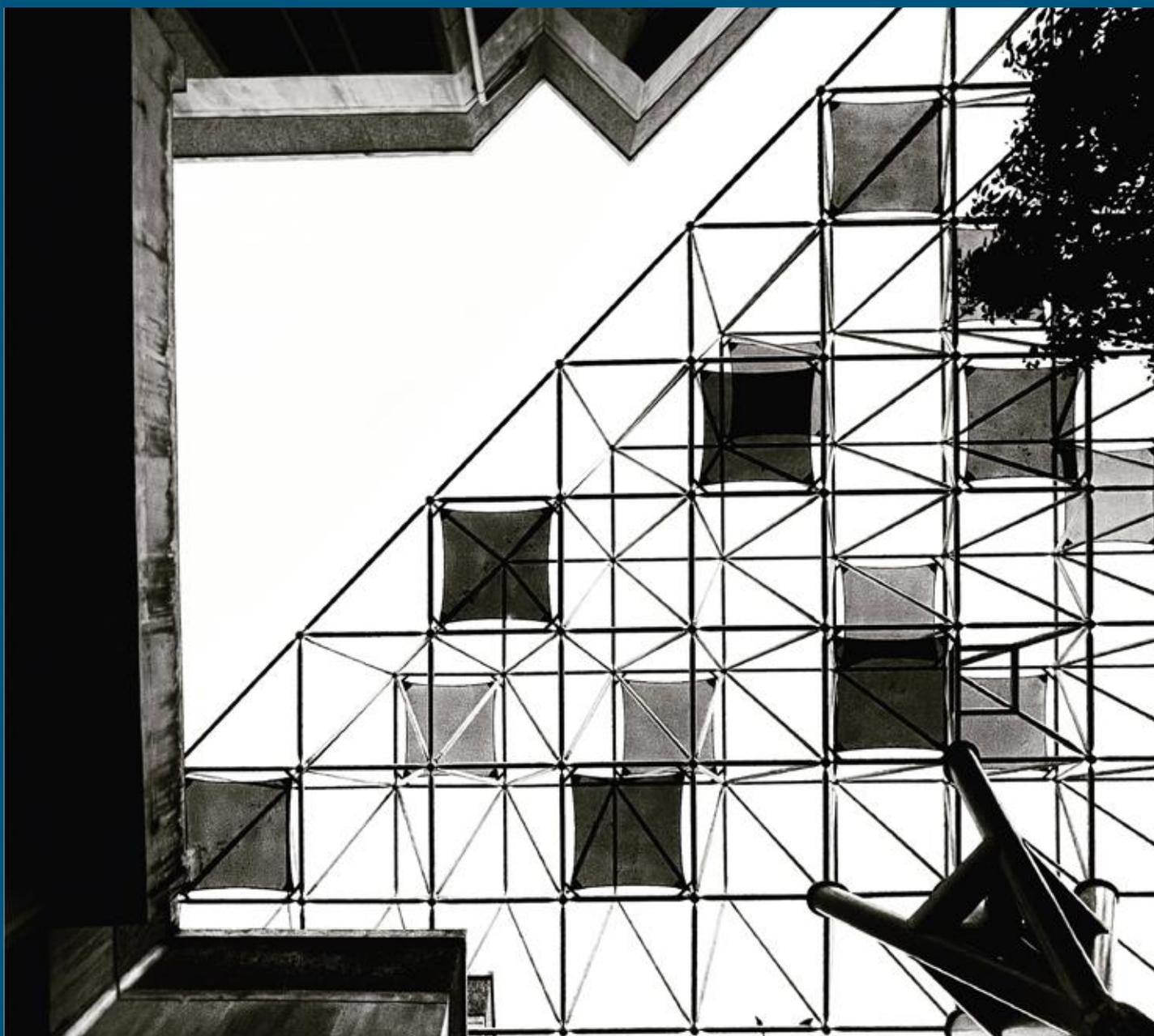


IITGN

ANNUAL REPORT 2020 - 21



INDIAN INSTITUTE OF TECHNOLOGY GANDHINAGAR
PALAJ, GANDHINAGAR 382 055



ANNUAL REPORT 2020 - 21



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Vision Mission and Values

CORE FEATURES

- A safe and peaceful environment
- Relevant and responsive to the changing needs of our students and the society
- Academic autonomy and flexibility
- Research Ambiance
- Nature of faculty and students:
 - Faculty recruiting norms are much higher than most of the academic institutes in India
 - Students are inducted strictly on a merit basis
- Sustainable and all-inclusive growth, including community outreach programmes
- Infrastructure: Liberal funding to the laboratory facilities and amenities to make them comparable to those best in the world
- Administration: Exclusive concern of IIT Gandhinagar, and handled internally
 - Director given adequate powers to manage most academic, administrative and financial issues (within the framework)
- Residential Campus:
 - Leads to closer academic and social interaction between students and faculty
 - Develops stronger community spirit and provides opportunity to learn from each other
 - Sustained academic ambiance resulting in higher creativity from everyone.

PRINCIPLES

- Lifelong commitment to learning
- Encouragement of merit
- Passion and motivation for work
- Professionalism
- Respect for law
- Concern for the improvement of the society
- Transparency in functioning of the Institute
- Dedication to the Institute

VALUES

- Meritocracy
- Unparalleled quality and excellence
- Honesty, Integrity, Sincerity and Devotion
- Trust and freedom with accountability
- Appreciation and celebration of creativity
- Willingness to try new ideas and make mistakes
- Social and moral responsibility
- Respect for every individual, and diversity
- Co-operation, Collaboration and Teamwork

GOALS

- To build and develop a world-class institution for creating and imparting knowledge at the undergraduate, post graduate and doctoral levels, contributing to the development of the nation and the humanity at large.
- To develop leaders with vision, creative thinking, social awareness and respect for our values.
- To foster excellence in teaching and research to make a global impact.
- To engage in path-breaking research that would influence national policies.
- To pursue sustainable technological solutions to societal problems.
- To focus on lean engineering solutions for sustainable development.
- To be the leader for academic and industrial collaborations in various disciplines, nationally and internationally.
- To create awareness of the true significance of learning and teaching.
- To enrich local schools and communities through value-added interactions.
- To encourage excellent language skills as part of the institutional culture.
- To prepare students not just for their first job, but their last job as well.

MISSION

IIT Gandhinagar, as an institution for higher learning in science, technology and related fields, aspires to develop top-notch scientists, engineers, leaders and entrepreneurs to meet the needs of the society-now and in the future. Furthermore, in this land of Gandhiji, with his spirit of high work ethic and service to the society, IIT Gandhinagar seeks to undertake ground breaking research, and develop breakthrough products that will improve everyday lives of our communities.

VISION

- To shape IIT Gandhinagar into an exciting place for learning, teaching and research.
- To establish a process of learning that is free, fulfilling and enjoyable experience.
- To provide an enabling environment to nurture critical and creative minds, and to propel them to greater heights of excellence in their pursuits.
- To create a vibrant atmosphere that breeds front runner innovators, scientists, engineers, entrepreneurs, academicians and thinkers of tomorrow.
- To provide opportunity for students to learn from wherever, however and whatever they choose to study.
- To make IIT Gandhinagar the preferred destination for future generations of students, staff and faculty.





From the Director's Desk

Much as it upended life globally, the ongoing pandemic has defined and shaped many institutional developments during this year. Our community has risen to the occasion and displayed inspiring leadership, empathy and engagement. From ensuring that students always had a choice of staying on campus for as long as they needed, to developing our own facilities for taking care of more than 240 COVID patients on campus during the peak of the second wave, we have emerged stronger from these challenging times. We describe our response to the extraordinary circumstances brought about by the pandemic in a separate section of the annual report.

We were the first IIT to hold a virtual Annual Convocation on August 23, 2020. Notably, the number of PhDs awarded at this year's Convocation (55) more than doubled from last year (27), signaling the rising development of our research ecosystem.

The first term for the new batch of BTech students started only on Nov 12 due to the delayed JEE Advanced test. We knew that this batch had already faced extraordinary circumstances with a great deal of uncertainty. To minimize the extent to which they would feel the impact of a delayed start, we shortened the first semester to half the duration with half the coursework. This allowed the batch to be "back in sync" with the regular academic calendar within just a couple of months. The first six-week term had courses on Computing, Writing, Learning How to Learn, and a Foundation Programme reimagined for the online setting.

We are grateful for the generosity of major donors who supported several new initiatives during the year. Shri Gordhanbhai B Gelot established the Kankuben Bakshirambhai

Gelot Chair in memory of his late mother as well as the Gordhanbhai B Gelot Laboratory for Artificial Intelligence and Data Science. Dr Dinesh O Shah has endowed the Dr Dinesh O Shah Chair. Dr Hemant Kanakia and the Maker Bhavan Foundation helped establish the Kanakia Young Researcher Seminar Series at the Institute.

IITGN alumni have demonstrated extraordinary affection and during the financial year 2020-21 with more than 55% contributing to the Institute, an exceptionally high gifting rate at any institute globally and especially noteworthy considering how recently they graduated from the Institute. Five more alumni have endowed Rs 1 lakh annual scholarships for undergraduate students. The scale of alumni engagement is a strong testament to the value they place on their IITGN experience.

With the next set of academic buildings, presently under construction, we expect to significantly scale up our experimental facilities. The Research Park is nearing completion and will lead to unprecedented opportunities for industry partnerships. The Department of Science and Technology (DST) sanctioned the establishment of a Nidhi-Prayas Centre to support young innovators turn their ideas into proofs-of-concept at the Innovation and Entrepreneurship Centre (IIEC). The DST has also approved the installation of a 650 TF Supercomputing System (70:30 CPU & GPU), with appropriate data centres with storage capacity. The institute has signed a MoU with the Centre for Development of Advanced Computing for the installation of this facility under the National Supercomputing Mission, which is coordinated by the DST along with the Ministry of Electronics and Information Technology.

Director
Prof Sudhir K Jain



Constructions of our guest house and the Central Arcade are now complete. The bank and the Medical Centre have already established operations in the Central Arcade. Two new hostels were commissioned during the year and a state-of-the-art sports complex is nearing completion. Rang Manch, the open-air theatre, is undergoing final landscaping and is ready for public events as soon as they become possible again. An animal care facility has been created on the campus where medical care can be provided to the campus animals (pets as well as street animals).

Faculty recruitment continues vigorously at the institute and we introduced the Early Career Fellowship and 50-50 Scheme to recruit high-caliber post-doctoral researchers. We established the Sabarmati Bridge Fellowship to provide research opportunities to our final year students whose higher study plans were disrupted by the pandemic. We anticipate that online student and faculty recruitment will become a larger component of our strategy in the coming years, opening up new avenues and talent for the continued growth of IITGN.

The world is experiencing extraordinary turmoil, but the campus community's remarkable response to this crisis throughout this year is powerful evidence of IITGN's outstanding ethos and culture. With our endearing efforts on making the campus population 100% vaccinated, we hope that we can eventually look forward to a new normal, where we have the entire IITGN family back on the campus, and where we have leveled up on all fronts based on our learnings from the pandemic years.

Prof Sudhir K Jain



Organisation

BOARD OF GOVERNORS

(As on Mar 31, 2021)

CHAIRPERSON

DR SANJIV GOENKA

Chairman
RP-Sanjiv Goenka Group
Kolkata

MEMBERS

DR B N GANGADHAR

Former Director
National Institute of Mental Health and Neurosciences
Bengaluru

SHRI B C TRIPATHI

Former Chairman & Managing Director
GAIL (India) Limited
New Delhi

SHRI KAMAL BALI

President & Managing Director
Volvo Group India Private Limited
Bengaluru

SHRI RAKESH RANJAN, IAS

Additional Secretary (Technical Education)
Department of Higher Education
Ministry of Education
Government of India, New Delhi

SHRI ANIL MUKIM, IAS

Chief Secretary
Government of Gujarat
Gandhinagar

SHRI PRAFULBHAI K PATEL

Administrator
UT Administration of Daman and Diu
Daman (UT)

PROF SUDHIR K JAIN

Director
Indian Institute of Technology Gandhinagar

PROF AMIT PRASHANT

Professor
Indian Institute of Technology Gandhinagar

PROF PRANAB MOHAPATRA

Professor
Indian Institute of Technology Gandhinagar

SECRETARY

SHRI P K CHOPRA

Registrar
Indian Institute of Technology Gandhinagar

FINANCE COMMITTEE

(As on Mar 31, 2021)

CHAIRPERSON

DR SANJIV GOENKA

Chairman
RP-Sanjiv Goenka Group
Kolkata

MEMBERS

PROF SUDHIR K JAIN

Director
Indian Institute of Technology Gandhinagar

SHRI RAKESH RANJAN, IAS

Additional Secretary (Technical Education)
Department of Higher Education
Ministry of Education
Government of India, New Delhi

SMT DARSHANA M DABRAL

Joint Secretary (Integrated Finance Bureau) & Financial Advisor
Ministry of Education
Government of India, New Delhi

SHRI BHADRESH MEHTA

Chartered Accountant
Ahmedabad

PROF PRATIK MUTHA

Associate Professor
Indian Institute of Technology Gandhinagar

SECRETARY

SHRI P K CHOPRA

Registrar
Indian Institute of Technology Gandhinagar

BUILDING AND WORKS COMMITTEE

(As on Mar 31, 2021)

CHAIRMAN

PROF SUDHIR K JAIN

Director

Indian Institute of Technology Gandhinagar

MEMBERS

PROF NEELKANTH CHHAYA

Former Dean

Faculty of Architecture

CEPT University

Ahmedabad

SHRI M B BHALALA

Former Chief Engineer

Roads & Buildings Department

Government of Gujarat

Gandhinagar

SHRI K S WAGH

Chief Advisor (Civil Infrastructure)

Indian Institute of Technology Bombay

SHRI A K JAIN

Former Special Director General

Central Public Works Department

Government of India, New Delhi

SHRI L P SRIVASTAVA

Advisor (Works)

Indian Institute of Technology Gandhinagar

PROF GAURAV S

Dean (Campus Development)

Indian Institute of Technology Gandhinagar

SECRETARY

SHRI P K CHOPRA

Registrar

Indian Institute of Technology Gandhinagar

SENATE

(As on Mar 31, 2021)

CHAIRMAN

Prof Sudhir K Jain
Director

MEMBERS

Prof D P Roy
Prof G K Sharma
Prof S P Mehrotra
Prof Amit Prashant
Prof Pranab Kumar Mohapatra
Prof Vikrant Jain
Prof Jaison Manjaly
Prof Chinmay Ghoroi
Prof Sameer Dalvi
Prof Nihar Ranjan Mohapatra
Prof Anirban Dasgupta
Prof Deepak Kunzru
Prof Namit Mahajan
Prof Gayatri Menon
Mr Anand Parekh
Mr Sunil Parekh
Prof Kabeer Jasuja
Prof Gaurav S
Prof Sivapriya Kirubakaran
Prof Sharmistha Majumdar
Prof Bhaskar Datta
Prof Vimal Mishra
Prof Manish Kumar (Civil)
Prof Saumyakanti Khatua
Prof Sudipta Basu
Prof Pratyush Dayal
Prof Mithun Radhakrishna
Prof Krishna Miyapuram
Prof Pratik Mutha
Prof Neeldhara Misra
Prof Shanmuganathan R
Prof Naran Pindoriya
Prof Nithin V George
Prof Sanjay Singh Bora
Prof Ambika Aiyadurai
Prof Sharmita Lahiri
Prof Jagmohan Tyagi
Prof Akshaa Vatwani
Prof Vinod Narayanan
Prof Dilip Srinivas Sundaram
Prof Superb Misra
Prof Abhijit Mishra
Prof Vinod Chandra
Prof Krishna Kanti Dey

SECRETARY

Shri P K Chopra
Registrar

PERMANENT INVITEE

Dr T S Kumbar
Librarian

STUDENT INVITEES

Jainam Shah
General Secretary, Student Council

Utkarsh Gangwal
Convener, Student Senate

Anukesh K A (PhD 2016)
Jainendra Jain (MTech 2019)
Deepika Soni (BTech 2017)

STANDING COMMITTEES OF THE SENATE

SENATE ACADEMIC PERFORMANCE EVALUATION COMMITTEE (SAPEC)

Prof Pratik Mutha, Convener
Prof Kabeer Jasuja, (Dean, AA)
Prof Dilip Srinivas Sundaram
Prof Krishna Kanti Dey
Prof Bhaskar Datta
Prof Joycee Mekie
Prof Ambika Aiyadurai
Prof Nitin Khanna
Prof S Rajendran
Prof Sriharitha Rowthu

SENATE ACADEMIC PROGRAMMES COMMITTEE (SAPC)

Prof Kabeer Jasuja, Chairman (Dean, AA)
Prof Dilip Srinivas Sundaram
Prof Krishna Kanti Dey
Prof Sameer Dalvi
Prof Vikrant Jain
Prof Jaison Manjaly
Prof Sharmistha Majumdar
Prof Pratyush Dayal
Prof Sudipta Basu
Prof Krishna Prasad Miyapuram
Prof Anirban Dasgupta
Prof Naran Pindoriya
Prof Ambika Aiyadurai
Prof Superb Misra
Prof Jagmohan Tyagi
Prof Vinod Narayanan
Prof Vinod Chandra
Shantanu Jana (Student Nominee)
Pratyush Bhatt (Student Nominee)

SENATE SCHOLARSHIPS AND PRIZES COMMITTEE (SSPC)

Prof Sivapriya Kirubakaran, Chairman
(Dean, Student Affairs)
Prof Naran Pindoriya
Prof Manish Kumar (CE)
Prof Chetan Pahlajani

SENATE STUDENT AFFAIRS COMMITTEE (SSAC)

Prof Sivapriya Kirubakaran, Chairman
(Dean, Student Affairs)
Prof Angus McBlane
Prof Meera M Sunny
Prof Sharmistha Majumdar
Prof Chandrakumar Appayee
Prof Arnab Saha
Jainam Shah (General Secretary, Student Council)
Utkarsh Gangwal (Convener, Student Senate)
Yashi Gaur (Student Nominee)
Amar Deep (Student Nominee)

SENATE LIBRARY COMMITTEE (SLC)

Prof Anirban Dasgupta, Chairman
Dr T S Kumbar
Shri Nirmal Jha
Prof Nishaant Choksi
Prof Indranath Sengupta
Prof Ravi Sastri Ayyagari
N S S Sanjeevi (Student Nominee)
Soham Solanki (Student Nominee)

ACADEMIC OFFICIALS

DIRECTOR

Prof Sudhir K Jain

ACADEMIC AFFAIRS

Prof Kabeer Jasuja

Dean, Academic Affairs

Prof Dilip Srinivas Sundaram

Associate Dean, Undergraduate Studies

Prof Krishna Kanti Dey

Associate Dean, Postgraduate Studies

STUDENT AFFAIRS

Prof Harish P M

Dean, Student Affairs (Apr 1, 2020 – Dec 31, 2020)

Prof Sivapriya Kirubakaran

Dean, Student Affairs (Jan 1, 2021 – Mar 31, 2021)

Associate Dean, Student Welfare (Sep 1, 2020 – Dec 31, 2020)

Prof Abhijit Mishra

Associate Dean, Student Development

Prof Abhay Raj Singh Gautam

Head, Career Development Services (and also

Coordinator, Placement)

Prof Shanmuganathan Raman

Coordinator, Internship

Prof Himanshu Shekhar

Coordinator, Future Faculty Program and Higher

Education

Prof Raghavan Ranganathan

Warden, Student Well Being I

Prof Prachi Thareja

Warden, Student Well Being II

Prof Satyajit Pramanik

Warden, Student Well Being III

Prof Arnab Saha

Warden, Mess and Eateries

Prof Bhaskar Datta

Head, Counselling Services

Prof Akshaa Vatwani

Associate Head, Counselling Services

Prof Anirban Dasgupta

Advisor, Technical Activities

Prof Mithun Radhakrishnan

Advisor, Cultural Activities

Prof Jaichander Swaminathan

Advisor, Amalthea

Prof Himanshu Shekhar

Advisor, Blithchron

Prof Leslee Lazar

Coordinator, Tinkerer's Lab

Prof Jaison Manjaly

Coordinator, Clay Studio

Prof Madhu Vadali

Head, Sports

Prof Gopinadhan Kalon

Advisor, Physical Education and Sports Activities and

Coordinator, Earn-While-You-Learn

Prof Baradhvaj Coleppa

Advisor, Gymnasium

Prof Udit Bhatia

Head, Student Leadership Programmes and

Coordinator, Communications, Life Skills & Leadership

Programs

Prof Sharada C V

Coordinator, NYASA

Prof Pradipta Ghosh & Prof Jooyoung Kim

Coordinators, Student Integration

Prof Bipul Saurabh & Prof Jagmohan Tyagi

Coordinator, Data Management

Prof Sharmistha Majumdar

Committee, Financial Grants and Loans

FACULTY AFFAIRS

Prof G K Sharma

Professor-in-Charge, Faculty Affairs

Prof Nithin George

Associate Dean, Faculty Relations

Prof Prasanna Venkatesh B

Associate Dean, Faculty Recruitment

(Apr 1, 2020 – Dec 31, 2020)

