for school students of classes 10 to 12, on Apr 15, 2023. Hundreds of school students visited and participated in the fair with their parents, teachers, and guardians to engage with Science, Technology, Engineering, and Mathematics (STEM), and experience IITGN's unique research projects. The day-long Fair was packed with a plethora of exciting activities, hands-on training modules, interactive showcases and exhibitions, and immersive workshops and competitions.

CHEMISTRY CAMP 2023

IITGN, together with the Royal Society of Chemistry (RSC), India, conducted a three-day residential Yusuf Hamied Chemistry Camp

(YHCC) for more than 80 students of class 9 from different districts of Gujarat during Mar 29-31, 2023. The Camp aimed to infuse fun in learning practical chemistry and inspire them to pursue chemistry at university level and beyond. The programme was coordinated by **Prof Sivapriya Kirubakaran.**

SCIENCE DAY 2023



IITGN, with support from the Royal Society of Chemistry, celebrated 'National Science Day' on the campus on Feb 28, 2023, by organising an 'Open Day' with several exciting and hands-on activities and scientific demonstrations for school and college students. Around 1000 school students and 200 college students from Ahmedabad, Gandhinagar, and nearby districts visited the IITGN campus to explore, experience, and enjoy Science and its wonders. The event was organised by **Profs Sivapriya Kirubakaran and Sriram Kanvah.**

CAMP ART AND LEARNING

IITGN's Curiosity Lab and Social Action and Policy Lab, in collaboration with UNICEF, hosted 'Camp Art & Learning', an online camp for school students of classes 6 to 12,

besides teachers, parents, and scholars of education, from Feb 3 to 5, 2023. The event, through its fascinating sessions by some highly-regarded professionals from India and abroad, emphasised the importance of integrating art within the curriculum for the overall development of students. The event was coordinated by **Prof Jaison Manjaly**.

JEE OPEN HOUSE 2023

IITGN hosted a virtual JEE Open House for IIT aspirant students and their parents on June 21, 2023, to address their curiosity and doubts through direct interaction with faculty, students, and alums of IITGN. The live event had interactive sessions with the Director, Dean of Academic Affairs, Dean of Student Affairs, Head of Counselling Services, Head of Career Development Services, and IITGN students and alumni. A large number of participants from all over the country attended the sessions. On June 25, 2023, the Institute also hosted an exclusive online JEE Open House session on BTech in Artificial Intelligence and BTech in Computer Science and Engineering programmes at IITGN.

VVS LAXMAN MET



IITGN STUDENTS

On May 31, 2023, former Indian cricketer and National Cricket Academy (NCA) Director VVS Laxman met and interacted with IITGN's recipient students of scholarships set up by him, and motivated them to work hard and focus on goals. The students who met the cricket legend are from humble backgrounds and are recipients of the 'Satyaram Scholarships' at IITGN and 'Yuva Scholarships' through the NGO **Yuva Unstoppable**.

YUVA SANGAM



As a nodal Institute in Gujarat for 'Yuva Sangam', a student exchange programme under the 'Ek Bharat Shreshtha Bharat' initiative of the Ministry of Education, GoI, IITGN had the pleasure of hosting and facilitating exposure visits for two cohorts of students and off-campus youngsters from Assam. In the first phase, a

total of 18 students and off-campus youngsters from Assam visited Gujarat between Feb 24 and Mar 2, 2023, and 53 students and off-campus youngsters from Gujarat visited Assam to get an immersive experience of various facets of art, culture, life, and landmarks and to connect with the youth in these states. In the second edition of the programme, which ran from Mar 29 to Apr 3, 2023, 29 students and off-campus youngsters from Assam visited different places in Gujarat, including the famous Madhavpur Ghed Fair in the Porbandar district.

NATIONAL CONFERENCE BY IITGN AND RGU

IITGN and Rajiv Gandhi University (RGU), Arunachal Pradesh joined hands to organise a national conference on 'Tribes, State and the Environment: Contemporary Research in India's North East' at the RGU campus in Itanagar, during Mar 6-7, 2023. Participants from across the world attended the conference. The event was co-organised by **Prof Ambika Aiyadurai** from IITGN and **Prof Sarit K Chaudhuri** from RGU.