Prof Udit Bhatia

Associate Dean, Faculty Recruitment

(Jan 1, 2021 – Mar 31, 2021)

EXTERNAL RELATIONS

Prof S P Mehrotra

Professor-in-Charge, External Relations

Dr Ravikumar Bhaskaran

Honorary Advisor, External Relations

Prof Neeldhara Misra

Associate Dean, External Communication

Team Leader - Communication

Mr Nirmal Jha

Team Leader- External Relations

Prof Achal Mehra

Team Leader- Overseas Partnerships

GENERAL ADMINISTRATION

Prof D P Roy
Professor-in-Charge, General Administration

RESEARCH AND DEVELOPMENT

Prof Amit Prashant
Dean, Research and Development

Prof Sharad Gupta
Associate Dean, External Projects

Prof Umashankar Singh
Coordinator, Continuing Education Programmes

CAMPUS DEVELOPMENT

Prof Gaurav S
Dean, Campus Development

Prof Chinmay Ghoroi
Associate Dean, Campus Management

INFORMATION SYSTEMS AND TECHNOLOGY FACILITY (ISTF)

Prof Jaison A Manjaly
Coordinator, Information Systems and Technology Facility

Prof Mayank Singh
Co-Coordinator, Information Systems and Technology Facility

Prof Dilip Sundaram
Co-Coordinator, Information Systems and Technology Facility

INSTITUTE MANAGEMENT SYSTEM

Prof Amit Prashant
Chairman, IMS

Prof Shanmuganathan Raman
Coordinator, IMS

Prof Jaichander Swaminathan
IMS Liaison

HEADS

Prof Sameer Dalvi
Head, Engineering Disciplines

Prof Jaison A Manjaly
Head, Humanities and Social Sciences

Prof Vikrant Jain
Head, Natural Sciences

CHIEF VIGILANCE OFFICER

Prof Pranab Mohapatra
Chief Vigilance Officer

DISCIPLINE COORDINATORS

(As on Mar 31, 2021)
Prof Sharmistha Majumdar
Biological Engineering

Prof Pratyush Dayal
Chemical Engineering

Prof Sudipta Basu
Chemistry

Prof Vimal Mishra
Civil Engineering

Prof Krishna Prasad Miyapuram
Cognitive Science

Prof Anirban Dasgupta
Computer Science and Engineering

Prof Naran Pindoriya
Electrical Engineering

Prof Ambika Aiyadurai
Humanities and Social Sciences

Prof Superb Misra
Materials Engineering

Prof Jagmohan Tyagi
Mathematics

Prof Vinod Narayanan
Mechanical Engineering

Prof Vinod Chandra
Physics

Prof Vikrant Jain
Earth Sciences

CENTRES COORDINATORS

(As on Mar 31, 2021)

Centre for Archeological Sciences

Coordinator: Prof Michel Danino
Co-coordinator: Prof S P Mehrotra

Centre for Biomedical Engineering

Coordinator: Prof Uttama Lahiri
Co-coordinator: Prof Karla P Mercado-Shekhar

Centre for Creative Learning

Coordinator: Prof Manish Jain
Co-coordinator: Prof Neeldhara Misra

Centre for Cognitive and Brain Sciences

Coordinator: Prof Krishna Prasad Miyapuram
Co-coordinator: Prof Meera Mary Sunny

Design and Innovation Centre

Coordinator: Prof Leslee Lazar
Co-coordinator: Prof Amit Arora

Dr Kiran C Patel Centre for Sustainable Development

Coordinator: Prof Achal Mehra
Co-coordinator: Prof Vimal Mishra

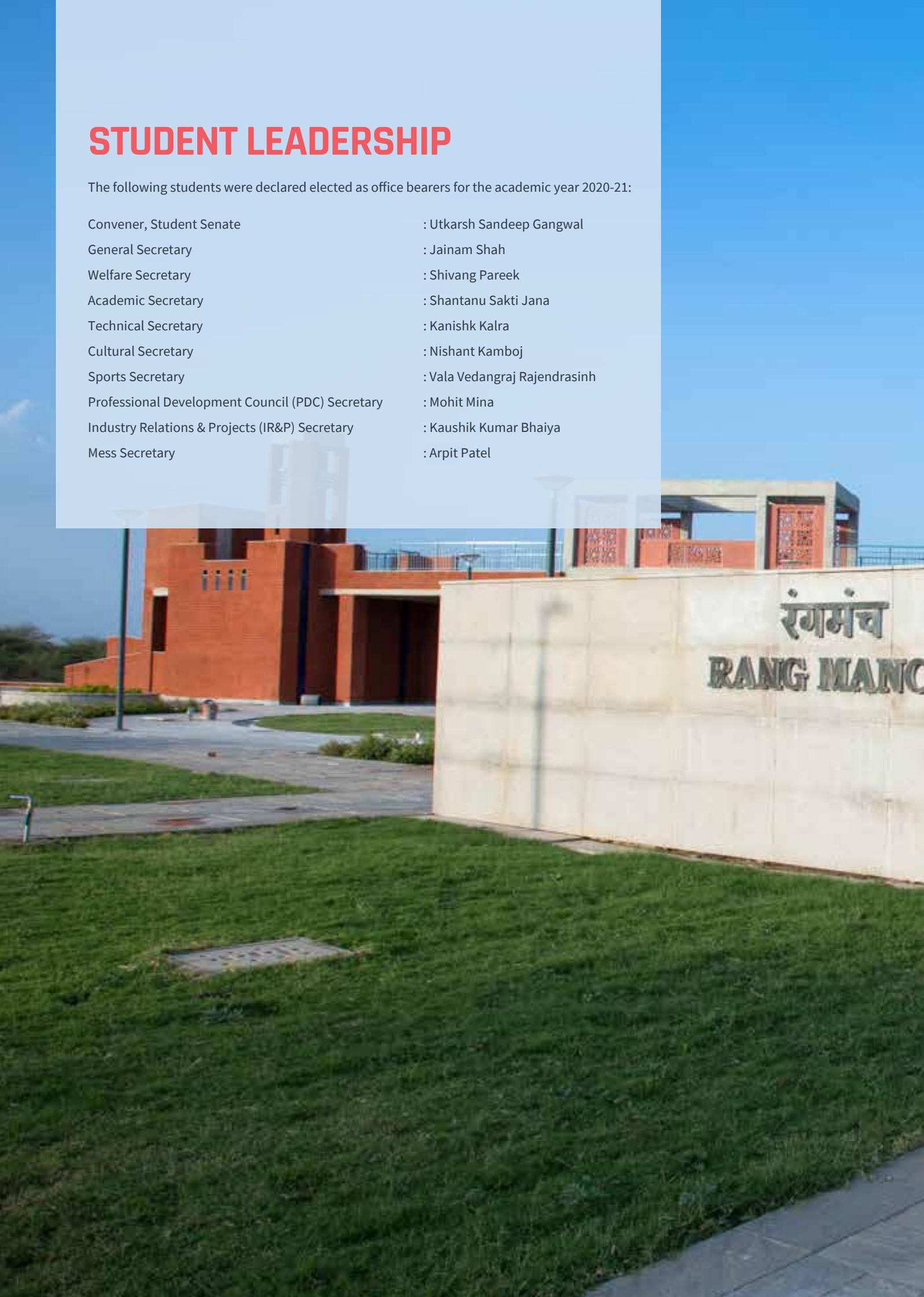
Centre for Safety Engineering

Coordinator: Prof Chinmay Ghoroi
Co-coordinator: Prof Gaurav S

STUDENT LEADERSHIP

The following students were declared elected as office bearers for the academic year 2020-21:

Convener, Student Senate	: Utkarsh Sandeep Gangwal
General Secretary	: Jainam Shah
Welfare Secretary	: Shivang Pareek
Academic Secretary	: Shantanu Sakti Jana
Technical Secretary	: Kanishk Kalra
Cultural Secretary	: Nishant Kamboj
Sports Secretary	: Vala Vedangraj Rajendrasinh
Professional Development Council (PDC) Secretary	: Mohit Mina
Industry Relations & Projects (IR&P) Secretary	: Kaushik Kumar Bhaiya
Mess Secretary	: Arpit Patel



रंगमंच
RANG MANOCH





Pandemic Response

The widespread outbreak of the coronavirus has created a state of emergency for most of 2020 and through 2021, forcing most establishments to move to remote modes of work with exceptions being made only for essential services, which in turn created a situation where most students across the country had to pack up and leave campuses.

At IITGN, where students have a longstanding tradition of taking ownership of issues that affect them directly, the Institute has been able to craft a response that has been relatively nuanced. In particular, students had the flexibility to choose to stay on campus or leave for home just before the nation-wide lockdown came into effect. The Institute was successfully able to work with its mess workers, laundry services, housekeeping team, and food vendors during different stages of the lockdown. The shops and outlets inside the campus premises functioned by following all precautionary norms to ensure that the IITGN community had safe access to all the essential services. The entry and exit protocols of the campus were designed and enforced appropriately.

The students started operating the **24x7 Control Room** from IITGN's hostel premises starting from Mar 17, 2020. This initiative aimed to facilitate smooth communication between the student body and Institute authorities regarding all matters that are concerned with this crisis.



A **Crisis Management Group**, comprising of faculty and staff members, came into force on Mar 13, 2020, after it was apparent that we are indeed dealing with a global emergency. This was a fast-response group which helped the community respond effectively to the evolving situation. Coordinating with various sections and offices of the campus, it planned for appropriate responses under various pandemic scenarios that evolved over the year. Further, the Institute established a **COVID Medical Response Team** on Jun 24, 2020 to provide overall leadership and coordination with respect to the medical response of the Institute.

A **Special Volunteer Force**, which comprises students, faculty, staff, and other community members, also came into effect as a response measure. The objective of this initiative was to engage in multiple services such as aiding security, coordinating the delivery of essential items, providing support to the essential services staff, providing food delivery support, and so on.

To complement the preventive measures against the global pandemic, IITGN organised a **COVID-19 testing drive** for its entire campus community in the second week of Oct 2020 with support from medical teams of the Government of Gujarat. About 1800 community members, including faculty, staff, residents, outsourced support staff, and students residing on campus underwent Rapid Antigen Tests. The Institute arranged testing for the campus construction workers as well.



With an increasing number of COVID positive cases on the campus during the second wave, IITGN converted its newly constructed guest house into a **190-bed Covid Care Facility** to treat COVID positive patients from the community with mild to moderate symptoms. More than 240 Covid patients were served at the facility between Apr 1 through May 15, 2021, including a peak of 95 in mid-April. The facility provided them basic medical services, such as regular temperature and oxygen monitoring, advice from doctors and nurses of the Institute, medicines, blood and RT-PCR tests, hard-to-access health services, such as oxygen concentrators and tanks, and nutritious meals four times daily. Institute medical staff and ambulance services are available 24x7. The facility also helped patients find beds in local hospitals if needed. Counselling services offered psychological support to patients, medical staff, and their families.

We are proud of the collective response and support for the most vulnerable members of our community and neighbouring villages. The **Shramik Kalyan Samiti**, established on Apr 1, 2020, collaborated with CPWD to ensure the health, safety and well-being of construction workers during the pandemic. The **Padosi Gaam Sahayog Samiti**, setup on May 7, 2020, strengthened our relationship with the neighbouring villages by organising distribution of rations and safety-related supplies.



PADOSI GRAM SAHYOG SAMITI

The Padosi Gram Sahyog Samiti (constituted in the year 2020), under the leadership of **Prof Prasanna B**, continued to engage with the two neighbouring villages, Palaj and Basan. Numerous activities were conducted through the Samiti during the year. The Samiti has enabled the creation of a volunteer force of enterprising villagers, which is working towards enhancing awareness regarding vaccination and management of COVID symptoms by checking vital medical conditions (temperature and oxygen saturation) through house-to-house visits. A number of medical camps have been organised in the villages through the Institute OPD. Additionally, many needy families that required support due to low incomes or livelihood loss due to the pandemic in Palaj were identified, and the Samiti organised a drive to distribute food kits containing high nutrition essential food items such as oil, flour and pulses. **Col Vineet Agrawal** also shouldered key responsibilities and guided the Samiti in coordinating various welfare activities in Palaj and Basan since March 2021.

152

needy families provided with food-kits in Palaj and Basan

1512

families provided with masks, sanitiser and pamphlets in Palaj and Basan

160

Policemen and Gram Rakshak Dal personnel provided with hand sanitiser and masks



SHRAMIK KALYAN SAMITI

The Institute has been at the forefront of construction workers' welfare since its inception. In the wake of the COVID-19 pandemic, IITGN joined hands with the Central Public Works Department (CPWD) to launch a series of welfare measures for the benefit of migrant workers in the construction projects at the Institute. The Institute constituted a Shramik Kalyan Samiti (Labour Welfare Committee) under the leadership of **Prof Gaurav S** and with participation of numerous volunteers, to regularly sensitise the workers and create awareness about preventive measures against COVID-19. The Institute also arranged first aid kits, free medical support and consultation in the Institute's medical centre, ambulance services, mobile recharge, distribution of relief materials, sanitary napkins, and cloth masks for IITGN construction workers and their families, and made sure regular disinfection of construction workers' colonies and frequently-touched surfaces. The Institute's OPD and COVID Care Facility is open to all construction workers where they can avail basic medical screening, testing and medications.

Beneficiaries (800 Workers) of Various Welfare Activities by Shramik Kalyan Samiti

Welfare Activity	Details of Distribution (approx)
Distribution of Masks	5300 Masks
Distribution of Mosquito Repellent Coils	233 Packets
Distribution of Sanitary Pads	4000 Packets
Distribution of Condoms	180 Packets
Mobile Recharges	382 Persons
Distribution of Biscuits	2171 Packets
Distribution Sweets & Snacks	560 Packets
Distribution Milk Powder_ Amul	500 Packets
Distribution Namkeen and Water Bottles	144 Packets
Distribution Nutritious Food (Apples, Oranges and Amul Tetra Pack to Covid positive workers)	8 persons

Total 15 Distribution drives have been conducted during 2020-21



Every adversity also offers opportunities for the resilient. The unprecedented global pandemic prodded us to implement several educational innovations.

To begin with, when the second semester of the 2019-20 academic year was disrupted by the first nation-wide lockdown, we decided to advance the 2020 summer vacation instead of resuming the disrupted semester immediately in online mode. This gave all faculty members time to prepare themselves to teach online. Few selected faculty members taught courses online in the summer and the entire faculty body benefited from their collective experiences. These faculty members tried different techniques, used different platforms and learnt their inherent features and limitations. The institute then organised **workshops on online teaching** in which these faculty members shared their experiences. All the necessary support and equipment were provided and this enabled the faculty members to adapt quickly and teach online effectively.

We switched to the **online mode of teaching and learning** from June 8, 2020, and introduced a **new grading system** for the disrupted academic term, under which no letter grades were awarded in the second semester of the academic year 2019-20 for any course. Instead, two new grades were introduced - 'P(E)' (Pass Emergency) and 'I/F' (Incomplete/Fail) for all the courses of the semester. In addition, all students who get an 'I/F' grade were also given one more opportunity to complete the course requirement and improve their performance to earn a 'P(E)' grade. This revised grading policy was designed to reflect continuous learning, ensure fairness and reflect the disruptive impact of the pandemic on the educational system.

The pandemic delayed the joining of the new batch of BTech students to mid-November. For these

students, our flagship **Foundation Programme was re-designed** for virtual mode. We also reconfigured the first-year curriculum for this batch and split the year into three terms of 6 weeks, 15 weeks, and 8 weeks, respectively. The first term of six weeks included courses on Computing, Writing, Learning to learn. With this timeline, the academic schedule of all the students was synchronised from January 2021.

IITGN has always adopted a liberal policy for **financial aid to needy students**, and more so during the pandemic. With the help of the IITGN Foundation in the United States, we raised nearly Rs 1.4 crores in the **Empathy Fund** to benefit students and community members severely affected by the pandemic. The support enabled the Institute to provide liberal aid to 160 financially impacted students, including grants for the purchase of laptops, and tuition fee waivers.

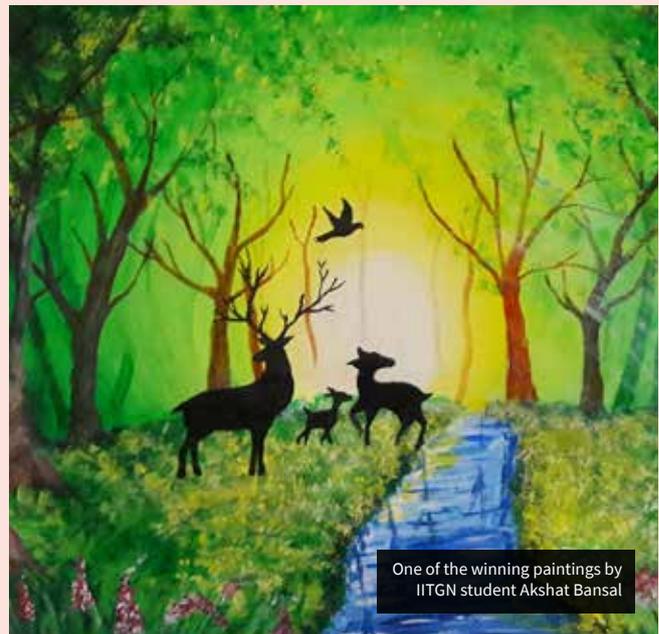
We also launched several **initiatives to help the graduating students** whose future plans may have been interrupted by the COVID-19 pandemic. The Institute launched a one-year Postgraduate Diploma Program (PGDIIT) for the Academic Year (2020-21) for students of the graduating class. This Postgraduate Diploma also aims to help graduating students who are interested in exploring but are not fully committed to a Master's programme. A candidate completing the PGDIIT can subsequently choose to apply to enrol for the MTech degree. In addition, IITGN also offered 'Sabarmati Bridge Fellowship' to enable graduating students to make use of this time to embark on cutting-edge research.

Finally, we also launched On-Campus Employment Opportunities and UG Teaching Assistantships to enable students to hone their job skills and leadership potential while studying. The institute also introduced a Work and Study MTech programme.



PROJECT ISAAC SHOWCASE

IITGN organised 'Project Isaac Showcase' on Jan 29, 2021, an exciting and fun-filled event to celebrate and reward the talent and creativity of students with live musical performances, recitations, virtual gallery walkthroughs for sketches and paintings, quizzes, and prizes. The virtual show exhibited the best and most creative works generated by students as a part of the 'Project Isaac' by IITGN, which was designed to encourage students to cultivate new skills in writing, painting, coding, music, creative expression, and so on, during the COVID-19 induced lockdown in India. The event was coordinated by **Prof Achal Mehra**, Visiting Professor, HSS, IITGN



One of the winning paintings by IITGN student Akshat Bansal



Academics

PROGRAMMES OFFERED

BTECH ●

MSc ◆

MA ◻

MTECH/PGDIIT ■

PHD ⊙

DISCIPLINES

- Biological Engineering ■ ⊙
- Chemical Engineering ● ■ ⊙
- Chemistry ◆ ⊙
- Civil Engineering ● ■ ⊙
- Cognitive Science ◆ ⊙
- Computer Science and Engineering ● ■ ⊙
- Earth Sciences ⊙
- Earth System Science ■
- Electrical Engineering ● ■ ⊙
- Humanities & Social Sciences ⊙
- Materials Engineering ● ■ ⊙
- Mathematics ◆ ⊙
- Mechanical Engineering ● ■ ⊙
- Physics ◆ ⊙
- Society and Culture ◻



Apart from the mentioned programmes, a Dual Major BTech Programme, a BTech-MTech Dual Degree and a BTech-MSc dual degree are also offered.

DUAL MAJOR BTECH PROGRAMME

- where a student can graduate with degrees in two disciplines

BTECH- MTECH DUAL DEGREE

- which enables a student to graduate with both BTech and MTech degrees in five years

BTECH- MSc DUAL DEGREE

- which enables a student to graduate with both BTech and MSc degrees in five years

BSc (ENGINEERING)

- Three-year BSc degree is an "Exit" degree and no separate admissions are offered into this program. BSc in Engineering is without any sub-specialisation

NON DEGREE PROGRAMME

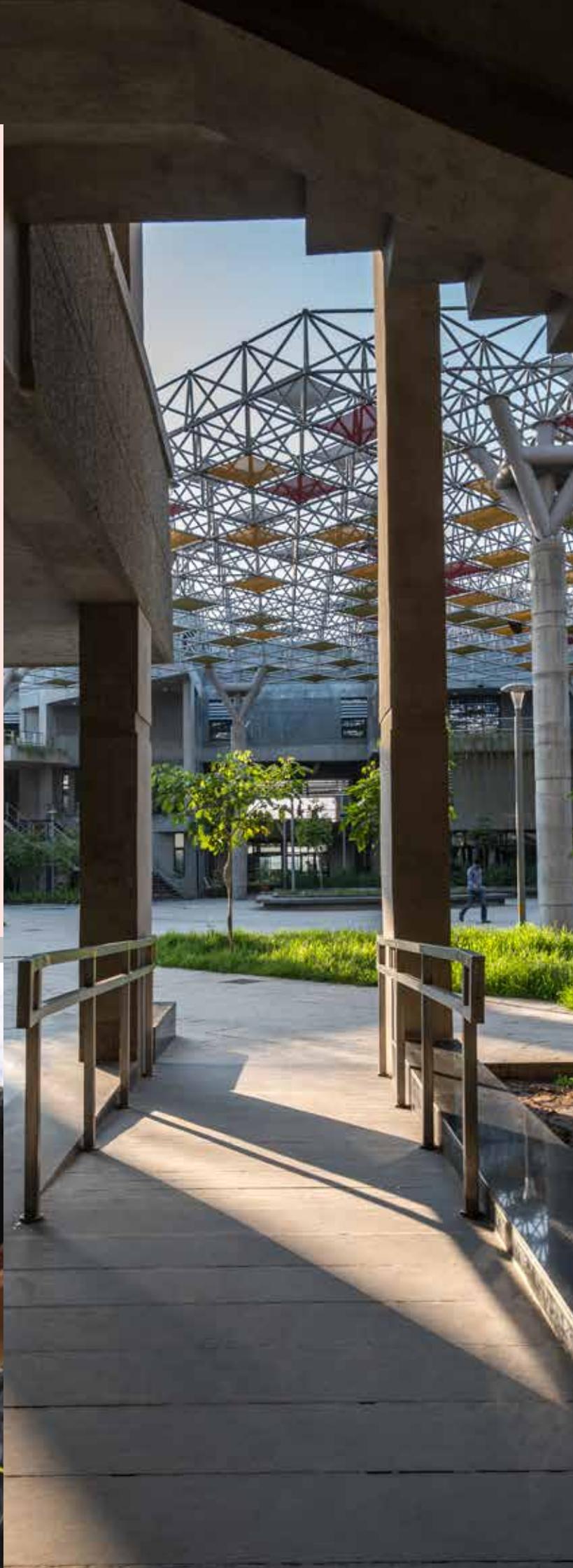
- A student who is registered for a degree in a recognised institute or university in India or abroad, and who is officially sponsored by that institute or university to complete part of his/her academic requirements at IITGN, can apply for admission to IITGN as a non degree student



INNOVATIVE CURRICULUM AND ACTIVE LEARNING

Award winning curriculum, project based learning, creativity, entrepreneurship, encouraged emphasis on design, humanities, and life sciences to promote out-of-the box and non-linear thinking.

- **40%** of UG and **77%** of PhD students receive international exposure
- Increasing emphasis on learning-by-doing and active learning
- Tinkerer's Lab for fearless experimentation
- Programmes such as Invent@IITGN to promote innovations and inventions
- Maker Bhavan to drive active learning and research innovation
- Freedom, flexibility, autonomy and support to try out new pedagogical approaches



9TH CONVOCATION

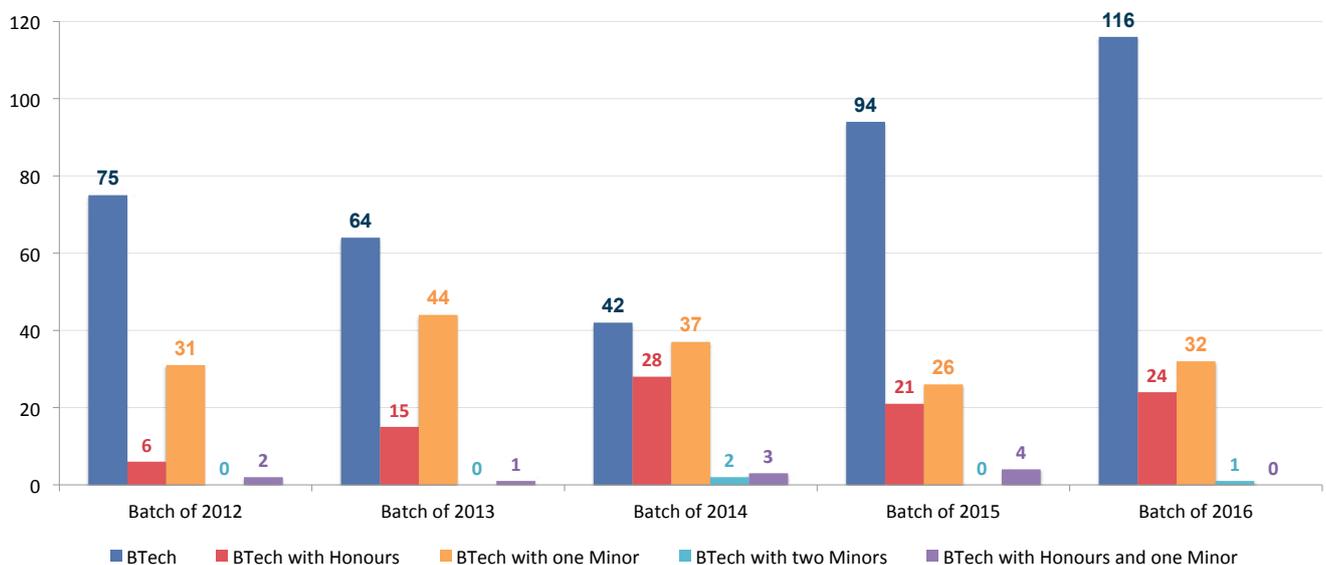
IITGN hosted its 9th Convocation through a unique virtual ceremony on Aug 23, 2020, and became the first IIT to conduct the online Convocation. A total of 455 students were conferred their degrees in digital mode. These included 173 BTech degrees, 1 BTech-MTech Dual Degree, 1 BTech-MSc Dual Degree, 115 MTech, 84 MSc, 19 MA, 55 PhD, and 7 PGDIIT degrees. In addition, 25 gold medals, 15 silver medals, and 16 medallions were awarded to students for excellence in various categories. This year, IITGN also graduated its pioneer batch of BTech students in Computer Science and Engineering. Even in the online mode, the Institute made sure to imbue the graduation ceremony for its students with a personal touch. **Mr Nandan Nilekani**, Chairman and Co-Founder, Infosys Limited, graced the occasion as the Chief Guest. He encouraged students to continue their journey of life-long learning. **Prof Sudhir K Jain**, Director, IITGN, congratulated all the graduating students and medal winners and highlighted some of the remarkable

programmes, initiatives and achievements of IITGN during the academic year 2019-20. He expressed his firm belief in the preparedness of IITGN students to take on the most difficult challenges and wished them wisdom and courage that would serve them in good stead for the future. The entire event was streamed online on IITGN's YouTube channel and Facebook page.

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

DISTRIBUTION OF BTECH DEGREES AMONG THE GRADUATING BATCHES OF 2012-2016

Year	BTech	BTech with Honours	BTech with one Minor	BTech with two Minors	BTech with Honours and one Minor	Total Strength
Batch of 2012	75	6	31	0	2	114
Batch of 2013	64	15	44	0	1	124
Batch of 2014	42	28	37	2	3	112
Batch of 2015	94	21	26	0	4	145
Batch of 2016	116	24	32	1	0	173



RECIPIENTS OF THE DEGREE OF BACHELOR OF TECHNOLOGY

Roll No	Name	Degree
14110151	Navdeep Prakash	Bachelor of Technology in Chemical Engineering
15110099	Rajeev Kumar Mahto	Bachelor of Technology in Chemical Engineering
16110003	Abhishek Dubey	Bachelor of Technology in Chemical Engineering with Minor in Management
16110014	Anish Dubey	Bachelor of Technology in Chemical Engineering
16110033	Bhumika Sandilya	Bachelor of Technology in Chemical Engineering
16110036	Buditi Prudhvi	Bachelor of Technology in Chemical Engineering
16110056	Gameti Nirav Rajeshbhai	Bachelor of Technology in Chemical Engineering
16110071	Kamle Mayank Shrikant	Bachelor of Technology in Chemical Engineering
16110077	Khili Khamesra	Bachelor of Technology with Honours in Chemical Engineering
16110086	Lakhan Agrawal	Bachelor of Technology in Chemical Engineering with Minor in Management
16110088	Manjot Singh	Bachelor of Technology in Chemical Engineering
16110109	Patel Milanbhai Bhagubhai	Bachelor of Technology in Chemical Engineering
16110131	Raman	Bachelor of Technology in Chemical Engineering
16110139	Ritik Jain	Bachelor of Technology in Chemical Engineering with Minor in Management
16110140	Rohan Gupta	Bachelor of Technology in Chemical Engineering with Minor in Management
16110156	Singh Shivam Raj Keshar	Bachelor of Technology in Chemical Engineering
16110158	Sourabh Saini	Bachelor of Technology in Chemical Engineering
16110159	Spand Bharat Mehta	Bachelor of Technology in Chemical Engineering
16110160	Sparsh Jain	Bachelor of Technology in Chemical Engineering
16110173	Varsha Singh	Bachelor of Technology in Chemical Engineering
16110179	Yash Makwana	Bachelor of Technology in Chemical Engineering
13110081	Praveen Pandey	Bachelor of Technology in Civil Engineering
16110005	Ajay Bhardwaj	Bachelor of Technology in Civil Engineering
16110006	Akhil Anil Rajput	Bachelor of Technology with Honours in Civil Engineering
16110009	Akshay Mittal	Bachelor of Technology in Civil Engineering
16110010	Amar Baroliya	Bachelor of Technology in Civil Engineering
16110012	Animesh Rastogi	Bachelor of Technology with Honours in Civil Engineering
16110018	Anubhav Meena	Bachelor of Technology in Civil Engineering
16110021	Arra Sriya	Bachelor of Technology in Civil Engineering
16110028	Ayush Singh	Bachelor of Technology in Civil Engineering
16110041	Chekkala Sai Srishal	Bachelor of Technology in Civil Engineering
16110043	Chinmay Girish Kulkarni	Bachelor of Technology in Civil Engineering
16110045	Danish Mansoor	Bachelor of Technology in Civil Engineering
16110061	Hansraj Bijarnia	Bachelor of Technology in Civil Engineering
16110064	Ishank Singh	Bachelor of Technology in Civil Engineering
16110067	Jitesh Mittal	Bachelor of Technology in Civil Engineering
16110074	Kaushal Chhimpaa	Bachelor of Technology in Civil Engineering
16110078	Kishan Khichi	Bachelor of Technology in Civil Engineering
16110079	Kokkonda Prashanth	Bachelor of Technology in Civil Engineering
16110081	Krishan Kumar	Bachelor of Technology in Civil Engineering
16110090	Mayank Kumar	Bachelor of Technology in Civil Engineering
16110093	Mohit Gadhwai	Bachelor of Technology in Civil Engineering
16110097	Muhammed Sinan R K	Bachelor of Technology in Civil Engineering
16110098	Mukesh Kumar	Bachelor of Technology in Civil Engineering
16110113	Piyush Chandra	Bachelor of Technology in Civil Engineering
16110117	Pranav Peepre	Bachelor of Technology in Civil Engineering
16110138	Rishabh Jain	Bachelor of Technology in Civil Engineering
16110144	Sahil Jain	Bachelor of Technology in Civil Engineering with Minor in Management
16110171	Utkarsh Meena	Bachelor of Technology in Civil Engineering

16110178	Wani Tejas Sakahari	Bachelor of Technology with Honours in Civil Engineering
16110016	Anmol Gautam	Bachelor of Technology in Computer Science and Engineering
16110020	Apoorv Agnihotri	Bachelor of Technology in Computer Science and Engineering
16110024	Atishay Jain	Bachelor of Technology in Computer Science and Engineering
16110026	Ayush Garg	Bachelor of Technology in Computer Science and Engineering
16110027	Ayush Garg	Bachelor of Technology in Computer Science and Engineering
16110047	Davinder Singh	Bachelor of Technology in Computer Science and Engineering
16110048	Debanuj Nayak	Bachelor of Technology with Honours in Computer Science and Engineering
16110053	Ritik Dutta	Bachelor of Technology with Honours in Computer Science and Engineering
16110059	Gohil Varun Chandrashekhar	Bachelor of Technology in Computer Science and Engineering
16110062	Heer Ambavi	Bachelor of Technology with Honours in Computer Science and Engineering
16110083	Kukunuri Sai Venkata Ratna Rithwik	Bachelor of Technology in Computer Science and Engineering
16110084	Kunal Verma	Bachelor of Technology in Computer Science and Engineering
16110091	Meet Panchal	Bachelor of Technology in Computer Science and Engineering
16110094	Monika Chouhan	Bachelor of Technology in Computer Science and Engineering
16110095	Mridul Sharma	Bachelor of Technology in Computer Science and Engineering
16110100	Naman Jain	Bachelor of Technology with Honours in Computer Science and Engineering
16110103	Nitiksha	Bachelor of Technology in Computer Science and Engineering with Minor in Mathematics
16110104	P Jayakrishna Sahit	Bachelor of Technology in Computer Science and Engineering
16110105	Pachpande Soham Kishor	Bachelor of Technology in Computer Science and Engineering
16110108	Parmar Monarch Upendrabhai	Bachelor of Technology in Computer Science and Engineering
16110110	Pathlavath Prashanth	Bachelor of Technology in Computer Science and Engineering
16110119	Pranjali Jain	Bachelor of Technology with Honours in Computer Science and Engineering
16110120	Pratik Kayal	Bachelor of Technology with Honours in Computer Science and Engineering
16110125	Rahul Challa	Bachelor of Technology in Computer Science and Engineering
16110136	Rayan Gaat	Bachelor of Technology in Computer Science and Engineering
16110137	Rendla Aditya	Bachelor of Technology in Computer Science and Engineering
16110141	Rohit Sharma	Bachelor of Technology in Computer Science and Engineering with Minor in Mathematics
16110142	S Deepak Narayanan	Bachelor of Technology with Honours in Computer Science and Engineering
16110143	S Vinu Sankar	Bachelor of Technology in Computer Science and Engineering
16110147	Sammed Shantinath Kagi	Bachelor of Technology in Computer Science and Engineering
16110148	Shivansh Choudhary	Bachelor of Technology in Computer Science and Engineering
16110149	Shivji Bhagat	Bachelor of Technology in Computer Science and Engineering
16110150	Shreyas Singh	Bachelor of Technology with Honours in Computer Science and Engineering
16110157	Smeet Vora	Bachelor of Technology in Computer Science and Engineering with Minor in Management
15110050	Gaurav Singh Khatana	Bachelor of Technology in Electrical Engineering
15110074	More Rishikesh Babu	Bachelor of Technology in Electrical Engineering
15110081	Pankaj Kumar	Bachelor of Technology in Electrical Engineering
15110100	Ravi Jangir	Bachelor of Technology in Electrical Engineering
16110002	Abhinav Narayan Harish	Bachelor of Technology in Electrical Engineering with Minor in Computer Science and Engineering
16110011	Amit Kumar Singh Yadav	Bachelor of Technology in Electrical Engineering with Minor in Computer Science and Engineering
16110017	Anshul Shivhare	Bachelor of Technology in Electrical Engineering
16110029	Balani Mohit Manoj	Bachelor of Technology in Electrical Engineering with Minor in Computer Science and Engineering
16110031	Bedmutha Manas Satish	Bachelor of Technology in Electrical Engineering with Minor in Computer Science and Engineering
16110039	Chakka Snehith	Bachelor of Technology in Electrical Engineering
16110040	Chavali Bharath Chandra	Bachelor of Technology with Honours in Electrical Engineering
16110049	Deshpande Ajit Umesh	Bachelor of Technology in Electrical Engineering with Minor in Computer Science and Engineering
16110057	Girish Chandar G	Bachelor of Technology in Electrical Engineering with Minor in Computer Science and Engineering
16110060	Gupta Sagar Rajeev	Bachelor of Technology in Electrical Engineering with Minor in Robotics
16110065	Jai Parmar	Bachelor of Technology in Electrical Engineering
16110066	Jatin Ashish Dholakia	Bachelor of Technology in Electrical Engineering with Minor in Computer Science and Engineering

16110069	K S Santhosh Kumar	Bachelor of Technology in Electrical Engineering
16110080	Kratika Bhagtani	Bachelor of Technology with Honours in Electrical Engineering
16110107	Pankaj Watwani	Bachelor of Technology in Electrical Engineering with Minor in Computer Science and Engineering
16110112	Penumaka Gopi Kishore	Bachelor of Technology in Electrical Engineering
16110118	Pranjal Darda	Bachelor of Technology in Electrical Engineering
16110121	Pratik Puri Goswami	Bachelor of Technology in Electrical Engineering
16110122	Prjolkar Neha Satyendra	Bachelor of Technology in Electrical Engineering with Minor in Design
16110128	Rahul Yadav	Bachelor of Technology in Electrical Engineering
16110132	Ramesh Meena	Bachelor of Technology in Electrical Engineering
16110145	Sai Praneeth Maddi	Bachelor of Technology in Electrical Engineering
16110152	Shubham Ashok Kalgunde	Bachelor of Technology in Electrical Engineering
16110154	Shubhranshu Singh	Bachelor of Technology in Electrical Engineering with Minor in Computer Science and Engineering
16110155	Siddharth Krishnan	Bachelor of Technology in Electrical Engineering with Minor in Physics
16110162	Sumit Walia	Bachelor of Technology in Electrical Engineering with Minor in Computer Science and Engineering
16110163	Suraj Kumar Meena	Bachelor of Technology in Electrical Engineering
16110174	Vasu Bhalothia	Bachelor of Technology in Electrical Engineering
14110017	Antima Meena	Bachelor of Technology in Materials Science and Engineering
15110055	Himani Verma	Bachelor of Technology in Materials Science and Engineering
15110060	Jayshankar Sharma	Bachelor of Technology in Materials Science and Engineering
15110132	Sujeet Singh Mathur	Bachelor of Technology in Materials Science and Engineering
16110015	Anjali Kumari	Bachelor of Technology in Materials Science and Engineering
16110019	Anushikha	Bachelor of Technology in Materials Science and Engineering with Minor in Management
16110025	Ayan Rakshit	Bachelor of Technology with Honours in Materials Science and Engineering
16110034	Bidyan Basumatary	Bachelor of Technology in Materials Science and Engineering
16110037	Bukya Vinay	Bachelor of Technology in Materials Science and Engineering
16110038	C R Greeshma	Bachelor of Technology with Honours in Materials Science and Engineering
16110051	Dharmendra Sablaniya	Bachelor of Technology with Honours in Materials Science and Engineering
16110063	Ingle Varad Jitendrakumar	Bachelor of Technology in Materials Science and Engineering with Minor in Management
16110068	Joshi Kavan Sanjaybhai	Bachelor of Technology with Honours in Materials Science and Engineering
16110085	Kunwar Shivam Pratap	Bachelor of Technology with Honours in Materials Science and Engineering
16110106	Pankaj Kumar Saini	Bachelor of Technology in Materials Science and Engineering
16110126	Rahul Rajeev	Bachelor of Technology with Honours in Materials Science and Engineering
16110135	Ratul Chakraborty	Bachelor of Technology in Materials Science and Engineering
16110151	Shreyas Sreeram	Bachelor of Technology in Materials Science and Engineering
16110161	Sriram Sriharsha	Bachelor of Technology in Materials Science and Engineering
16110167	Tanisha Aggrawal	Bachelor of Technology in Materials Science and Engineering
16110170	Utkarsh Balodi	Bachelor of Technology in Materials Science and Engineering
16110172	Varri Venkata Sai Akhil	Bachelor of Technology with Honours in Materials Science and Engineering
16110176	Vikas Dudi	Bachelor of Technology in Materials Science and Engineering
16110182	Neha Meena	Bachelor of Technology in Materials Science and Engineering
16110183	Shubham Gond	Bachelor of Technology in Materials Science and Engineering
14110034	Dabhi Parth Lalitkumar	Bachelor of Technology in Mechanical Engineering
14110138	Vaibhav S Pal	Bachelor of Technology in Mechanical Engineering
14110152	Panna Lal Saini	Bachelor of Technology in Mechanical Engineering
15110013	Amit Jangid	Bachelor of Technology in Mechanical Engineering
15110018	Anilraj Meena	Bachelor of Technology in Mechanical Engineering
15110126	Bhide Shrinidhi Dilip	Bachelor of Technology in Mechanical Engineering
16110008	Akshat Bansal	Bachelor of Technology in Mechanical Engineering
16110023	Ashar Akhil Parag	Bachelor of Technology with Honours in Mechanical Engineering
16110032	Bharg Jigesh Mehta	Bachelor of Technology in Mechanical Engineering with Minor in Robotics
16110044	Chitipolu Gowtham	Bachelor of Technology in Mechanical Engineering with Minor in Computer Science and Engineering