YOUNG SCHOLARS' CONFERENCE ON HOMI

As part of the History of Mathematics in India (HoMI) project, IITGN organised the second virtual 'Young Scholars' Conference on the History of Mathematics', focusing on India, on Jan 21, 2023. A total of seven young experts in the field shared their insights and research during the conference. The workshop was coordinated by **Prof Michel Danino**.

SMART MANUFACTURING RESEARCH CONCLAVE

IITGN, together with NASSCOM CoE-IoT, hosted 'Smart Manufacturing Research Conclave' on Apr 27-28, 2023. The two-day conclave on the latest trends in smart manufacturing brought together the brightest minds in academia, research, and industry to discuss, explore, and develop strategies for the successful implementation of Industry 4.0 technologies in the manufacturing sector. The event was coordinated by **Prof Madhu Vadali**.

IGRIP CONCLAVE 2023

IITGN organised a two-day 'Initiative for Geotechnical Research and Innovative Practices' (iGrip) Conclave with a focus on the Bureau of Indian Standards (BIS) Code of Practice on Geosynthetic Reinforced Soil Structure during Mar 3-4, 2023. The event covered a wide spectrum of topics around the theme with attention to current research in geotechnical engineering. The Conclave was coordinated by **Prof Ajanta Sachan**.

REGIONAL KNOWLEDGE FORUM WITH IWMI

The International Water Management Institute (IWMI), in collaboration with KPCSD, IITGN and other partner organisations, hosted a

Regional Knowledge Forum on the campus on 'Energising Agriculture and Enabling Just Energy Transitions in South Asia' during Feb 6-8, 2023. A total of 170 participants from 16 countries, including regional researchers, policymakers, and practitioners in the renewable energy sector, attended the forum sessions in five thematic areas.

INTERNATIONAL COLLOQUIUM ON HARAPPAN CIVILISATION



IITGN and the Ministry of Culture, GoI, in collaboration with the Indira Gandhi National Centre for the Arts, New Delhi, hosted a three-day International Colloquium on 'Emerging Perspectives of Harappan Civilisation' from Feb 10 to 12, 2023, focusing on the genesis, material culture, climatic scenario, and theoretical perspectives of the proto-historic era. The colloquium brought together more than 65 scientists and research scholars from India and abroad. The event was coordinated by **Profs Michel Danino, V N Prabhakar, and Sharada CV**.

CAN 2022-23

Dr Kiran C Patel Centre for Sustainable Development (KPCSD), IITGN, in collaboration with Gujarat Ecological Education and Research (GEER) Foundation, Gandhinagar, organised Segments II and III of Climate Action Now (CAN), a workshop series on Climate Change, during Jan 2023. The second segment of the workshop series was held from Jan 16 to 20, 2023, with a focus on "Climate Action and the Role of Industries" and the third segment was held between Jan 27 and 31, 2023, on "Climate Change-Centric Research and Development".

SYMPOSIUM ON NANOMAGNETISM AND SPINTRONICS

The Institute hosted a one-day Symposium on 'Frontier Problems in Nanomagnetism and Spintronics' on Feb 9, 2023, to bolster research activities and collaborations at the national and international levels in the field. Experts from India and abroad were present in the day-long conclave and introduced the participants to cutting-edge research problems in the areas of nanomagnetism and spintronics. The workshop was coordinated by **Prof Rupak Banerjee**.

15TH YOUNG INVESTIGATORS' MEETING

The 15th Young Investigators' Meeting (YIM)

was jointly hosted by IITGN, Ahmedabad University, and IndiaBioscience, during Feb 13-17, 2023. The event brought together nearly eighty young researchers and postdoctoral fellows, in addition to several mentors, science professionals, national and international funding agencies, and institutional representatives to talk and discuss about science careers, mentoring and networking. The event at IITGN was coordinated by **Prof Dhiraj Bhatia**.