16110046	Chinmay Dashpute	Bachelor of Technology in Mechanical Engineering with Minor in Electrical Engineering
16110054	G Ramanan	Bachelor of Technology in Mechanical Engineering
16110070	Kadam Omkar Devidas	Bachelor of Technology in Mechanical Engineering
16110072	Karthik Subramanya Karvaje	Bachelor of Technology in Mechanical Engineering with Minor in Robotics
16110073	Kathroth Pavan Kalyan	Bachelor of Technology in Mechanical Engineering
16110076	Kevin Patel	Bachelor of Technology in Mechanical Engineering with Minor in Computer Science and Engineering
16110082	Kshitij Sendre	Bachelor of Technology in Mechanical Engineering with Minor in Management
16110089	Manvendra Singh Chauhan	Bachelor of Technology in Mechanical Engineering
16110096	Mudit Jangid	Bachelor of Technology in Mechanical Engineering
16110099	Mukul Lawas	Bachelor of Technology in Mechanical Engineering
16110123	Putsala Anirudh	Bachelor of Technology in Mechanical Engineering with Minor in Robotics
16110124	Rahil Sanwla	Bachelor of Technology in Mechanical Engineering
16110129	Rajat Biluniya	Bachelor of Technology in Mechanical Engineering
16110134	Rathi Aditya Manish	Bachelor of Technology in Mechanical Engineering with Minor in Robotics
16110146	Sakhalikar Pushpakraj Shyamappa	Bachelor of Technology in Mechanical Engineering
16110164	Surve Sushrut Sudarshan	Bachelor of Technology in Mechanical Engineering with Minors in Electrical Engineering and Robotics
16110165	Suyash Patidar	Bachelor of Technology with Honours in Mechanical Engineering
16110166	Tandale Atharva Madhukar	Bachelor of Technology with Honours in Mechanical Engineering
16110169	Ukey Vishal Hemraj	Bachelor of Technology in Mechanical Engineering
16110175	Vedant Rajendra Gote	Bachelor of Technology in Mechanical Engineering with Minor in Management
16110180	Yogesh Meena	Bachelor of Technology in Mechanical Engineering
16110184	Upendra Kumar	Bachelor of Technology in Mechanical Engineering

RECIPIENTS OF THE DEGREE OF MASTER OF ARTS

Society and Culture

Roll No	Name
17520009	Devika Jayssell
18520001	Ahila S
18520005	Debasmita Ghosh
18520006	Devduttaa Chakraborty
18520007	Devika Menon
18520008	Dimple Khattar
18520009	S Gnana Selvam
18520011	Kritika Gosain
18520013	Noyonika Das
18520014	Khobragade Prerna Pawankumar
18520015	Punya Lokesh Suri
18520016	Rujuta Naik
18520018	Sayantani Saraswati
18520019	Sevgi Demiroğlu
18520020	Nair Shruti Sudhakaran
18520021	Simrith Kaur Hundal
18520023	Swaroop Manish Bhatkar
18520024	Vasundhara Krishnan
18520025	Zaphya Jena

RECIPIENTS OF THE DEGREE OF MASTER OF SCIENCE

Chemistry

Roll No	Name
18510002	Abhinav Gautam
18510008	Anjali Sharma
18510028	Harsh Kumar
18510031	Jaya Bharti
18510034	Kritika Jaiswal
18510041	Mansi Porwal
18510044	Monika
18510048	Nilesh Mathur
18510055	Ojasvi Verma
18510056	Pankaj Kumar
18510057	Parul
18510061	Priya
18510062	Priyavrat Vashisth
18510070	Rimjhim
18510076	Shaiborlang Rapsang
18510077	Shivam Kumar
18510087	Tannu
18510089	Tarun

Cognitive Science

Roll No	Name
17510027	Greeshma Mohan
18510006	Anadi Mehta
18510009	Anushka Oza

18510024	Divya Reji
18510025	Ekta Khemchandani
18510026	Sharma Esha Rajesh Neha
18510029	Ihsan K
18510030	Ishita Arun
18510058	R Pooja
18510060	Prashanti Ganesh A
18510064	Rachelle Chandraan
18510067	Swarnkar Raunak Raghunandan
18510072	Bhanap Ruhi Prasad Sujata
18510073	Samruddhi Rajesh Damle

Mathematics

Roll No	Name
16510035	Kamaraj P
17510080	Shubham Kumar
18510001	Aashima Kaushal
18510005	Ambhore Siddhi Balu Manjula
18510018	Bhawani Shankar
18510021	Mihir Vilas Deo
18510027	Goutam Biswas
18510032	Joshi Bhavin Rasikbhai
18510035	Kshama Sehra
18510036	Kuntal Banerjee
18510037	Lakhani Devanshi Rameshbhai
18510038	Lokesh Sharma
18510042	Md Kashif Jamal
18510047	Nikita Sharma

18510065	Rahul Rohilla
18510066	Rakesh Kumar Rath
18510068	Ravi Mahala
18510080	Sneha Kumari
18510084	Surbhi Warkade
18510085	Surendra Choudhary
18510086	Suresh Suman
18510088	Tannu Kumari
18510090	Vaibhava Srivastava
18510091	Vikash Jangid
18510092	Vineet Kumar
18510095	Yogesh Kumar Gupta

Physics

Roll No	Name
17510037	Kanshokmi Tuihung
17510062	Ravi Kumar
18510003	Adesh Kushwaha
18510007	Anil Kumar
18510010	Aparna Rathi
18510012	Aritra Sen
18510016	Ayush Kant Ranga
18510017	Bharat Singh
18510020	Debroy Das
18510023	Diptesh Gayen
18510043	Md Sahnawaz Alam
18510045	Neeraj Kumar Meena

18510046	Neha Singh
18510052	Nitin Kumari
18510053	Nitish Goyal
18510054	Nividha
18510059	Prashant Kumar
18510063	Rachana Choudhary
18510069	Ravi Shankar Bunkar
18510074	Saroj Yadav
18510075	Sarvdeep Sangwan
18510079	Siyaram Mina
18510081	Sneha Yadav
18510093	Vishal Badoliya
18510094	Vivek Dhaka
18510096	Zayid Ahmed

RECIPIENTS OF THE POST-GRADUATE DIPLOMA OF THE INSTITUTE (PGDIIT)

Roll No	Name	Degree
18210070	Rohitashva Kumar Singh	The Post Graduate Diploma of the Institute in Civil Engineering
18250003	Kazani Aman Sirajbhai	The Post Graduate Diploma of the Institute in Civil Engineering
18250037	Vaghela Vishal Ghanshyambhai	The Post Graduate Diploma of the Institute in Civil Engineering
18310031	Prashant Kumar Jha	The Post Graduate Diploma of the Institute in Electrical Engineering
18210102	Jitendra Prasad Agrawal	The Post Graduate Diploma of the Institute in Electrical Engineering
19210088	Piyush Kumar	The Post Graduate Diploma of the Institute in Electrical Engineering
19210117	Aman Verma	The Post Graduate Diploma of the Institute in Materials Science and Engineering

RECIPIENTS OF THE DEGREE OF MASTER OF TECHNOLOGY

Biological Engineering

Roll No	Name
18210012	Aravintha Siva M
18210013	Arthi Hariharan
18210023	Chinmaya Panda
18210024	Debarpan Ghosh
18210036	Hoime Banerjee
18210044	Kuldeep Sharma
18210056	Pragati Saxena
18210086	Sumit Kharbanda
18210087	Surabhi Sharma
18250028	Rupsha Mukherjee
18210116	Dibyadarsi Nepal

Chemical Engineering

Roll No	Name
17210023	Ayush Nema
17210043	Kanchan Sharma
18210005	Varma Akash Kiran
18210048	Mahendra Jagdish Choudhary
18210061	Zope Rajat Sunil
18210067	Rishabh Patidar
18210074	Samyabrata Chatterjee

18210075	Deshmukh Saurabh Dhondiraj
18210090	Surwase Swarupkumar Harishchandra
18210096	Vishesh Sharma
18210105	Krushan Patel
18250020	Md Zafar Ahmed
18250002	Ahteshamul Haq
18250019	Md Nasre Alam

Civil Engineering

Roll No	Name
16210020	Srusti Bala Harsha Teja
17210034	Gaurav Khandelwal
17210056	Lakhani Mohit Sureshkumar
17210058	Nikhil O
17210067	Prajwal Patidar
17210084	Ravi Shankar
17210109	Sukrit Sharma
17210120	Yash Goyal
17250019	Prerna Sarkar
18210001	Adarsh Singh Thakur
18210016	Avisina Charitej Reddy
18210025	Deepak Kumar
18210045	Kunal Bhardwaj
18210049	Manu Mathur
18210078	Sheetal Gujarati
18210091	Tanaya Mukati
18210109	M Satish
18250021	Nivedita Pradhan

18250025	Rahul Nautanbhai Khatri
18250030	Shalinee Bharat

Computer Science and Engineering

Roll No	Name
18210030	Sonawane Dhananjay Kishor Varsha
18210040	Karan Kumar
18210042	Krishan Kant Chugh
18210046	Kushpal Singh Yadav
18210053	Upadhya Neelay Jagdip Khushman
18210058	Prathamesh Upadhyay
18210071	Roop Choudhuri
18210076	Sayak Chowdhury
18210083	Souvik Roy
18210097	Vivek Srivastava
18250008	Chandan Kumar
18250009	Darshita Jain
18250032	Soumita Kundu

Earth System Science

Roll No	Name
18210007	Alok Kumar Thakur
18210011	Anushka Vashistha
18210038	Indra Mani Tripathi
16510001	Juliana Rex

Electrical Engineering

Roll No	Name
17250003	Ajay Kumar Ucheniya
18210014	Ashish Kumar
18210015	Ashish Tiwari
18210027	Deepanshu
18210033	Diptesh Datta
18210043	Krishna Kumar
18210054	Neha Bhadani
18210080	Shubham Jain
18210088	Surendra Kumar Maurya
18210095	Vishal Ranjan Prasad
18210101	Gyanendra K Tiwari
18210103	Jitesh Sah
18210107	Rakesh Kumar Pothal
18210111	Shubham Garg
18210112	Shubham Patil
18250004	Chauhan Anandsingh Puransingh
18250005	Ankita Nandi
18250007	Biplob Nath
18250010	Deepesh Agarwal

18250017	Kaushal Dadsena
18250023	Piyush Dewangan
18250027	Agrawal Roshni Pravinbhai
18250024	Priyanjana Pal

Materials Science and Engineering

Roll No	Name
18210006	Akshay Srivastava
18210008	Ankit Jaiswal
18210057	Trivedi Pranav Mittalbhai
18210059	Priya Tiwari
18210064	Pidathala Ranga Teja
18210068	Dahule Rohit Sanjay
18210081	Sidharth Sarmah
18210085	Sudha Gautam
18210098	Yadav Gaurav Anilkumar
18250029	Saurabh Soni
18250034	Swagat Das
18410001	Nishkarsh Srivastava

Mechanical Engineering

Roll No	Name
16210090	Lanje Saurabh Yashwant
17210003	Abhimanyu
17210015	Arunav Choudhury
17210091	Sanjeev Kumar
18210021	Chandan Kumar
18210026	Deepam Dubey
18210028	Devki Verma
18210029	Dewansh Shrivastava
18210032	Dinesh Bauskar
18210034	Harvansh Dandelia
18210035	Hemanth Krishnan R
18210072	Ruchi Anil Thosare
18210073	Challa Sai Ajay Narendra
18210077	Jadhav Sayali Nitin
18250006	Aqbal Ahmad
18250026	Patel Rishabh Rakeshkumar
18250035	Utkarsh Sanjaybhai Upadhyay
15310067	Rishabh Mathur

RECIPIENT OF THE BTECH-MTECH DUAL DEGREE

Roll No	Name	Degree
14110026	B Pranav Chakra Varthy	Bachelor of Technology in Civil Engineering with Minor in Computer Science and Engineering and Master of Technology in Civil Engineering

RECIPIENT OF THE BTECH-MSc DUAL DEGREE

Roll No	Name	Degree
15110045	Chitta Sai Pavan	Bachelor of Technology in Electrical Engineering and Master of Science in Physics

RECIPIENTS OF THE DEGREE OF DOCTOR OF PHILOSOPHY

Roll No	Name	Discipline
12310036	Pallavi Chilka	Biological Engineering
13310002	Krittika Ralhan	Biological Engineering
13310003	Poonam Pandey	Biological Engineering
13310034	Rashmi Bhakuni	Biological Engineering
13310035	Abhijeet Ojha	Biological Engineering
14310001	Sanjay Kumar	Biological Engineering
14310002	Gayathri P	Biological Engineering
13310037	Asha Liza James	Chemical Engineering
13310039	Sophia Varghese	Chemical Engineering
14310004	Deepa Dixit	Chemical Engineering
11310011	Katla Jagadish Kumar	Chemistry
13310006	Shaik Althaf	Chemistry
13310007	Bhanu Pratap Singh Gangwar	Chemistry
13310008	Deekshi Angira	Chemistry
13310040	Anuj Bisht	Chemistry
14310044	Kutwal Mahesh Shantaram	Chemistry
15310033	Beena Kumari	Chemistry
14350006	Majid Hussain	Civil Engineering
10104701	Mehta Krishnesh Shantilal	Cognitive Science
14310043	Abhishek Sahai	Cognitive Science
14310045	Shruti Goyal	Cognitive Science
14310057	Pradeep Raj K B	Cognitive Science
14310058	Choudhari Jayesh Tulsidas	Computer Science and Engineering
13310016	Ramendra Sahoo	Earth Sciences
14310060	Akarsh A	Earth Sciences
12350007	V Naveen Deepak	Electrical Engineering
13210022	Solanki Dhaval Shashikantbhai	Electrical Engineering
13210024	Bhoir Mandar Suresh	Electrical Engineering
13210026	Ganeriwala Mohit Dineshkumar	Electrical Engineering
13310018	Batchu Raja Sekhar	Electrical Engineering
13310023	Sneha Nitin Ved	Electrical Engineering
14310020	Anirban Roy	Electrical Engineering
14310037	Patel Diptiben Navinchandra	Electrical Engineering
14350004	Dwaipayam Ray	Electrical Engineering
15310015	Adyasha Dash	Electrical Engineering
12310030	Nagireddy Neelakanteswar Reddy	Humanities and Social Sciences
13310055	Dyotana Banerjee	Humanities and Social Sciences

14310068	Jahnu Bharadwaj	Humanities and Social Sciences
14310069	Mukta Madhav Gundi	Humanities and Social Sciences
12310026	Tvarit Ashokbhai Patel	Materials Science and Engineering
13310032	Mahesh V P	Materials Science and Engineering
13310033	Narendra Bandaru	Materials Science and Engineering
13350009	Sasmita Majhi	Materials Science and Engineering
14310047	Dharmendra Kumar	Mathematics
13310029	Ravi Kant	Mechanical Engineering

14310026	Sarode Ajinkya Ashok	Mechanical Engineering
13330002	Rukmani Bai	Physics
14330001	Aman Abhishek	Physics
14330003	Chauhan Bhavesh Jaikumar	Physics
14330004	Bharti	Physics
14330005	Vishnudath K N	Physics
14330006	Nijil Lal C K	Physics
14330007	Soumik Bandyopadhyay	Physics
15310026	Fairoos C	Physics
15330014	Varun Sharma	Physics



MEDALS AND AWARDS

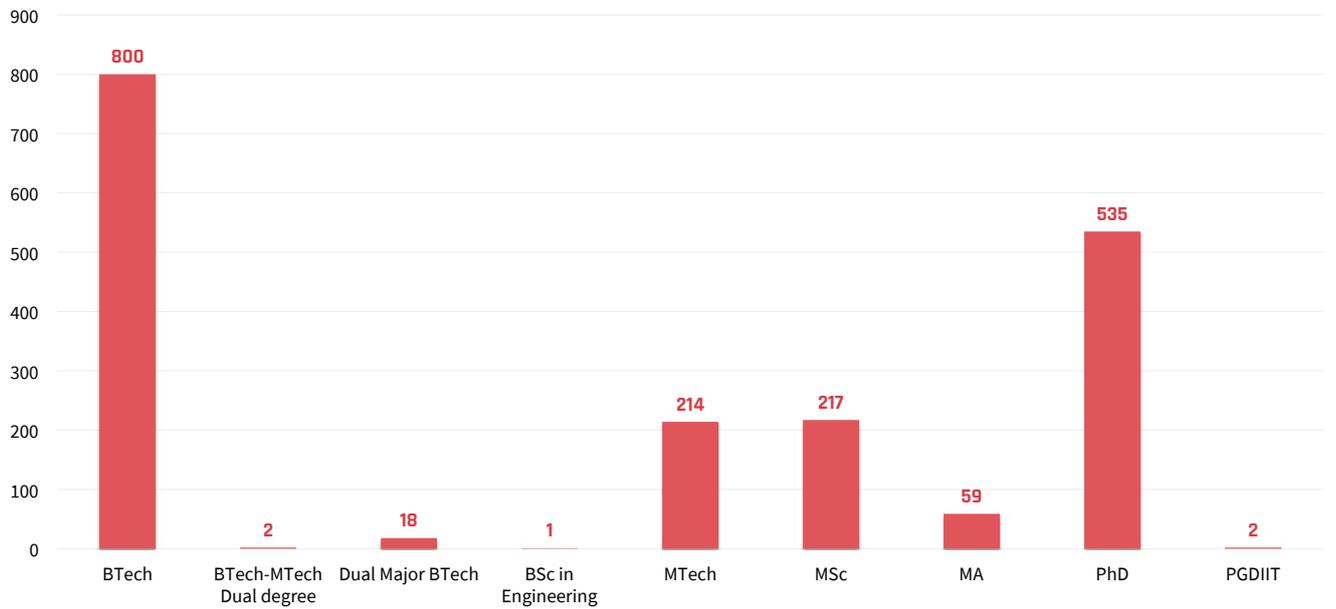
Award Category	Student Name
President's Gold Medal, BTech	Atishay Jain
President's Gold Medal, MTech	Ashish Tiwari
President's Gold Medal, MSc and MA	Samruddhi Rajesh Damle
Institute Gold Medal, Chemical Engineering, BTech	Khili Khamesra
Institute Gold Medal, Civil Engineering, BTech	Chinmay Girish Kulkarni
Institute Gold Medal, Computer Science And Engineering, BTech	Atishay Jain
Institute Gold Medal, Electrical Engineering, BTech	Shubhranshu Singh
Institute Gold Medal, Materials Science And Engineering, BTech	Ayan Rakshit
Institute Gold Medal, Mechanical Engineering, BTech	Rahil Sanwla
Institute Gold Medal, Biological Engineering, MTech	Chinmaya Panda
Institute Gold Medal, Chemical Engineering, MTech	Vishesh Sharma
Institute Gold Medal, Civil Engineering, MTech	Shalinee Bharat
Institute Gold Medal, Computer Science And Engineering, MTech	Sonawane Dhananjay Kishor Varsha
Institute Gold Medal, Electrical Engineering, MTech	Ashish Tiwari
Institute Gold Medal, Materials Science And Engineering, MTech	Ankit Jaiswal
Institute Gold Medal, Mechanical Engineering, MTech	Jadhav Sayali Nitin
Institute Gold Medal, Cognitive Science, MSc	Samruddhi Rajesh Damle
Institute Gold Medal, Chemistry, MSc	Mansi Porwal
Institute Gold Medal, Mathematics, MSc	Kuntal Banerjee
Institute Gold Medal, Physics, MSc	Adesh Kushwaha
Institute Gold Medal, Society & Culture, MA	Zaphya Jena
Institute Silver Medal, Chemical Engineering, BTech	Raman
Institute Silver Medal, Civil Engineering, BTech	Animesh Rastogi
Institute Silver Medal, Computer Science And Engineering, BTech	Ayush Garg
Institute Silver Medal, Electrical Engineering, BTech	Abhinav Narayan Harish
Institute Silver Medal, Materials Science And Engineering, BTech	Varri Venkata Sai Akhil
Institute Silver Medal, Mechanical Engineering, BTech	Ashar Akhil Parag
Institute Silver Medal, Computer Science And Engineering, MTech	Roop Choudhuri
Institute Silver Medal, Electrical Engineering, MTech	Deepesh Agarwal
Institute Silver Medal, Mathematics, MSc	Mihir Vilas Deo
Institute Silver Medal, Physics, MSc	Sneha Yadav
Institute Silver Medal, Society & Culture, MA	Punya Lokesh Suri
Director's Gold Medal, BTech	Animesh Rastogi
Director's Gold Medal, MTech	Ashish Tiwari
Director's Gold Medal, PhD	Dwaipayan Ray
Director's Gold Medal, MSc and MA	Vasundhara Krishnan
Director's Silver Medal, Chemical Engineering, BTech	Ritik Jain
Director's Silver Medal, Civil Engineering, BTech	Sahil Jain
Director's Silver Medal, Computer Science And Engineering, BTech	S Vinu Sankar
Director's Silver Medal, Electrical Engineering, BTech	Amit Kumar Singh Yadav

Director's Silver Medal, Materials Science And Engineering, BTech	Anushikha
Director's Silver Medal, Mechanical Engineering, BTech	Surve Sushrut Sudarshan
Award for Outstanding Innovation	Sanjay Kumar
Award for Outstanding Social Service	Mayank Kumar
Award for Integrity and Exemplary Human Qualities	Bhumika Sandilya
Award for the Outstanding Research, BTech	Naman Jain
Award for the Outstanding Research, MTech	Krishna Kumar
Award for the Outstanding Research, PhD	Bhoir Mandar Suresh
Award for the Outstanding Research, MSc and MA	Monika
Award for Outstanding Performance in Athletics	Juliana Rex
Award for Outstanding Performance in Aquatics	Dwaipayan Ray
Awards for Outstanding Performance in Arts and Culture	Akshat Bansal
Pioneer Batch Award for Outstanding Leadership	Kshitij Sendre
Award for the best performance in the core courses of Engineering Graphics, and Manufacturing and Workshop Practice	Ayush Garg
Award for the best performance in the core courses of Mathematics	Ayush Garg
Award for the best performance in the core courses of Physics, Chemistry and Life Sciences	S Deepak Narayanan
Award for the best overall performance in the core courses of Humanities and Social Sciences	Ayan Rakshit
Award for outstanding performance in the courses of Humanities and Social Sciences	Nitiksha



STUDENTS

Programme-wise Summary of Students at IITGN



As on Mar 31, 2021



SHORT COURSES

IITGN has started offering short courses since 2010. These are one credit courses with a typical 10 to 12 hour engagement. The Institute offers on an average 8-9 courses per semester totalling 168 courses to date. In particular, the Institute has offered 14 short courses in the academic year Jun 2020 - Aug 2021. These include diverse courses ranging from "Governance Structure in India" by Shri J P Gupta, IAS, to "Some Aspects of Topological and Cold Atom Systems" by Prof Krishnendu Sengupta. More than 300 students across disciplines and levels have benefitted from these courses. Short courses are a testament to the Institute's all-inclusive philosophy.

There are several reasons why course offerings in this format are important. Short courses allow:

- Active engagement with professionals and researchers globally and diversify the in-house portfolio
- To cover a wide range of topics that cannot be accommodated within the curriculum
- Promotion of interdisciplinary thinking among students through open-to-all offerings

Below is the list of short courses that were conducted during Apr 2020 to Mar 2021:

- Communicative English by **Writing Studio, IITGN**, conducted during four weekends in the span of July to Aug 2020.
- Tensor Mathematics in Constitutive Modeling by **Dr Gyan Vikash**, Assistant Professor, Civil Engineering, Shiv Nadar University, Noida, July 27 - Aug 2, 2020.
- Active Tectonics & Earthquake Geology: A tool for Seismic Hazard Assessment by **Prof Javed N Malik**, Professor, Department of Civil Engineering, IIT Kanpur, Sep 21- 30, 2020.
- Scientific Writing (Module 1-5) by **Dr Monal K Desai**, Writing Studio, IITGN, conducted every Monday and Tuesday in the span of five weeks during Sep and Oct 2020.
- Workplace Leadership for Millennial by **Prof Rajeev Rajan Sharma**, Professor at International Management Institute (IMI), New Delhi, Oct 24 to Nov 29, 2020.
- Chemical Processes A by **Dr Subhash Deodhar**, Senior Consultant, Fisher International, USA, Oct 26 to Nov 13, 2020.
- Chemical Processes B by **Dr Subhash Deodhar**, Senior Consultant, Fisher International, USA, Nov 16 to Dec 4, 2020.
- Communicative English for Staff (Basic) by **Ms Akanksha Tripathi**, former Teaching Associate, Writing Studio, IITGN, in the span of four weeks during Nov and Dec 2020.
- Communicative English for Staff (Advance) by **Ms Akanksha Tripathi**, former Teaching Associate, Writing Studio, IITGN, in the span of four weeks in the month of Jan 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 Jan 23 to Mar 6, 2021.
- Spoken Word Poetry - From Page to Stage by **Mr Nivid Desai**, a writer, translator, editor, public speaker and research scholar, Mar 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 Mar 19 to Apr 17, 2021.
- Nature-Inspired Design, **Mr Sanjay Jain**, Professor Emeritus, Avantika University and SAGE University, 2 hours/ week during Mar 20 to Apr 24, 2021.





Student Affairs

PLACEMENTS, INTERNSHIPS AND HIGHER STUDIES 2020

CAMPUS PLACEMENTS 2020

The following organisations offered campus placements for the outgoing undergraduate batch in 2020.

Names of the organisations:

Aakash Educational Services Ltd
Aarti Industries Ltd Ltd
Achnet Technologies Inc
Addverb Technologies Pvt Ltd
Affine Analytics Pvt Ltd
Ajmera Infotech Pvt Ltd
Alluvium IOT Solutions Pvt Ltd
Amul
Banco Products (India) Ltd
Barclays
Cadila Pharmaceuticals Ltd
CGI INC
Chem Academy
Clumio Technologies India LLP
Cognizant
Dai-ichi
Deepak Nitrite Ltd
Deepen AI
Diverta Inc - Japan
Doubtnut
Earthcon Systems India Pvt Ltd
Earthkids Humanity Foundation
eClerx Services Ltd

Enphase Solar Energy Pvt Ltd
GAIL
Goldman Sachs Services Pvt Ltd
GSPL
Hindprakash Group
HLE Galscoat Ltd
HPCL
HSBC Technology India
InfoStretch
Inspired Automation Future Technologies
Institute Management System (IMS), IITGN
Jay Chemicals
Jubilant Life Sciences Ltd
K12 TechnoServices Pvt Ltd
Kuken Kogyo Co Ltd, Japan
L&T Construction
Larsen & Toubro Infotech Ltd
Linde Engineering India Pvt Ltd
Meccademia Education Institute
Nessa Illumination Technologies Pvt Ltd
Nutanix Technologies India Pvt Ltd
NXP Semiconductor
Quixote Automotive Technologies Pvt Ltd

Raam Group
Redpine Signals India Pvt Ltd
RKC Infrabuilt Pvt Ltd
S&P Global
Samsung R&D Institute India, Noida
S-Cube
Sigmoid
SiliConch Systems Pvt Ltd
SRF Ltd
Tata Consultancy Services (Research and Innovation Group)
TATA Consulting Engineers Ltd
Testbook
Thornton Tomasetti
Tonichi Insatsu Co Ltd - Japan
Trading Technologies India Pvt Ltd
Wipro Ltd
Worley
ZopSmart
ZS Associates India Pvt Ltd



SUMMER INTERNSHIPS 2020

IITGN considers internships as a valuable mechanism through which students gain exposure to real-world problems and cutting-edge research by working in leading academic institutions and industries. Students are encouraged to take up internships that suit their exploratory instincts and future plans.

A total of 14 students did their internships virtually in the following international institutions:

List of Foreign Institutions

Name of Student	Discipline	Name of Institution
Vedanta Krishna Bhutani	Electrical Engineering	California Institute of Technology, USA
Ribhu Vajpeyi	Electrical Engineering	Carnegie Mellon University, USA
Mohammed Aasim Shaikh	Electrical Engineering	King Abdullah University of Science and Technology, Saudi Arabia
Pardeshi Shweta Rajesh	Electrical Engineering	Nanyang Technological University, Singapore
Nidhin Harilal	Computer Science and Engineering	Northeastern University, USA
Pranjali Anil Borse	Civil Engineering	Northeastern University, USA
Lovepreet Singh	Computer Science and Engineering	Shantou University, China
Kishen N Gowda	Computer Science and Engineering	University of Bergen, Norway
Vraj Patel	Computer Science and Engineering	University of Bergen, Norway
Kaoshik Ronak Nitin	Electrical Engineering	University of California Santa Barbara, USA
Jain Harshil Rakesh	Computer Science and Engineering	University of Mannheim, Germany
Chauhan Jainish Nileshkumar	Electrical Engineering	University of South Carolina, USA
Deepika Soni	Electrical Engineering	University of Southern California, USA
Mulastham Amitha Rani	Materials Engineering	University of Washington, USA

List of Indian Organisations

Another set of students (116 in the summer and 39 in the winter) did their internships in various leading industries and institutions within India:

Domestic Internships (Summer)

Student Name	Discipline	Organisation / Institute
Shaurya Agarawal	Computer Science and Engineering	Accenture
Shivam Sahnii	Computer Science and Engineering	Aivid Technologies
Patel Ajjkumar Dahyalal	Electrical Engineering	AP Analytica LLP
Varun Jain	Electrical Engineering	Avid TechVision
Parth Upadhayay	Chemical Engineering	
M Mohit Mina	Computer Science and Engineering	Barclays
Soni Anirudha Pradeepkumar	Mechanical Engineering	
Aishna Agrawal	Computer Science and Engineering	
Janvi Vinodkumar Thakkar	Computer Science and Engineering	
Joshi Devvrat Shailesh	Computer Science and Engineering	
Athave Prasad Devidas	Computer Science and Engineering	
Priyam Tongia	Computer Science and Engineering	
Siddharth Soni	Computer Science and Engineering	Capgemini
Vivek Modi	Computer Science and Engineering	
Jani Dhyye Hareshbhai	Electrical Engineering	
Jayesh Dnyaneshwar Salunkhe	Electrical Engineering	
Kumar Ayush Paramhans	Electrical Engineering	
Jay Rahulbhai Shah	Electrical Engineering	
Mody Shril Paresh	Electrical Engineering	
Sachin Yadav	Computer Science and Engineering	CodeChef

Student Name	Discipline	Organisation / Institute
Aastha Jivrajani	Materials Engineering	CueMath
Narni Vishnu Karthikeya	Electrical Engineering	DE Shaw
Prakash R	Electrical Engineering	
Abhisht Tiwari	Computer Science and Engineering	EarlSalary
Ayush Agarwal	Computer Science and Engineering	
Rachit Ray	Chemical Engineering	Edvizo Media Ltd
Pranjal Singh	Civil Engineering	
Dhanesh Jagdish Bhutada	Chemical Engineering	Fair Insights
Shuchi Dharendra Sanandiyaa	Materials Engineering	Forbes Marshall
Shah Meet Parag	Mechanical Engineering	
Parimi Siva Krishna Sarma	Computer Science and Engineering	Franklin Templeton Investments
Nishikant Parmar	Computer Science and Engineering	Frrle AI
Yannawar Pranav Sameer	Mechanical Engineering	Futures First
Aglawe Anup Ravindra	Computer Science and Engineering	Goldman Sachs
Kavita Vaishnav	Computer Science and Engineering	
Bhavya Gupta	Chemical Engineering	Growfix
Mithbavkar Ojas Shashikant	Electrical Engineering	i3 systems
Shreya Pamecha	Electrical Engineering	IIT Bombay
Anshuman Yadav	Computer Science and Engineering	IIT Gandhinagar
Mrinal Anand	Computer Science and Engineering	
B Dhyanesh	Materials Engineering	
Shah Dhruval Suresh	Materials Engineering	
Prasanna D	Chemical Engineering	
Tanmay Sharma	Chemical Engineering	
Abhinav Kumar	Computer Science and Engineering	
Kabra Arpita Sanjay	Electrical Engineering	
Dhruvi Prakash Lodhavia	Electrical Engineering	
Shastri Hetvi Hiren	Electrical Engineering	
Palak Purohit	Electrical Engineering	
Udit	Electrical Engineering	
Dhruv Menon	Materials Engineering	
Rahul Gupta	Mechanical Engineering	
Shruti Prakash Gupta	Electrical Engineering	
Rwik Rana	Mechanical Engineering	IIT Kanpur
Chris Francis	Computer Science and Engineering	Indian Institute of Science Bangalore
Viraj Kalpesh Shah	Electrical Engineering	Intelligent Industrial Internet Systems
Tanmaey Gupta	Electrical Engineering	ITC Ltd
Maitreya Thakur	Chemical Engineering	J K Lakshmi Cement Ltd
Shivanshu Sharma	Electrical Engineering	
Poojan Modi	Mechanical Engineering	JSW Group
Vandit Goyal	Mechanical Engineering	
Rahul Dhamania	Chemical Engineering	Jubilant Life Sciences
Rajas Prasad Shah	Chemical Engineering	
Tandale Akshay Jay	Mechanical Engineering	KPIT
Shah Dhruvin	Mechanical Engineering	
Patel Urvishkumar Jayrambhai	Electrical Engineering	London Town Group
Lodha Ayush Manojkumar	Civil Engineering	
Jethva Utsav	Electrical Engineering	Mahindra and Mahindra
Harsh Mahendra Bhai	Computer Science and Engineering	MCG AI
Yash Gautam Kamble	Electrical Engineering	MiCoB Pvt Ltd

Student Name	Discipline	Organisation / Institute
Akshat Mangal	Chemical Engineering	Mysuru Consulting Group
Gaurav Sonkusle	Chemical Engineering	
Ajinkya Shirish Pawar	Computer Science and Engineering	
Amireddy Manisha	Computer Science and Engineering	
Preeti Chiluveru	Computer Science and Engineering	
Pushkar Mujumdar	Computer Science and Engineering	
Raghav Goyal	Computer Science and Engineering	
Shah Jay Ashish	Chemical Engineering	NEC Labs
Mrityunjay Saraf	Chemical Engineering	Necesario Innovations Pvt Ltd
Khandare Vaibhav Dilip	Chemical Engineering	
Prajapati Pradipbhai Dahyabhai	Electrical Engineering	
Meshram Yash Arun	Mechanical Engineering	
Debarya Das	Computer Science and Engineering	Newzera Tech Labs
Onteddu Rama Krishna Reddy	Electrical Engineering	
Aditya Tripathi	Computer Science and Engineering	
Dishank Goel	Computer Science and Engineering	
Aditya Garg	Computer Science and Engineering	Nutanix Technologies
Anubhav Jain	Computer Science and Engineering	
Lakshay	Computer Science and Engineering	
Anand Hiren Merchant	Chemical Engineering	OYO Rooms
Sanjeet Kumar Yadav	Chemical Engineering	
Nayan Chaudhary	Electrical Engineering	
Pundru Chandrahas	Electrical Engineering	
Ujjwal Gautam	Materials Engineering	
Ravi Rathod	Electrical Engineering	Peacock Solar
Parth Shinde	Mechanical Engineering	Piramal Enterprises Ltd
Chandan Maji	Computer Science and Engineering	Publicis Sapient
Ram Bhagwan Prajapat	Computer Science and Engineering	
Rohit Shantaram Patil	Computer Science and Engineering	
Baheti Sakshi Prabhulal	Chemical Engineering	PureScan AI
Daga Parth Prakash	Chemical Engineering	Recko
Shah Jainam	Mechanical Engineering	Sun Engineers
Vrutik Chandresh Shah	Electrical Engineering	Tata Consultancy Services
Dhruv Mahesh Bukinkere	Materials Engineering	Thermax Ltd
Shubhi Maheshwari	Chemical Engineering	TRA Research
Ankush Mishra	Mechanical Engineering	Udaipur Cement Works Ltd
Shivang Pareek	Mechanical Engineering	
Aditi Gera	Chemical Engineering	
Gondalia Dhruvi Ramniklal	Civil Engineering	
Vaibhav Sharma	Civil Engineering	
Bhasin Abhiraj	Mechanical Engineering	
Jayesh Khanna	Mechanical Engineering	
Rachit Shrimal	Mechanical Engineering	
Shirodkar Rohan Ninad	Mechanical Engineering	
Dip Nilim Das	Mechanical Engineering	White Panda
Bhatt Pratyush Hemant	Chemical Engineering	Your HR Buddy

Domestic Internships (Winter)

Student Name	Discipline	Organisation / Institute
Aastha Jivrajani	Materials Engineering	Aad Express
Chenna Kesava Tirunagari	Computer Science and Engineering	Alluvium IOT
Lovepreet Singh	Computer Science and Engineering	Bennett University
Narni Vishnu Karthikeya	Electrical Engineering	Cappgemini
Patel Ajkkumar Dahyalal	Electrical Engineering	
Gudivada Venkata Prudvi Tej	Electrical Engineering	
Katike Pranay Deep Reddy	Materials Engineering	
Katpara Shruti Ashokkumar	Computer Science and Engineering	
Pushkar Mujumdar	Computer Science and Engineering	
Reddy Venkata Neeraj Kumar	Electrical Engineering	
Viraj Kalpesh Shah	Electrical Engineering	
Abhigyan Martin Ninama	Computer Science and Engineering	
Palak Purohit	Electrical Engineering	
Aditi Gera	Chemical Engineering	Ernst & Young
Bhavya Gupta	Chemical Engineering	
Harsh Mahendra Bhai	Computer Science and Engineering	
Maitreya Thakur	Chemical Engineering	Gujarat Polytechnic
Poojan Modi	Mechanical Engineering	
Anubhav Jain	Computer Science and Engineering	IIM Ahmedabad
Shuchi Dharendra Sanandiya	Materials Engineering	IISc Bangalore
Preeti	Civil Engineering	IIT Bombay
Chauhan Jainish Nileshkumar	Electrical Engineering	IIT Gandhinagar
Kakumani Prudhvi Raj	Computer Science and Engineering	
Lodha Ayush Manojkumar	Civil Engineering	
Hardik Khichi	Civil Engineering	
Ashok Kumar	Civil Engineering	
Abhinav	Mechanical Engineering	ISRO
Khandare Vaibhav Dilip	Chemical Engineering	J K Lakshmi cement
Jaspreet Singh	Electrical Engineering	
Preet Gokulesh Patel	Electrical Engineering	LeadingIndia.AI
Mohmmad Aslam	Chemical Engineering	
Harish Meghwal	Electrical Engineering	Nuclear Power Corporation of India Limited
Patel Smit Bhupeshbhai	Materials Engineering	Photom Technologies, Ahmedabad
Utsav Prashant Racca	Civil Engineering	Sambhavana Institute of Public policy
Karanam Avinash	Mechanical Engineering	Sandvik
S Ganesh	Mechanical Engineering	Uflex
Unnat Nikhil Dave	Electrical Engineering	Verzeo EduTech
Bodala Yajurvedh	Computer Science and Engineering	
Sayan Biswas	Materials Engineering	