WORKSHOP ON MENTAL WELLNESS

As a designated nodal agency by the Ministry of Education, Government of India, IITGN conducted a two-day workshop on 'Mental Wellness and Stress Management' for all the institutions/universities in the western region on June 9-10, 2023. Faculty, staff, and students from across disciplines from several institutions participated in the workshop. The event was coordinated by **Prof Bhaskar Datta**.

1ST ALL IITS DEAN OF STUDENTS CONCLAVE



IITGN hosted the Deans of Student Affairs from various IITs across India to participate in the first-ever 'All IITs Dean of Students Conclave' on Mar 10-11, 2023. The conclave members brainstormed on various challenges and new initiatives of their Institutes for making students' lives better in IITs. The event was coordinated by **Prof Sivapriya Kirubakaran**.

1ST ALL IITS TRAINING & PLACEMENT OFFICERS MEET

The **Career Development Services** of IITGN successfully organised the first 'All IITs Training & Placement Officers Meet' on Feb 25, 2023, with participation from various IITs. The participants discussed various agendas, such as best practices, skill development, industry-academia collaboration, policies, and enhancing career opportunities, among others.

BOOK RELEASE- 'ECOLOGICAL ENTANGLEMENTS'

Ahead of World Earth Day, IITGN released a book 'Ecological Entanglements: Affect, Embodiment and Ethics of Care' on Apr 13, 2023. The book, edited by **Profs Ambika Aiyadurai, Arka Chattopadhyay, and Nishaant Choksi**, faculty members of Humanities and Social Sciences at IITGN, was released by **Prof Rajat Moona**, Director, IITGN. Published by Orient BlackSwan, the book calls for new ways to apprehend the ecological crisis by formulating



a framework that integrates social, material, and cultural dimensions of ecology.

ACTIVITIES BY CCL

CCL, IITGN conducted a plethora of workshops and activities for internal and external audiences, including; five-day online experiential pedagogy workshop sessions for 5000+ primary teachers in collaboration with SCERT, Government of Bihar; hands-on workshop sessions on experiential learning in the Faculty Development Programme by the University of Goa; three-day workshop for 300 middle and secondary school teachers at Raipur and Durg; workshop for master trainers and KGBV teachers of UP; e-workshops for 900+ KGBV teachers in 13 batches; and STEM sessions at various institutes; among others. Two exhibits of CCL, IITGN – a Geodesic dome made out of bamboo and Sine/Triangular wave cars – were shortlisted to be showcased in the Art Gallery area of the prestigious Joint Mathematical Meetings 2023 held in Boston, USA, during Jan 4-7, 2023.

NYASA AND NEEV'S SUMMER ACTIVITIES

Spreading light in the lives of hundreds of disadvantaged children, women, and youth, Nyasa and NEEV, the two social outreach programmes of IITGN conducted some of the most wonderful and useful summer activities to help them find their hidden potential. Nyasa successfully concluded a 10-day summer camp for more than 100 children from neighbouring villages and construction workers' colonies of IITGN from May 25 to June 3, 2023. NEEV, in association with **Desai Foundation Trust**, once again successfully organised six Skill Development Summer Courses from April to June 2023 for 257 rural women and youth.

SANJEEVANI HEALTH MELA 2023

Nyasa, IITGN, with support from the Desai Foundation, successfully organised the seventh edition of the 'Sanjeevani Health Mela' – an annual health camp - in the adjacent Basan and Palaj villages, on Jan 29 and Feb 7, 2023, respectively. About 670 villagers benefitted through a dedicated team of specialist doctors present at the camps.

TRAININGS BY NEEV

NEEV IITGN, in association with the Desai Foundation, organised a number of training programmes and seminars, including Skill Development Courses in stitching, beautician, data-entry and typing, and training of trainers

in stitching during Jan-Mar 2023. Cumulatively, these courses benefited more than 100 youth and women from IITGN's nearby villages and from the South Gujarat region.

ACTIVITIES BY ART@IITGN

The **ART@IITGN** initiative conducted several artful activities during Jan-June 2023. It hosted two events with artists of the IITGN community. 'Movements', an evening of Indian Classical dance performances was held on Apr 22, 2023. **Tanisha Bhadury, Debasmita Ghosh, Dr Ramya Srinivasan, and Dyuti Pandya** presented performances in Manipuri, Odissi, Bharatanatyam, and Kathak, respectively. 'Swar Sangam', an evening of instrumental performances was organised on May 13, 2023. The artists of the evening included **Shri Mithun Radhakrishna** on Electric Mandolin, **Shri Soumyabrata Chakrabarty** on Violin, **Shri Ananth Menon** on Mridangam, **Shri Harvansh Dandelia** on Electric Bass, and **Shri Hemant Joshi** on Tabla. The initiative also organised 'Exhibition on Art and Uncomfortable Ideas' during Jan 7-15; a 'Comics Conclave' and an 'Exhibition of Low Art', with curated images from the original sketchbook of the legendary Satyajit Ray on Jan 21-22; a month-long 'Theatre and Performing Arts Festival' (TaPAF) on the campus during Feb 2023, among other events.

SIMPLY SPEAKING

The **Leadership Development Initiative (LDI)**, IITGN hosted the second edition of its flagship event, "Simply Speaking" on Apr 16, 2023. The grand finale saw participation from a total of 25 students from different disciplines, who showcased their skills in simplifying their research work for laymen and presented it in a "3 minute-3 slide" format.

CELEBRATION OF SPECIAL DAYS

IITGN students, staff, and residents celebrated the **132nd birth anniversary of Dr Babasaheb Ambedkar** on Apr 13 and 14, 2023. The two-day programme consisted of various activities and performances highlighting the life and legacy of the great leader. The Green Club at IITGN marked **World Earth Day** by organising several events and initiatives in the campus and nearby villages on Apr 21-22, 2023, including a rally in primary schools, awareness sessions, tree plantation and plogging drives on the campus, and a poster-making competition for children. The Institute community also celebrated the **World Environment Day**, June 5, 2023, and planted about 350 trees on the campus with great enthusiasm. IITGN observed **World Blood Donor Day** on June 14, 2023, by organising a blood donation camp on the campus. The ninth **International Yoga Day** was celebrated on June 21, 2023, with a range of activities to promote the practice of yoga for its numerous benefits. The Physical Education Section of the Institute also organised a 30-Day Countdown to the 9th International Day of Yoga from May 23 with a series of yoga sessions and challenges.

REPUBLIC DAY 2023

IITGN celebrated the 74th Republic Day with patriotic fervour and an expression of gratitude towards members of its community. The Institute presented Faculty Excellence Awards, and Campus Development and Excellence Awards to various non-teaching staff members for their invaluable services throughout the past year. The extraordinary performers of Inter-IIT Sports Meets were presented with Awards for Achievement in Sports. Winners of the Undergraduate and Postgraduate Research Showcase and students on the Dean's list for excellent academic performance in Semester-I of 2022-23 were also felicitated during the event. On this occasion, **Prof Rajat Moona** also released a booklet - 'IIT Gandhinagar in News' - that presents a glimpse of the news coverage about the Institute, its programmes, initiatives, research, and achievements in various local, national, and international news media during the year 2022. The day also witnessed a grand 'Bada Khana' (a feast) for nearly 3500 people,

where all stakeholders involved in the campus development and management came together for a meal as one large family. The Faculty Excellence Awards were received by **Prof Joyce Meki** for Excellence in Teaching, **Prof Atul Dixit** for Excellence in Research, **Prof Sivapriya Kirubakaran** for Excellence in Institution Building, and **Prof Gaurav Srivastava** for Excellence in Outreach Activities. Following staff members received the Staff Excellence Awards: **Mr B V Puvar**, **Mr Laxmi Kant Mishra**, **Dr Dinesh Parmar**, **Ms Timir Y Berawala**, **Mr Gabhaji Shanaji Solanki**, and **Ms Vasantiben Vora**. Recipients of the Campus Development Awards include **Mr Kaushik Patel**, **Mr Dipak Lalpura**, **Mr Dalpatsinh Solanki**, **Mr Pawan Kumar**, **Ms Falgunibahen Solanki**, **Mr Sumitabh Tiwari**, and **Mr Yashwant Chouhan**.