CLASS OF 2020 GRADUATES PURSUING HIGHER STUDIES ABROAD

Student Name	Discipline	Programme	Institute	Country
BTECH				
Pranjali Jain	Computer Science and Engineering	MS	École Polytechnique Fédérale de Lausanne	Switzerland
S Vinu Sankar	Computer Science and Engineering	PhD	The University of Maryland	USA
Abhinav Harish	Electrical Engineering	MS	Georgia Tech	USA
Akhil Anil Rajput	Civil Engineering	PhD	Texas A&M University	USA
Animesh Rastogi	Civil Engineering	Integrated Masters and PhD	University of Texas at Austin	USA
Anushikha	Materials Science and Engineering	MS	Carnegie Mellon University	USA
Ashar Akhil Parag	Mechanical Engineering	PhD	Colorado School of Mines	USA
Atishay Jain	Computer Science and Engineering	PhD	Brown University	USA
Ayan Rakshit	Materials Science and Engineering	MRes+PhD	University of Cambridge	UK
Bharg Mehta	Mechanical Engineering	MS	University of Pennsylvania	USA
Chinmay Dashpute	Mechanical Engineering	MS	University of Illinois at Urbana-Champaign	USA
Chinmay Girish Kulkarni	Civil Engineering	MS	State University of New York, University at Buffalo	USA
Girish Chandar G	Electrical Engineering	MS	University of Michigan	USA
Kavan Joshi	Materials Science and Engineering	MS	University of California, Davis	USA
Rahul Rajeev	Materials Science and Engineering	PhD	Clemson University	USA
Ritik Dutta	Computer Science and Engineering	MS	University of Illinois at Urbana-Champaign	USA
Shreyas Singh	Computer Science and Engineering	PhD	The University of Utah	USA
Shubhranshu Singh	Electrical Engineering	MS	Carnegie Mellon University	USA
Siddharth Krishnan	Electrical Engineering	MS	University of Illinois at Urbana-Champaign	USA
Sushrut Surve	Mechanical Engineering	PhD	Cornell University	USA
Varri Venkata Sai Akhil	Materials Science and Engineering	PhD	University of Munster	Germany
Varun Gohil	Computer Science and Engineering	PhD	Cornell University	USA
Wani Tejas Sakhahari	Civil Engineering	MS	Georgia Institute of Technology	USA

Student Name	Discipline	Programme	Institute	Country
BTECH-MSc DUAL DEGREE				
Chitta Sai Pavan	BTech - Electrical Engineering MSc Physics	PhD	Northwestern University	USA
MSc				
Kuntal Banerjee	Mathematics	PhD	University Of Saskatchewan	Canada
Jaya Bharti	Chemistry	PhD	University of Paris	France
Prashanti Ganesh	Cognitive Science	PhD	Humboldt University of Berlin	Germany
Parul	Chemistry	PhD	Institute of Organic Chemistry, Polish Academy of Sciences	Poland
Ishita Arun	Cognitive Science	PhD	Dartmouth College	USA
Mansi Porwal	Chemistry	PhD	University of Illinois Chicago	USA
Ojasvi Verma	Chemistry	PhD	Rice University	USA
Vaibhava Srivastava	Mathematics	PhD	Iowa State University	USA
MTECH				
Sidharth Sarmah	Materials Science and Engineering	PhD	McGill University	Canada
Debarpan Ghosh	Biological Engineering	PhD	Institut Curie (PSL University)	France
Aqbal Ahmad	Mechanical Engineering	PhD	King Fahd University of Petroleum & Minerals	Kingdom of Saudi Arabia
Aravintha Siva M	Biological Engineering	PhD	University of Michigan	USA
Deepesh Agarwal	Electrical Engineering	PhD	Kansas State University	USA
Ranga Teja Pidathala	Materials Science and Engineering	PhD	University of Louisville	USA
Rohitashva Kumar Singh	Civil Engineering	PhD	University of Texas	USA
Sheetal Gujarati	Civil Engineering	PhD	University of Tennessee	USA
MA				
Noyonika Das	HSS	PhD	University of Amsterdam	Netherlands
PGDIIT				
Kazani Aman Sirajbhai	Civil Engineering	Master of Engineering	University Of Ottawa	Canada

CLASS OF 2020 GRADUATES PURSUING HIGHER STUDIES IN INDIA

Name of the Student	Discipline	Programme	Name of the Institute
BTECH			
Akshay Mittal	Civil Engineering	MTech	IIT Madras
Danish Mansoor	Civil Engineering	MTech	IIT Gandhinagar
Dharmendra Sablaniya	Materials Science and Engineering	MTech	IIT Kanpur
Ishank Singh	Civil Engineering	MTech	IIT Madras
Karthik Subramanya Karvaje	Mechanical Engineering	MTech	IIT Madras
Kunal Verma	Computer Science and Engineering	MTech	IIT Bombay
Vasu Bhalothia	Electrical Engineering	PGPDM	IIM Ahmedabad
Vedant Gote	Mechanical Engineering	MBA	IIM Calcutta
MSc			
Neha Singh	Physics	PhD	IIT Delhi
Siyaram Mina	Physics	PhD	University of Rajasthan
MTECH			
Ashish Tiwari	Electrical Engineering	PhD	IIT Gandhinagar
Challa Sai Ajay Narendra	Mechanical Engineering	PGDIE	National Institute of Industrial Engineering
Harvansh Dandelia	Mechanical Engineering	PhD	IIT Gandhinagar
Krishna Kumar	Electrical Engineering	PhD	IIT Gandhinagar
Shubham Patil	Electrical Engineering	PhD	IIT Bombay
Jadhav Sayali Nitin	Mechanical Engineering	PhD	IIT Gandhinagar
Alok Kumar Thakur	Earth Sciences	PhD	IIT Gandhinagar
Md Nasre Alam	Chemical Engineering	PhD	IIT Delhi
Priya Tiwari	Materials Science and Engineering	PhD	IIT Bombay
Srusti Bala Harsha Teja	Civil Engineering	PhD	IIT Gandhinagar



CASH AWARD FOR RESEARCH PUBLICATIONS

In its 9th meeting on Mar 28, 2013 the Board of Governors had approved a cash award scheme as an incentive for undergraduate and postgraduate students to publish in peer-reviewed journals. The following students were given cash awards during the year 2020-21:

Name of the Student	Programme
S Vinu Sankar	BTech
Rohit Sharma	BTech
Naman Jain	BTech
Kukunuri Sai Venkata Ratna Rithwik	BTech
Sai Aparna Aketi	BTech (alumnus)
Barath Kanna Mahadevan	BTech (alumnus)
Athira Haridas	MTech (alumnus)
Trisrota Deb	MTech (alumnus)
Pinki	MTech (alumnus)
Smriti Gupta	MTech (alumnus)
Rohit Saraswat	MTech (alumnus)
Ojasvi Verma	MSc
Jaya Bharti	MSc
Shivam Kumar	MSc
Pankaj Kumar	MSc
Anupam Sharma	MA (alumnus)

SCHOLARSHIPS & FINANCIAL SUPPORT TO STUDENTS

IITGN believes that financial constraints should not limit the academic pursuit of any student. The Institute's highly liberal financial aid and scholarship programmes ensure that no student feels disadvantaged due to his/her financial situation. The Institute has thus constituted numerous scholarships and financial assistance mechanisms such as the Donor Scholarships, Excellence Scholarships, TML-FAP (Tata Motors Ltd Financial Aid

Programme), tuition fee waivers etc. In addition to the above, the Institute also provides financial support in the form of financial grants, interest-free short/long term loans to deserving students for their needs towards expenditures such as tuition fee, hostel and mess fee, books, computer, pocket expenses, medical emergencies (beyond what is covered by insurance), social and cultural activities, internships and educational tours, etc.

The terms for interest-free loans and financial grants are as below:

- The short-term loans are provided to deserving students with demonstrated needs for the above-stated purposes from the Student Benevolent Fund. The student may repay the loan using their stipend, personal sources or earning through the oCEO programme.
- The long-term loans are provided to deserving students with demonstrated needs for the above-stated purposes from the Student Benevolent Fund. The repayment dates for the long-term loans may extend up to a maximum of 36 months from the recipient student's date of graduation.
- The financial grants are provided to deserving students with demonstrated needs for the above-stated purposes from the Student Benevolent Fund. Unlike the short-term and long-term loans, the financial support received from such grants are not deemed to be repaid by the beneficiary students.

Overall Scholarships and Financial Support to Students

Type of Scholarship and Financial Assistance	2020-21	
	No of Beneficiaries	Amount of Scholarship (in Rs)
Free Basic Messing and Pocket Allowance of Rs 250/- Per Month for Ten Months	73	25,52,740
Donor Scholarships	42	49,65,000
Excellence Scholarships	28	5,30,000
TML-FAP Assistance	47	22,29,000
Tuition Fee Waiver (UG)	186	3,29,00,042
Tuition Fee Waiver (PG)	88	8,65,000
Interest Free Loan and Grants (Financial Assistance provided from the Student Benevolent Fund)	101	50,91,837
Laptop Grant	79	31,64,000
Total (in Rs)	644	5,22,97,619

FINANCIAL AID TO STUDENTS

FINANCIAL AID FOR UNDERGRADUATE STUDENTS

As per current norms in all the IITs, students with parental income ranging between Rs 1 lakh to Rs 2.5 lakhs are provided with $\frac{2}{3}$ tuition fees waiver. However, at IITGN, an additional $\frac{1}{3}$ tuition fee reimbursement is provided to them so that they effectively receive full tuition fee exemption for their education at IITGN. This assistance is provided from the Student Benevolent & Welfare Fund or the Excellence Funds in the Endowment.

A total of 48 BTech students received this additional $\frac{1}{3}$ tuition fee waiver during the academic year 2020-21.

FINANCIAL AID FOR MASTERS STUDENTS

Students with parental income upto Rs 2.5 lakhs are provided with a full tuition fee reimbursement for their education at IITGN. This assistance is provided from the Student Benevolent & Welfare Fund or the Excellence Funds in the Endowment.

A total of 88 Masters (MTech, MSc and MA) students received full tuition fee waiver during the academic year 2020-21.

FREE BASIC MESSING AND POCKET ALLOWANCE ASSISTANCE

All students of the SC/ST category avail full tuition fee waiver. In addition, the Institute provides free basic messing and nominal pocket allowance of Rs 250 per month for ten months to SC/ST students whose annual parental income is upto Rs 4.5 Lakhs. This assistance is provided to BTech and MSc (Physics, Chemistry and Mathematics) students.

A total of 55 undergraduate and 18 postgraduate students from the SC/ST category, whose annual parental income was within the prescribed limit for this assistance, were granted the facility for free basic messing and a pocket allowance of Rs 250 per month for ten months during the academic year 2020-21.

SCHOLARSHIPS FOR EXCELLENCE

IITGN has instituted several excellence scholarships for outstanding performance in academics, sports & games, arts & culture, and social work & leadership. These scholarships are awarded on the basis of outstanding achievements in respective fields. The scholarship carries a monetary benefit of Rs 2,000 per month for 10 months. However, if the awardee is also a recipient of any other scholarship of equal or higher value, then he/she is eligible only for a one-time receipt of Rs 5,000. Excellence scholarships for the academic year 2020-21 have been awarded as follows:

SCHOLARSHIP FOR EXCELLENCE IN ACADEMICS

Utkarsh Sandeep Gangwal, Shantanu Sakti Jana, Vraj Patel, Prakash R, Shah Dhruvin, and Varun Biren Dolia are the recipients of scholarship for excellence in Academics from BTech 2017 batch.

Dave Hari Manish, Baheti Sakshi Prabhulal, Kushagra Sharma, Roopak Sharma, Jayesh Khanna, and Dhruv Menon are the recipients of scholarship for excellence in Academics from BTech 2018 batch.

Pallav Jain, Shreyshi Singh, Manas Mulpuri, Shrreya Singh, Saagar Parikh, and Eshika Pathak are the recipients of scholarship for excellence in Academics from BTech 2019 batch.

SCHOLARSHIP FOR EXCELLENCE IN SPORTS & GAMES

Vala Vedangraj Rajendrasinh, Mulastham Amitha Rani, Boddu Sai Gowri Jhansi, Deependra Kumar, Sakshi Yogesh Kabra, and Shah Dhruval Suresh were awarded the scholarship for excellence in Sports & Games for the academic year 2020-21.

SCHOLARSHIP FOR EXCELLENCE IN ARTS & CULTURE

Khot Krutarth Hemant and Aishna Agrawal were awarded the scholarship for excellence in Arts & Culture for the academic year 2020-21.

EXCELLENCE IN SOCIAL WORK & LEADERSHIP

Parth Shinde and Deepika Soni were awarded the scholarship for excellence in Social Work & Leadership for the academic year 2020-21.



SCHOLARSHIPS RECIPIENT

SCHOLARSHIPS FOR EXCELLENCE

SCHOLARSHIP	RECIPIENT'S NAME
Scholarship for Excellence in Academics from BTech 2017 Batch	Utkarsh Sandeep Gangwal, Shantanu Sakti Jana, Vraj Patel, Prakash R, Shah Dhruvin, and Varun Biren Dolia
Scholarship for Excellence in Academics from BTech 2018 Batch	Dave Hari Manish, Baheti Sakshi Prabhulal, Kushagra Sharma, Roopak Sharma, Jayesh Khanna, and Dhruv Menon
Scholarship for Excellence in Academics from BTech 2019 Batch	Pallav Jain, Shreyshi Singh, Manas Mulpuri, Shrreya Singh, Saagar Parikh, and Eshika Pathak
Scholarship for Excellence in Arts & Culture	Khot Krutarth Hemant and Aishna Agrawal
Scholarship for Excellence in Social Work & Leadership	Parth Shinde and Deepika Soni
Scholarship for Excellence in Sports & Games	Vala Vedangraj Rajendrasinh, Mulastham Amitha Rani, Boddu Sai Gowri Jhansi, Deependra Kumar, Sakshi Yogesh Kabra, and Shah Dhruval Suresh

SCHOLARSHIPS FOR STUDENTS

SCHOLARSHIP	RECIPIENT'S NAME
Chandrakant and Patricia Desai Scholarship	Trivedi Shubhang Krishnakant
Prof M H Divekar Scholarship	Shantanu Sakti Jana
Kankuben Bakshirambhai Gelot Scholarship	Pardeshi Shweta Rajesh
Neha & Vinay Gupta Scholarship	Bhavya Gupta
Ashok Jain Scholarship	Sachin Yadav
Seema Jain Scholarship	Gaurav Kumar
Mrs Sita Jha Memorial Scholarship	Sakshi Yogesh Kabra
P K Kelkar Scholarship	Janvi Vinodkumar Thakkar
S C Mehrotra Scholarship	Rensi Pipalia
Erach and Mehroo Mehta Merit Scholarship	Hitarth Gandhi, Viramgami Gaurav, Lavti Shubh Sunil, Tumati Rohith Kumar Reddy, Dhairya Shah, Saatvik Rao, Bhavesh Jain, Venkata Sriman Narayana Malli and Kanishk Singhal
Bhai Krishna Mohan Mittal Scholarship	Sanskar Anil Nalkande
Bhai Suresh Mohan Mittal Scholarship	Lodha Ayush Manojkumar
Prof KV Venkatesha Murthy Scholarship	Pandit Shubham Bhagvandas
Dr JL Nayyar Scholarship	Chris Francis
Professor DV Pai Scholarship	Shiva
Satyaram Scholarship	Agrawal Parth Sunilkumar, Ayush Kumar Gupta, Narni Vishnu Karthikeya, Patel Vandan, Ram Udit Saadh, Amlin Jose, Tella Selva Sowmya Rani and Yashi Gaur
Lalita J Shah & Jayantilal B Shah Scholarship	Thakar Devanshu Nilesh
Bipin and Rekha Shah Scholarships	Udit
Daya Shanker & Shakuntala Scholarship	Deep Samir Thakkar
Vimala Srinivas Scholarship	Solanki Soham Pratik
Prof S P Sukhatme Scholarship	Dhvani Manish Shah
Durga Devi Sultania Scholarship	Raghav Goyal
Mahabir Prasad Sultania Scholarship	Jitender Kumar
Santosh Rani Tandon Scholarship	Pranjali Anil Borse
Prof Nitish Thakor Scholarship	Mrinal Anand
Vegshakti Mahila Kalyan Sangathan Scholarship	Priya Gupta and Veena K



SCHOLARSHIPS FOR STUDENTS

CHANDRAKANT & PATRICIA DESAI SCHOLARSHIP

Chandrakant and Patricia Desai Scholarship was instituted in the year 2017 and is open to all BTech students. The scholarship amount is Rs 1 lakh per year and is awarded every year in order to support internships (international or domestic), special projects and opportunities, financial needs, etc. **Trivedi Shubhang Krishnakant** is the recipient of this scholarship for the academic year 2020-21.

PROF M H DIVEKAR SCHOLARSHIP

The Prof M H Divekar Scholarship was instituted in the year 2014 and is open for the third year BTech students of Chemical Engineering. The scholarship amount is Rs 40,000 and is awarded every year to the student securing the highest grade in the Chemical Engineering course at the end of the third year. **Shantanu Sakti Jana** is the recipient of this scholarship for the academic year 2020-21.

KANKUBEN BAKSHIRAMBHAI GELOT SCHOLARSHIP

Kankuben Bakshirambhai Gelot Scholarship was instituted in the year 2020 and is open to all female BTech students. The scholarship amount is Rs 1 lakh per year and is awarded every year in order to support financial needs, funding internships (international or domestic), special projects and opportunities, etc. **Pardeshi Shweta Rajesh** is the recipient of this scholarship for the academic year 2020-21.

SEEMA JAIN SCHOLARSHIP

Seema Jain Scholarship was instituted in the year 2019 and is open to all the BTech students. The scholarship amount is Rs 1 lakh per year and is awarded every year to support internships (international or domestic), special projects and opportunities, financial needs, etc. **Gaurav Kumar** is the recipient of this scholarship for the academic year 2020-21.

MRS SITA JHA MEMORIAL SCHOLARSHIP

Mrs Sita Jha Memorial Scholarship was instituted in the year 2018 and is open to all BTech students. The scholarship amount is Rs 1 lakh per year and is awarded every year in order to support internships (international or domestic), special projects and opportunities, financial needs, etc. Female students are usually given priority. **Sakshi Yogesh Kabra** is the recipient of this scholarship for the academic year 2020-21.

NEHA & VINAY GUPTA SCHOLARSHIP

Neha & Vinay Gupta Scholarship was instituted in the year 2019 and is open to all BTech students. The scholarship amount is Rs 1 lakh per year and is awarded every year in order to support internships (international or domestic), special projects and opportunities, financial needs, etc. **Bhavya Gupta** is the recipient of this scholarship for the academic year 2020-21.

ASHOK JAIN SCHOLARSHIP

Ashok Jain Scholarship was instituted in the year 2019 and is open to all BTech students. The scholarship amount is Rs 1 lakh per year and is awarded every year in order to support internships (international or domestic), special projects and opportunities, financial needs, etc. BTech students with a minimum CPI of 6.5 are eligible. **Sachin Yadav** is the recipient of this scholarship for the academic year 2020-21.



P K KELKAR SCHOLARSHIP

The P K Kelkar Scholarship was instituted in the year 2016 and is open to all BTech students. The scholarship amount is Rs 1 lakh per year and is awarded every year in order to support internships (international or domestic), special projects and opportunities, financial needs, etc. **Janvi Vinodkumar Thakkar** is the recipient of this scholarship for the academic year 2020-21.

S C MEHROTRA SCHOLARSHIP

The S C Mehrotra Scholarship was instituted in the year 2010 and is open to all the BTech students. The scholarship amount is Rs 1 lakh per year and is awarded every year in order to support internships (international or domestic), special projects and opportunities, financial needs, etc. **Rensi Pipalia** is the recipient of this scholarship for the academic year 2020-21.

BHAI SURESH MOHAN MITTAL SCHOLARSHIP AND BHAI KRISHNA MOHAN MITTAL SCHOLARSHIP

These scholarships were instituted in the year 2018 and 2019 and are open to all BTech students at IITGN. The scholarship amount is Rs 1 lakh and is awarded every year to support internships (international or domestic), special projects and opportunities, financial needs, etc. **Lodha Ayush Manojkumar** is the recipient of Bhai Suresh Mohan Mittal Scholarship for the academic year 2020-21 and **Sanskar Anil Nalkande** is the recipient of Bhai Krishna Mohan Mittal Scholarship for the academic year 2020-21.

PROFESSOR D V PAI SCHOLARSHIP

Professor DV Pai Scholarship was instituted in the year 2018 and is open to all second-year students of the MSc programme in Mathematics at IITGN whose gross annual parental income does not exceed Rs 8 lakhs per annum and has a minimum CPI of 7.0. The scholarship amount is Rs 25,000 per academic year. In addition, a book grant of total up to Rs 5,000 can be claimed by the recipient student against the actual expenditure incurred. **Shiva** is the recipient of this scholarship for the academic year 2020-21.