Mr Puvar



Mr Mishra



Dr Parmar



Ms Berawala



Mr Solanki



Ms Vora



Mr Patel



Mr Lalpura



Mr Solanki



Mr Kumar



Prof Meki



Prof Dixit



Prof Sivapriya



Prof Gaurav



Ms Solanki



Mr Tiwari



Mr Chouhan

CONNECTIONS 2023

The third edition of the industry conclave, Connections, was held at IITGN's Research Park on Feb 24, 2023, with nearly 80 participants from about 45 companies from different industry sectors. The event was aimed at bridging the gap

between the Institute and various industries.

START-UP'S ACHIEVEMENT

Galanto Innovations, a start-up founded by **Dr Chandan Kumar Jha**, a PhD alumnus of Electrical Engineering, and incubated at IITGN

under the Nidhi Prayas programme, was among the top 7 startups that received a grant of Rs 10 lakhs in the Boeing India's 'Boeing's University Innovation Leadership Development' (BUILD) programme.

WORKSHOPS

- Enhance your Research with Scopus & Mendeley by **Dr Shubhra Dutta**, Solutions Consultant, Elsevier, Apr 11, 2023.
- Testing Aspects of General Relativity-II, co-organised by **Prof Arpan Bhattacharyya**, IITGN together with IIIT Allahabad and the University of Lethbridge, Canada (ULeth), Apr 11-13, 2023.
- Web of Science & EndNote: Taking your research to a next level by **Vishav Sharma**, Senior Customer Success Manager, Scientific Research Division, Clarivate Analytics, Apr 17, 2023.
- Indo-UK workshop on Photonics for Health, Atmosphere, Safety and Education (PHASE) 2023, coordinated by **Profs Arup Lal Chakraborty, Himanshu Shekhar**, and **Saumyakanti Khatua**, Mar 30-31, 2023.

- Heavy Hadrons in Heavy-Ion to Particle Collisions, coordinated by **Prof Rusa Mandal** and **Prof Vinod Chandra**, Mar 24-25, 2023.
- Single Crystal X-Ray Crystallography, coordinated by **Prof Vijay Thiruvakatam**, Mar 15-21, 2023.
- Effective Scientific Research Communication, facilitated by **Prof Himanshu Shekhar** and **Prof Karla Mercado-Shekhar**, Mar 14, 2023.
- Analysis and Design of Seismically Isolated Structures, coordinated by **Prof Manish Kumar**, Feb 27-28, 2023.
- Writing R&D Grants for Women Engineers, jointly organised by IITGN, the Indian National Academy of Engineering (INAE) and Science and Engineering Research Board (SERB), coordinated by **Prof Atul Bhargav**, Feb 23-24, 2023.

- 'CAS SciFinder-n' for Scientific Research by **Mr Milind Wagh**, Principal Account Manager - Scientific Solutions, ACS India, Feb 17, 2023.
- 24th INDO-US Flow Cytometry Workshops 2023, organised by the Trust for Education and Training in Cytometry (TETC); hosted by IITGN, in collaboration with Gujarat Biotechnology Research Centre, NIPER Ahmedabad, and Kamdhenu University Gandhinagar; and coordinated by **Prof Sharad Gupta**, Feb 1-4, 2023.
- Understanding the Linkage: From Seismic Hazard to Ground Motion Characterization for Seismic Design, coordinated by **Prof Dhiman Basu**, Jan 20-21, 2023.
- Energy Efficiency and Conservation in MSMEs, coordinated by **Prof Naran Pindoriya**, Jan 12, 2023.

- Microbubbles for Drug Delivery and Ultrasonic Imaging by **Profs Sameer V Dalvi**, Smt Meera and Prof Girish K Sharma Chair Professor, Chemical Engineering, **Himanshu Shekhar**, Assistant Professor, Electrical Engineering, **Karla Mercado-Shekhar**, Assistant Professor, Biological Engineering, IITGN, and **Prof Mark Borden** from the University of Colorado at Boulder, USA, Jan 12-13, 2023.

LECTURES AND SHORT COURSES

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



STUDENTS AND STAFF

AWARDS AND RECOGNITIONS

- Rashi Kumar**, an MSc student in Cognitive Science, has been selected as an Advance Alzheimer's Research and Treatment (ISTAART) Ambassador for 2023-2024.
- Ahana Ghosh** and **Shruti Singh**, PhD scholars in Humanities and Social Sciences and Computer Science and Engineering, respectively, have won the coveted Fulbright-Nehru Doctoral Research Fellowship 2023-24.
- Five IITGN PhD scholars from different disciplines have bagged the coveted Prime Minister's Research Fellowship in the December 2022 cycle. These recipients include: **Hiren Solanki**, Earth Sciences; **K**

K Gayatri Priyadarsini, Computer Science and Engineering; **Saptaswa Ghosh**, Physics; **Shouharda Ghosh**, Electrical Engineering; and **Shreyas A Shenoy**, Chemical Engineering.

- Safya Nasir**, a PhD student, has been awarded the Khorana Program for Scholars.
- Ashish Tiwari**, PhD scholar in Electrical Engineering, and his faculty advisor **Prof Shanmuganathan Raman**, Jibaben Patel Chair Associate Professor, Electrical Engineering jointly with Computer Science & Engineering, have been awarded the Qualcomm Innovation Fellowship (QIF) for 2023-24.
- Dr Poulami Nandi**, a Postdoctoral Fellow in Physics, has won the Fulbright-Nehru Postdoctoral Research Fellowship 2023-24.

- Dr Sonam**, a Research Associate in Earth Sciences, has been awarded the Fulbright-Kalam Climate Fellowship for Postdoctoral Research.
- Team Vinteo**, a film making club of IITGN, bagged a Bronze medal in the online Short Film Making Competition at the 5th Inter IIT Cultural Meet held at IIT Madras.
- The IITGN contingent bagged three medals in the following categories at the Inter IIT Tech Meet 2023 held at IIT Kanpur: Bronze medal in Drona Aviation High Prep Challenge, Silver medal in IGDC Game Dev Low Prep Challenge, and Bronze medal in Cognitive Garage Low Prep Challenge.
- Team Odyssey**, IITGN demonstrated outstanding performances in 'ASTRAX' - the annual Astro Meet of IIT Mandi, during

March 3-5. The team made a clean sweep by bagging all three – winner, first runners-up, and second runners-up trophies and a special mention in an event called 'Messier Marathon'. In another event called "SkyQuest", the team clinched the second and third spots on the winners' podium.

UDAAN 2023

IITGN hosted its signature farewell event for the graduating students of the Class of 2023 on Apr 21, 2023. The heartwarming evening was filled with fond memories and heartfelt messages to bid a special goodbye to the outgoing students.

COOKING FOR MESS STAFF



As a gesture of gratitude towards the mess staff who feed the Institute community everyday, the Student Affairs office of IITGN took an initiative to cook and serve a meal to nearly a hundred mess workers of the three dining facilities at IITGN on Apr 23, 2023. The team included nearly ten students and 20 staff and faculty members, including Prof Rajat Moona, Director, IITGN, his wife Mrs Rajni Moona, and Prof Sivapriya Kirubakaran, Dean, Student Affairs.

PG/PHD RESEARCH SHOWCASE



The Institute organised a postgraduate Research Showcase for MA, MSc and MTech students on Jan 11, 2023, and PhD Research Showcase for PhD scholars during Jan 23-25 and 27, 2023. The event served as a forum to showcase and communicate their eclectic research work in various interdisciplinary fields to a larger and more diverse audience, and thus, facilitated unique discussions and novel perspectives on their research.

HACKRUSH 2023

IITGN's Student Academic Council and Team HackRush organised the sixth edition of HackRush 2023, a 36-hour annual hackathon, during Apr 14-16, 2023. The event witnessed an overwhelming participation of 90 teams (nearly 300 participants), each working on statements focussing on long-term software/game

development and short-term competitions from diverse domains including Cyber Security, ML Challenge, Algorithm Optimisation, Quantitative Finance, and Competitive Programming.