ERACH AND MEHROO MEHTA MERIT SCHOLARSHIP

Erach and Mehroo Mehta Merit Scholarship was instituted in the year 2019 and is open to the BTech students admitted at IITGN in AY 2019-20, AY 2020-21 and AY 2021-22. The scholarship amount is Rs 2 lakh per student annually for a period of four years with the total scholarship amount of Rs 8 Lakhs per student. The scholarship is awarded to the top five students admitted to the BTech programme at IITGN and holding a JEE Advanced rank of 1000 or better or having represented India in any recognised international Olympiad. The scholarship is renewed every year subject to satisfactory academic progress {SPI of 8.5 or minimum CPI of 8.00 (with at least normal academic load and no fail grades)} and is not under any disciplinary sanction. **Hitarth Gandhi, Viramgami Gaurav, Lavti Shubh Sunil, Tumati Rohith Kumar Reddy, Dhairya Shah, Saatvik Rao, Bhavesh Jain, Venkata Sriman Narayana Malli** and **Kanishk Singhal** are the recipients of this scholarship for the academic year 2020-21.

PROF K V VENKATESHA MURTHY SCHOLARSHIP

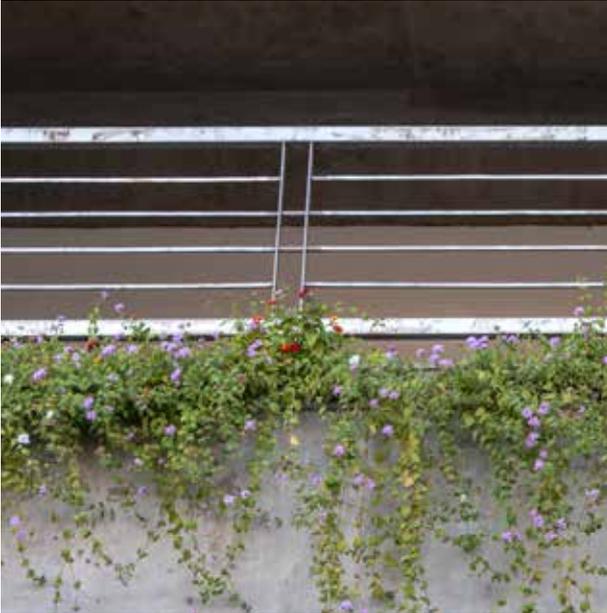
Prof KV Venkatesha Murthy Scholarship was instituted in the year 2017 and is open to all BTech students of Electrical Engineering. The scholarship amount is Rs 1 lakh per year and is awarded every year in order to support internships (international or domestic), special projects and opportunities, financial needs, etc. **Pandit Shubham Bhagvandas** is the recipient of this scholarship for the academic year 2020-21.

DR J L NAYYAR SCHOLARSHIP

Dr JL Nayyar Scholarship was instituted in the year 2017 and is open to all BTech students. The scholarship amount is Rs 1 lakh per year and is awarded every year in order to support internships (international or domestic), special projects and opportunities, financial needs, etc. **Chris Francis** is the recipient of this scholarship for the academic year 2020-21.

SATYARAM SCHOLARSHIP

The Satyaram Scholarships were instituted in the year 2016. Students with a minimum CPI of 6.5 and whose family annual income is not more than Rs 3 lakhs are eligible for this scholarship. The scholarship amount is Rs 1 lakh per year per student and a total of 8 students were awarded in the year 2020-21. The recipient student continues to get the scholarship support till the completion of his/her BTech programme at IITGN, subject to meeting the eligibility criteria. The awardee is expected to financially help at least one needy IITGN student in the future. **Agrawal Parth Sunilkumar, Ayush Kumar Gupta, Narni Vishnu Karthikeya, Patel Vandan, Ram Udit Saadh, Amlin Jose, Tella Selva Sowmya Rani** and **Yashi Gaur** are the recipients of this scholarship for the academic year 2020-21.



LALITA J SHAH & JAYANTILAL B SHAH SCHOLARSHIP

The Lalita J Shah & Jayantilal B Shah Scholarship was instituted in the year 2016 and is open to all BTech students. The scholarship amount is Rs 1 lakh per year and is awarded every year in order to support internships (international or domestic), special projects and opportunities, financial needs, etc. **Thakar Devanshu Nilesh** is the recipient of this scholarship for the academic year 2020-21.

BIPIN AND REKHA SHAH SCHOLARSHIPS

Bipin and Rekha Shah Scholarships were instituted in the year 2018 and are open to all BTech students of Electrical Engineering. The scholarship amount is Rs 1 lakh and is awarded every year to support internships (international or domestic), special projects and opportunities, financial needs, etc. **Udit** is the recipient of this scholarship for the academic year 2020-21.

DAYA SHANKER & SHAKUNTALA SCHOLARSHIP

Daya Shanker & Shakuntala Scholarship was instituted in the year 2020 and is open to all BTech students. The scholarship amount is Rs 1 lakh per year and is awarded every year in order to support internships (international or domestic), special projects and opportunities, financial needs, etc. **Deep Samir Thakkar** is the recipient of this scholarship for the academic year 2020-21.

VIMALA SRINIVAS SCHOLARSHIP

Vimala Srinivas Scholarship was instituted in the year 2019 and is open to all BTech students. The scholarship amount is Rs 1 lakh per year and is awarded every year in order to support internships (international or domestic), special projects and opportunities, financial needs, etc. BTech students with a minimum CPI of 6.5 are eligible. **Solanki Soham Pratik** is the recipient of this scholarship for the academic year 2020-21.

PROF S P SUKHATME SCHOLARSHIP

Prof S P Sukhatme Scholarship was instituted in the year 2019 and is open to all the BTech Students at IITGN. The scholarship amount is Rs 1 lakh per year and is awarded every year in order to support internships (international or domestic), special projects and opportunities, financial needs, etc. **Dhvani Manish Shah** is the recipient of this scholarship for the academic year 2020-21.

MAHABIR PRASAD SULTANIA SCHOLARSHIP AND DURGA DEVI SULTANIA SCHOLARSHIP

These Scholarships were instituted in the year 2016 and are open to all BTech students. The scholarship amount is Rs 1 lakh and is awarded every year to support internships (international or domestic), special projects and opportunities, financial needs, etc. **Jitender Kumar** is the recipient of Mahabir Prasad Sultania Scholarship for the academic year 2020-21 and **Raghav Goyal** is the recipient of Durga Devi Sultania Scholarship for the academic year 2020-21.



SANTOSH RANI TANDON SCHOLARSHIP

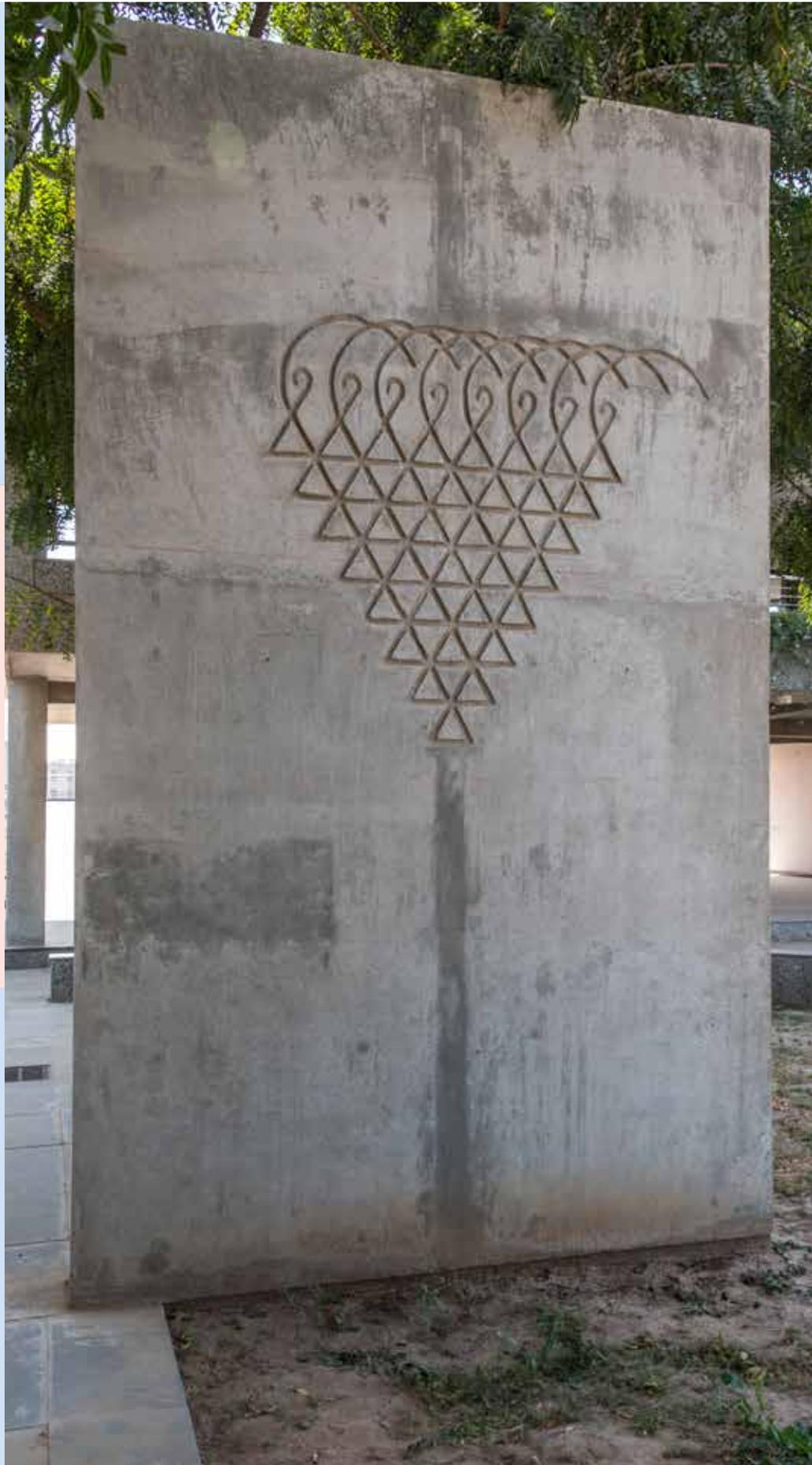
Santosh Rani Tandon Scholarship was instituted in the year 2018 and is open to all BTech students of Civil Engineering. The scholarship amount is Rs 1 lakh per student per year and is awarded every year in order to support internships (international or domestic), special projects and opportunities, financial needs, etc. Preference is given to female students interested in Structural Engineering. **Pranjali Anil Borse** is the recipient of this scholarship for the academic year 2020-21.

PROF NITISH THAKOR SCHOLARSHIP

Prof Nitish Thakor Scholarship was instituted in the year 2019 and is open to all the BTech students. The scholarship amount is Rs 1 lakh per year and is awarded every year in order to support internships (international or domestic), special projects and opportunities, financial needs, etc. **Mrinal Anand** is the recipient of this scholarship for the academic year 2020-21.

VEGSHAKTI MAHILA KALYAN SANGATHAN SCHOLARSHIP

The VMKS Scholarship has been instituted in the year 2020 and is open to the first year female students. The scholarship amount is Rs 1 Lakh per student per year and is awarded to two first-year BTech female students of IITGN in order to support their educational expenses. The scholarship recipients shall continue to receive the benefit of this scholarship during their UG programme every year, up to four years, provided they fulfil the academic criteria for annual renewal of the scholarship. **Priya Gupta** and **Veena K** are the recipients of this scholarship for the academic year 2020-21.



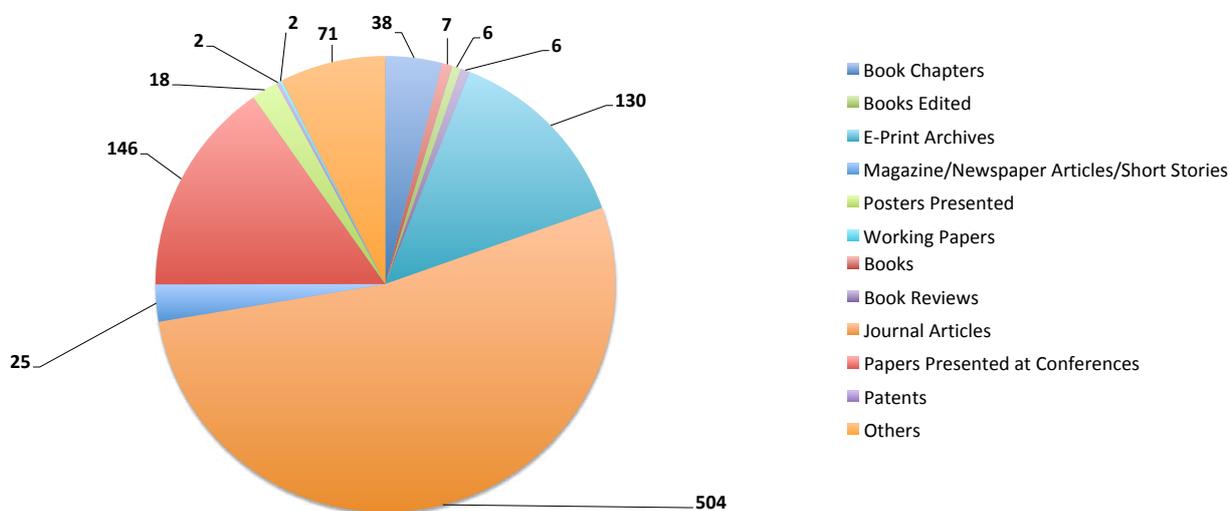


Research and Development

PUBLICATIONS

No of Research Publications from April 2020 - March 2021

Document Type	No of Research Publications	Document Type	No of Research Publications
Book Chapters	38	Papers Presented at Conferences	146
Books	7	Posters Presented	18
Books Edited	6	Patents	2
Book Reviews	6	Working Papers	2
E-Print Archives	130	Others	71
Journal Articles	504	Total	955
Magazine/Newspaper Articles/Short Stories	25		



SPONSORED RESEARCH PROJECTS

PROJECTS SANCTIONED DURING 2020-21

- Physics guided data science approach for predictive understanding of hydrological processes, (MHRD) Principal Investigator: **Prof Udit Bhatia**, Civil Engineering
- Multi-omic analysis to identify biomarkers to demarcate oral cancer and healthy tissue for margin clearance, (GSBTM) Principal Investigator: **Prof Anirbn Dasgupta**, Computer Science & Engineering
- Randomized algorithms for scalable numerical multilinear algebra, (GOOGLE) Principal Investigator: **Prof Anirbn Dasgupta**, Computer Science & Engineering
- Harnessing low cost, high efficiency stable photovoltaics based on layered hybrid perovskites, (MHRD) Principal Investigator: **Prof Rupak Banerjee**, Physics
- Emotional face recognition: understanding the underlying neural connectivity in high functioning adolescents with autism, (DST) Principal Investigator: **Prof Uttama Lahiri**, Electrical Engineering
- Implementation and control of cable actuation for gait assistance, (DRDO) Principal Investigator: **Prof Vineet Vashista**, Mechanical Engineering
- Fast, robust, energy-aware in-memory computing architectures, (SRC) Principal Investigator: **Prof Joycee Mekie**, Electrical Engineering
- Developing new plasmonic antenna- reactor platform for efficient storage of solar energy as clean fuels, (GUJCOST) Principal Investigator: **Prof Saumyakanti Khatua**, Chemistry
- Gold nano heater mediated targeting of powering in cancer for next generation chemo photo thermal therapy, (GUJCOST) Principal Investigator: **Prof Sudipta Basu**, Chemistry
- Design, dynamic study and control of a cable driven flexible robotic manipulator, (GUJCOST) Principal Investigator: **Prof Madhu Vadali**, Mechanical Engineering
- High sensitive detection of atmospheric pollutant gases to monitor the effects of industrial emissions on urban air quality, (GUJCOST) Principal Investigator: **Prof Arup Lal Chakraborty**, Electrical Engineering
- High performance fiber reinforced concrete (HPFRC): introducing a capacity based mix design framework, (GUJCOST) Principal Investigator: **Prof Dhiman Basu**, Civil Engineering
- Impact of air pollution on COVID-related secondary exacerbations, (GOOGLE) Principal Investigator: **Prof Nipun Batra**, Computer Science & Engineering
- Development of a reusable plasmonic platform for specific detection of covid-'19 RNA at ultralow concentrations, (BRNS) Principal Investigator: **Prof Saumyakanti Khatua**, Chemistry
- Self-aligned double poly silicon emitter bipolar technology for RF applications, (DST) Principal Investigator: **Prof Nihar Ranjan Mohapatra**, Electrical Engineering
- Indigenous cultural heritage as a facilitator for the sustainable development goals, (Flinders University) Principal Investigator: **Prof Alok Kanungo**, HSS
- Weekly surveillance of wastewater for SARS-CoV-2 gene detection in Ahmedabad for pandemic curve monitoring, (UNICEF) Principal Investigator: **Prof Manish Kumar**, Earth Sciences
- Slippery properties of liquid impregnated micro-cavities, (SERB) Principal Investigator: **Prof Srihartha Rowthu**, Materials Engineering
- Sonodynamic therapy for localized bacterial infections, (SERB) Principal Investigator: **Prof Himanshu Shekhar**, Electrical Engineering
- Delta geometry, modular forms and p-adic hodge theory, (SERB) Principal Investigator: **Prof Arnab Saha**, Mathematics
- AI and sensor networks for air-quality monitoring, (SERB) Principal Investigator: **Prof Nipun Batra**, Computer Science & Engineering
- Equivariant spectral triple for quotient spaces of quantized Lie groups, (SERB) Principal Investigator: **Prof Bipul Saurah**, Mathematics
- In search for a microstructure based universal strain hardening model in low stacking fault energy single phase face-centred-cubic alloys, (SERB) Principal Investigator: **Prof Pradipta Ghosh**, Materials Engineering
- The effects of reverse migration on indigenous communities following India's Covid-19 induced lockdown, (SSRC) Principal Investigator: **Prof Nishaant Choksi**, HSS
- Probing gravity using quantum information theoretic tools, (SERB) Principal Investigator: **Prof Arpan Bhattacharyya**, Physics
- Development of high frequency electronics laboratory, (DST) Principal Investigator: **Prof Nihar Ranjan Mohapatra**, Electrical Engineering
- Multi-scale modelling of viscoelastic damping in defect-engineered high entropy alloys, (SERB) Principal Investigator: **Prof Raghavan Ranganathan**, Materials Engineering
- BioTheraBubble" bioactive ultrasound-driven microbubble for theranostics, (DST) Principal Investigator: **Prof Krishna Kanti Dey**, Physics
- Understanding the role of chemical nature of the adsorbent on the co-solute assisted adsorption or desorption of solute in a liquid phase by using thermodynamic models and Monte Carlo simulations to aid the rational design of "smart" adsorbents", (SERB) Principal Investigator: **Prof Kaustubh Rane**, Chemical Engineering
- Small molecule-mediated targeting of powerhouse in cancer for next-generation chemo-photo-therapy, (SERB) Principal Investigator: **Prof Sudipta Basu**, Chemistry
- High strength hydrogels - synthesis, rheology and applications, (SERB) Principal Investigator: **Prof Prachi Thareja**, Chemical Engineering
- Investigations on heavy-quark dynamics in hot magnetised and viscous QCD medium, (SERB) Principal Investigator: **Prof Vinod Chandra**, Physics
- To study the effects of autophagy modulators in alleviation of breast cancer metastasis, (DBT-RA) Principal Investigator: **Prof Sivapriya Kirubakaran**, Chemistry
- AMR flows: antimicrobials and resistance from manufacturing flows to people - joined up experiments, mathematical modeling and risk analysis, (DBT) Principal Investigator: **Prof Pranab Kumar Mohapatra**, Civil Engineering
- Edge Non-intrusive load monitoring, (CISCO) Principal Investigator: **Prof Nipun Batra**, Computer Science & Engineering
- Optimizing plasmonic catalyst design for driving specific photocatalytic redox reactions, (SERB) Principal Investigator: **Prof Saumyakanti Khatua**, Chemistry
- Higgs Physics beyond the standard model at the LHC, (SERB) Principal Investigator: **Prof Baradhvaj Coleppa**, Physics
- Quantifying the violation of TTT identities to infer the dynamics of the molecular systems, (SERB) Principal Investigator: **Prof Kaustubh Rane**, Chemical Engineering
- Theoretical and observational constraints on gravitational Physics, (SERB) Principal Investigator: **Prof Sudipta Sarkar**, Physics
- Number-theoretic analysis of certain transformations and an extension of the Ramanujan master theorem, (SERB) Principal Investigator: **Prof Atul Dixit**, Mathematics
- Viruses in evolution and disease, (CISCO) Principal Investigator: **Prof Sharmistha Majumdar**, Biological Engineering
- Multi-effect membrane distillation for modular desalination and brine concentration, (SERB) Principal Investigator: **Prof Jaichander Swaminathan**, Mechanical Engineering
- Overdetermined problems for extremal Pucci equations and related symmetry and Liouville type results, (SERB) Principal Investigator: **Prof Jagmohan Tyagi**, Mathematics
- Developing directional combination rule for 6-component seismic excitations, (SERB) Principal Investigator: **Prof Dhiman Basu**, Civil Engineering
- Studies on optical, electrical and microstructural properties of MoS₂, SnS₂ and MoS₂-SnS₂ hybrid nanostructured thin films for solar cell applications, (SERB) Principal Investigator: **Prof Emila Panda**, Materials Engineering
- Geosynthetic reinforced soil walls and abutments for high-speed railway system, (HSRIC) Principal Investigator: **Prof Amit Prashant**, Civil Engineering
- Harnessing solar energy to achieve near zero carbon emission for brine treatment, (DST) Principal Investigator: **Prof Jaichander Swaminathan**, Mechanical Engineering
- A novel collaborative human - quadcopter interface for outdoor aerial transportation applications, (SERB) Principal Investigator: **Prof Vineet Vashista**, Mechanical Engineering
- Developing an efficient algorithm for the transition matrix Monte Carlo simulations of molecular systems in the generalized ensembles, (DST) Principal Investigator: **Prof Kaustubh Rane**, Chemical Engineering
- Synthesis of magnetic catalyst coated microbubbles for removal of trace pollutants, (DST) Principal Investigator: **Prof Sameer Dalvi**, Chemical Engineering
- Utilizing molecular dynamics simulations to study graphene nanopores as functional materials for dna sequencing, (DST) Principal Investigator: **Prof Sairam S Mallajosyula**, Chemistry
- Cable Driven hybrid actuation for load carriage control, (DRDO) Principal Investigator: **Prof Vineet Vashista**, Mechanical Engineering
- Screening of natural flavonoids as the potential autophagy modulators in the regulation of diabetes-associated AD, (SERB) Principal Investigator: **Prof Sharad Gupta**, Biological Engineering
- From single molecules to live cells: in situ, multiplexed, high-throughput imaging with