AMALTHEA 2022



The 12th edition of Amalthea, the entirely student-run annual technical summit of IITGN, was organised on Jan 21-22, 2023. This year's theme - 'Initiate Innovate Inspire' – encouraged young minds to ponder upon current issues and seek innovative and feasible solutions. While tech events like Drone Racing, Roboquest, D'Code, and Icon enthralled the students on one side, the Symposium and Conclave helped them delve deep into the future of technology with insights from industry stalwarts.

BLITHCHRON 2023

After a prolonged hiatus of two years, the 10th edition of 'Blithchron', the annual cultural festival of IITGN, made a triumphant offline return on Feb 18-19, 2023. This year's festival showcased all of its signature events along with several exciting new additions. The two-day cultural extravaganza concluded with grand performances by DJ Ravator and Sabali - The Band and registered participation by students from institutions across the country.

TEDxIITGANDHINAGAR 2023

IITGN successfully concluded the highly-anticipated TEDxIITGandhinagar on Feb 26, 2023. Focused on the theme 'Behind the Scenes', the event offered a unique opportunity to discover the hidden stories of invited speakers from different backgrounds, including **Amitabha Singh**, Cinematographer, National Award Winning Filmmaker, Founder of Cinevidya, and an educator; **Reema Nanavaty**, Director of Self-Employed Women's Association (SEWA) and a Padma Shri awardee; **Anurag Chauhan**, Founder of Humans For Humanity, social activist and recipient of several awards; and **Akshay Singhal**, Founder of Log9 and a Forbes under 30 Asia awardee.

SPORTS

AWARDS AND RECOGNITIONS

- IITGN students **Gaurav Rawat** and **Varad Sardeshpande** won gold and silver medals, respectively at the inter-college badminton tournament, in Singles Category, hosted by NIFT Gandhinagar.
- Sumit Yadav**, a preparatory course student,

won a gold medal in the long jump at the 7th UP State Para Athletics Championship-2023 and also bagged two silver medals in the long jump and javelin throw games in the U-19 Boys' category at the 12th National Junior & Sub Junior Para Athletics Championship 2023. He has also qualified for the national para athletics championships.

- The **girls' basketball team** clinched a silver medal in Justice League held by Gujarat National Law University.
- The **staff cricket team** secured a silver medal in the Dr Vikram Sarabhai Space Cricket tournament.
- The **staff football team** won the fair play trophy in the ONGC Cup Invitation Football Tournament 2022-23.

IITGN SQUASH OPEN

IITGN hosted the second edition of IITGN Squash Open from May 4-7, 2023, in collaboration with Squash Rackets Federation of India (SRFI), All Gujarat Squash Racquet Association, and Pine Labs. Nearly 280 participants from 19 states participated in this national circuit tournament.

IM NUBAIRSHAH SHAIKH AT IITGN

IM Nubairshah Shaikh, an acclaimed chess player, visited IITGN on May 29, 2023, and interacted with students and chess players of the Institute. In his honour, the Chess Club organised a Simultaneous Exhibition event in which 15 chess players challenged him.

FIRST WATER POLO TOURNAMENT

IITGN organised the first water polo tournament during May 27-28, 2023. The tournament saw enthusiastic participation from students as well as staff.

HALLABOL 2023



The 11th edition of Hallabol, the annual sports festival of IITGN, brought the Institute community together to compete in 11 thrilling games, including futsal, gully cricket, seven stones, tug of war, frisbee, dodgeball, foot-volley, kho-kho etc. that spanned 11 nights from Feb 11-26, 2023.

INTRA-COLLEGE SPORTS LEAGUE 2023

The Physical Education Section organised several tournaments under the Intra-college Sports League, including the League of Football Players, Cricket Combat League, Badminton Super League, Srija Memorial Volleyball League, Athe League, Table Tennis League, Basketball League, and Kautilya Chess League.