- DNA-nanotechnology, (**GUJCOST**) Principal Investigator: **Prof Dhiraj Bhatia**, Biological Engineering
- Development of a sliding bearing for earthquake protection of structures, (**DST**) Principal Investigator: **Prof Manish Kumar**, Civil Engineering
 - Bimodal intra-operative probe for brain tumor delineation, (**DST**) Principal Investigator: **Prof Karla Patricia Mercado-Shekar**, Biological Engineering
 - Development of multi-stage efficient OPC framework for nano-scale lithography

- simulation, (**DST**) Principal Investigator: **Prof Nihar Ranjan Mohapatra**, Electrical Engineering
- UAV-based laser spectroscopic monitoring of greenhouse gas emissions in urban and rural India, (**RAE**) Principal Investigator: **Prof Arup Lal Chakraborty**, Electrical Engineering
 - Predator prey interactions: chemical defense in hemiptera: pentatomidae bug (the gondhi bug) and its glandular secretions, (**DBT**) Principal Investigator: **Prof Dhiraj Bhatia**, Biological Engineering
 - SmartWear for monitoring and treatment of gait disorders in parkinsonism, (**DST**) Principal

- Investigator: **Prof Uttma Lahiri**, Electrical Engineering
- Multi-phasic models of solid-electrolyte interphases in lithium batteries: towards exascale simulations, (**DST**) Principal Investigator: **Prof Raghavan Ranganathan**, Materials Engineering
 - Development of industry friendly technology for fabricating highly reactive, non-toxic, and transparent antiviral surface coating, (**GUJCOST**) Principal Investigator: **Prof Emila Panda**, Materials Engineering

ONGOING SPONSORED PROJECTS

- Special manpower development project- chips to system design (SMDP-C2SD), Department of Electronics & Information Technology Central Electronics Engineering Research Institute (DEITY-CEERI). Principal Investigator: **Prof Nihar Ranjan Mohapatra**, Electrical Engineering
- Visvesvaraya PhD scheme for electronics and IT, Department of Electronics & Information Technology. Principal Investigator: **Prof Uttama Lahiri**, Electrical Engineering
- DSIR - common research and technology development hub - chemical processes, Department of Scientific and Industrial Research. Principal Investigator: **Prof Chinmay Ghoroi**, Chemical Engineering
- Mechanism of kinesin-3 base cargo transport, regulation and their implication in neurodegenerative diseases, Department of Biotechnology. Principal Investigator: **Prof Virupakshi Soppina**, Biological Engineering
- Smart integrated campus energy monitoring and management system, Science & Engineering Research Board. Principal Investigator: **Prof Naran Pindoriya**, Electrical Engineering
- Reusable and field-deployable nanobiocatalysts for detection of pesticides and herbicides, IMPRINT project, Ministry of Human Resource Development. Principal Investigator: **Prof Bhaskar Datta**, Chemistry
- Single crystal XRD instrument sanctioned under DST fund for the improvement of S&T infrastructure in Universities and Higher Educational Institutions (FIST) program – 2016. Principal Investigators: **Prof Sivapriya Kirubakaran**, Chemistry
- Scale-up of diesel autothermal reformer from 5 kWe to 30 kWe for naval applications, IMPRINT project, MHRD. Principal Investigator: **Prof Atul Bhargav**, Mechanical Engineering
- Regulation of inter-allelic epigenetic differences by CGGBP1-CTCF axis, Department of Biotechnology. Principal Investigator: **Prof Umashankar Singh**, Biological Engineering
- Effect of oxidation on the magnetic properties of SmCo based permanent magnets, Defence Research and Development Organisation (DRDO). Principal Investigator: **Prof Emila Panda**, Materials Science and Engineering
- Impacts of climate variability and climate change on water resources in the Sabarmati river basin, Ministry of Water Resources (MoWR). Principal Investigator: **Prof Vimal Mishra**, Civil Engineering
- Development of indigenous technology for CZTS (Cu₂ZnSnS₄) absorber based solar cell using industry friendly magnetron sputtering and RTP (Rapid Thermal Processing) sulfuration process, Science & Engineering Research Board. Principal Investigator: **Prof Emila Panda**, Materials Science and Engineering
- ECO-WET - efficient coupling of water and energy technologies for smart sustainable cities, Indo-German Science and Technology Centre. Principal Investigator: **Prof Naran Pindoriya**, Electrical Engineering
- Tectonic and climatic control on variability of sediment routing in the NW Himalaya since late quaternary, Department of Science & Technology. Principal Investigator: **Prof Vikrant Jain (Saptrishi Dey)**, Earth Sciences
- High yield exfoliation of layered metal diborides to synthesize boron analogs of graphene for developing a new class of energy storage nanocomposites, Science & Engineering Research Board. Principal Investigator: **Prof Kabeer Jasuja**, Chemical Engineering
- Reactive transport in porous media (Ramanujan), Science & Engineering Research Board. Principal Investigator: **Prof Uddipta Ghosh**, Mechanical Engineering
- Extremal partial VC-dimension and fine-grained fold-cut problems, Science & Engineering Research Board. Principal Investigator: **Prof Neeldhara Misra**, Computer Science and Engineering
- Developing low-cost bipolar transistors for analog and RF applications in 0.18µm CMOS technology, Science & Engineering Research Board. Principal Investigator: **Prof Nihar Ranjan Mohapatra**, Electrical Engineering
- Topology and evolution of black holes in higher curvature gravity, Department of Science & Technology. Principal Investigator: **Prof Sudipta Sarkar**, Physics
- Development of a prosumer driven integrated smart grid, Department of Science & Technology. Principal Investigator: **Prof Naran Pindoriya**, Electrical Engineering
- Theoretical and experimental study of wave propagation in granular metamaterials, Science & Engineering Research Board. Principal Investigator: **Prof Jayaprakash K R**, Mechanical Engineering
- Vulnerability assessment and sustainable solutions for water quality management in the urban environment, Department of Science & Technology. Principal Investigator: **Prof Manish Kumar**, Earth Sciences
- Micro-components quantification of end uses of water consumption In low income settings, WIN Foundation. Principal Investigator: **Prof Manish Kumar**, Earth Sciences
- Pilot scale in-situ application for arsenic and fluoride removal from the groundwater: a safe drinking water production perspective, WIN Foundation. Principal Investigator: **Prof Manish Kumar**, Earth Sciences
- Development of a predictive geomorphic model as a tool for a sustainable river management, Ministry of Earth Sciences. Principle investigator: **Prof Vikrant Jain**, Earth Sciences
- HDR-GIF and HDR Video generation for dynamic scenes, Science & Engineering Research Board. Principal Investigator: **Prof Shanmuganathan Raman**, Electrical Engineering
- Geometrically frustrated layered structure: synthesis and properties, Department of Science & Technology. Principal Investigator: **Prof Sudhanshu Sharma and Sethulaxmi N**, Chemistry
- Ultrasound-responsive multi-layered microbubbles using electrohydrodynamic focusing device for oral cancer drug delivery, UGC-UKIERI Joint Research Programme (UKIERI - III). Principal Investigator: **Prof Sameer Dalvi**, Chemical Engineering
- VAJRA faculty scheme: collaborative research visit of Prof Dinesh Kant Kumar from RMIT University, Australia, Science & Engineering Research Board. Principal Investigator: **Prof Uttama Lahiri, Prof Dinesh Kant**, Electrical Engineering
- Ramanujan fellowship - DNA nanodevices to program stem cells, Science & Engineering Research Board. Principal Investigator: **Prof Dhiraj Bhatia**, Biological Engineering
- Investigating the mechanisms of neuronal transport system and their regulations, Department of Science & Technology. Principal Investigator: **Prof Sivapriya Kirubakaran**, Biological Engineering
- Cultural Heritage Preservation and Restoration using Digital 3D Models, Science & Engineering Research Board. Principal Investigator: **Prof Shanmuganathan Raman**, Electrical Engineering
- Smart walk: intelligent sensor-fitted shoes for gait monitoring and rehabilitation in neurological disorders, Biotechnology Industry Research Assistance Council. Principal Investigator: **Prof Uttama Lahiri**, Electrical Engineering
- Unbiased pattern mining in NGS datasets: a novel computational biology approach, Department of Science & Technology. Principal Investigator: **Prof Umashankar Singh**, Biological Engineering
- Computational modelling of energetic materials subjected to thermal and mechanical insults using the material point method, Defence R&D Organisation. Principal Investigator: **Prof Gaurav S**, Civil Engineering
- INSPIRE Faculty Award, Department of Science & Technology. Principal Investigator: **Prof Akshaa Vatwani**, Mathematics
- An experimental operational hydrologic modeling and forecasting system for river basin hydrology and extremes for India, Indian Institute of Tropical Meteorology. Principal Investigator: **Prof Vimal Mishra**, Civil Engineering
- Targeting mitochondrial central dogma by chimeric nanoparticle in cancer, Department of Science & Technology. Principal Investigator: **Prof Sudipta Basu**, Chemistry
- Technology-assisted pelvic motion characterization and gait rehabilitation for the elderly, Department of Science & Technology. Principal Investigator: **Prof Uttama Lahiri**, Electrical Engineering
- A device for bed load measurement, Science & Engineering Research Board (IMPRINT). Principal Investigator: **Prof Pranab Mohapatra**, Civil Engineering
- Enzyme dynamics in cytosolic milieu: a new

- perspective on intracellular mechanics and transport, Science & Engineering Research Board. Principal Investigator: **Prof Krishna Kanti Dey**, Physics
- A photo-switchable plasmonic system to reconfigure hot-spots between nanogaps in gold nanorod dimers – NPDP, Science & Engineering Research Board. Principal Investigator: **Prof Saumyakanti Khatua** (Gayatri Joshi), Chemistry
 - Scaling up a high-throughput gravitational-wave search pipeline using randomized numerical linear algebra, Department of Science & Technology. Principal Investigator: **Prof Anand Sengupta**, Physics
 - Ramanujan-type formulas for $Z^2(2m+1)$ and a Bessel series, Science & Engineering Research Board. Principal Investigator: **Prof Atul Abhay Dixit**, Mathematics
 - Parabolic sheaves and filtered Kronecker modules, Science & Engineering Research Board. Principal Investigator: **Prof Sanjaykumar Amrutiya**, Mathematics
 - Development of novel bicyclic secondary amine catalysts for the stereoselective vinyllogous functionalization of unsaturated aldehydes, Science & Engineering Research Board. Principal Investigator: **Prof Chandrakumar Appayee**, Chemistry
 - Impact of ureido protein degenerative modifications on amyloidogenic peptide and protein aggregation: implications for neurodegenerative disorders, Science & Engineering Research Board. Principal Investigator: **Prof Sharad Gupta**, Biological Engineering
 - Heat transfer and material flow modeling of additive manufacturing of dissimilar materials, Science & Engineering Research Board. Principal Investigator: **Prof Amit Arora**, Materials Science and Engineering
 - Algebra structures on certain quadrics, Science & Engineering Research Board. Principal Investigator: **Prof Indranath Sengupta**, Mathematics
 - Scholarly information extraction from comparative charts and tables, Science & Engineering Research Board. Principal Investigator: **Prof Mayank Singh**, Computer Science and Engineering
 - Free boundary value problems and singular parabolic partial differential equations, Science & Engineering Research Board. Principal Investigator: **Prof Jagmohan Tyagi**, Mathematics
 - Design of hearables with psychoacoustic integration, Science & Engineering Research Board. Principal Investigator: **Prof Nithin V George**, Electrical Engineering
 - Global stability analysis of flow between eccentric rotating cylinders, Science & Engineering Research Board. Principal Investigator: **Prof Vinod Narayanan**, Mechanical Engineering
 - Unravelling Submarine Groundwater Discharge (SGD) zones along the Indian subcontinent and its Islands (Mission-SGD) – pilot study, National Centre for Earth Science Studies (NCESS). Principal Investigator: **Prof Manish Kumar**, Earth Sciences
 - Development of environmentally and economically sustainable composite solution for municipal solid waste management, Gujarat State Biotechnology Mission. Principal Investigator: **Prof Manish Kumar**, Earth Sciences
 - Impact of sea level fluctuations, climate change or tectonic activity on the decline of the Harappan settlement of Dholavira, Kutch, India, Department of Science & Technology. Principal Investigator: **Prof Vikrant Jain**, Earth Sciences
 - Design and synthesis of molecular probes for detection and imaging of protein aggregates. Principal Investigator: **Prof Sriram Kanvah**, Chemistry
 - Brain functional connectivity in health and disease - under India-Trento Programme for Advanced Research. Principal Investigator: **Prof Krishna Prasad Miyapuram**, Cognitive Sciences
 - Development of low-cost novel biomaterials for in-situ groundwater/soil remediation: A safe drinking water production perspective. Principal Investigator: **Prof Manish Kumar (Santanu Mukherjee)**, Earth Sciences
 - Questions in analytic number theory - classical and number field setting. Principal Investigator: **Prof Akshaa Vatwani**, Mathematics
 - Study the effects of small molecule mediated G-Quadruplex stabilization on induction of Autophagy in cell culture model of breast cancer. Principal Investigator: **Prof Bhaskar Datta (Piyali Majumdar)**, Biological Engineering
 - Establishing Gujarat State Climate Change Center. Principal Investigator: **Prof Vikrant Jain**, Earth Sciences
 - Curiosity to aid learning and motivation in Schools. Principal Investigator: **Prof Jaison Manajaly**, Humanities and Social Sciences
 - Comparative study of soft error tolerant synchronous and asynchronous processors. Principal Investigator: **Prof Joycee Mekie**, Electrical Engineering
 - Development of adaptive compression and distributed state estimation algorithms for future smart grids by accounting for uncertainties due to renewable energy sources: Demonstration of studies on the residential grid of IIT Gandhinagar. Principal Investigator: **Prof Babji Srinivasan**, Chemical Engineering
 - Computational aspects of social choice: Theory and practice. Principal Investigator: **Prof Neeldhara Misra**, Computer Science and Engineering
 - Development of Alt Mfg process for cooling channels in actively cooled Cu components using FSC. Principal Investigator: **Prof Amit Arora**, Material Science and Engineering
 - Studying polymorphism in drug intermediates and their applications. Principal Investigator: **Prof Sivapriya Kirubakaran**, Chemistry; Co-PI: **Prof Vijay Thiruvengadam**, Biological Engineering
 - Hit to lead chemistry for novel treatments of leishmaniasis. Principal Investigator: **Prof Sivapriya Kirubakaran**, Chemistry
 - Complexation on the surface of metal halide perovskite nanocrystals for application as energy materials, Principal Investigator: **Prof Krishna Kanti Dey (Satyapriya Bhandari)**, Physics
 - Gandhipedia: A one-stop AI-enabled portal for browsing Gandhian literature, life-events and his social network. Principal Investigator: **Prof Mayank Singh** (As Co-PI), Computer Science and Engineering
 - Assessing the concentrations and sources of indoor VOC's and particulate matter (PM) in urban India and Comparing to levels in China and the US. Principal Investigator: **Prof Chinmay Ghoroi**, Chemical Engineering
 - Low-cost and non-electric water filter for point-of-use (POU) water disinfection. Principal Investigator: **Prof Chinmay Ghoroi**, Chemical Engineering
 - Assessing the concentrations and sources of indoor VOC's and particulate matter (PM) in urban India and Comparing to levels in China and the US. Principal Investigator: **Prof Chinmay Ghoroi**, Chemical Engineering
 - Water for change: Integrative and fit-for-purpose water sensitive design framework for fast-growing livable cities. Principal Investigator: **Prof Pranab Mohapatra**, Civil Engineering
 - Brine splitting for energy-efficient textile dyeing effluent reuse. Principal Investigator: **Prof Jaichander Swaminathan**, Mechanical Engineering
 - Design and testing of robust and flexible 3D printed electrodes with novel porous architecture guided by graph theory and molecular simulations for high energy density applications. Principal Investigator: **Prof Mithun Radhakrishna**, Chemical Engineering
 - Micronixation and encapsulation of explosive by expansion of Co₂ - expanded solutions. Principal Investigator: **Prof Sameer Dalvi**, Chemical Engineering
 - Ground motion modelling in active shallow crustal regions across India. Principal Investigator: **Prof Sanjay Singh Bora**, Earth Sciences
 - Developing boron-based nanosheets reinforced polymer matrix for designing lightweight blast-resistant armors. Principal Investigator: **Prof Kabeer Jasuja**, Chemical Engineering
 - Optimizing work fluctuations of quantum heat engines. Principal Investigator: **Prof B Prassana Venkatesh**, Physics
 - Development of low cost-efficient and scalable materials for CO₂ capture using naturally available non-toxic stable materials and industrial solid wastes. Principal Investigator: **Prof Chinmay Ghoroi**, Chemical Engineering
 - Developing Physics guided super-resolution approach and evaluation strategies for downscaling earth system model output. Principal Investigator: **Prof Udit Bhatia**, Civil Engineering
 - Seismic performance assessment of a fixed-base and isolated generic Fast Reactor. Principal Investigator: **Prof Manish Kumar**, Civil Engineering
 - Design Enablement of Self Aligned double polysilicon Emitter silicon bipolar transistor for RF applications. Principal Investigator: **Prof Nihar Ranjan Mohapatra**, Electrical Engineering
 - Multicomponent seismic excitation: Characterization of design spectra and developing combination rule. Principal Investigator: **Prof Dhiman Basu**, Civil Engineering
 - Mixing in electricity driven flows: Effects of Reology. Principal Investigator: **Prof Uddipta Gosh**, Mechanical Engineering
 - An engineering approach towards novel materials development for combinatorial therapy in Biomedical application. Principal Investigator: **Prof Superb K Misra**, Materials Science & Engineering
 - Mathematical modeling and simulation of flame propagation in metal-liquid oxidizer energetic materials. Principal Investigator: **Prof Dilip Srinivas Sundaram**, Mechanical Engineering
 - Estimating error probabilities due to multiple event transients in circuits designed for space applications based on electrical, temporal and logical masking. Principal Investigator: **Prof Joycee Mekie**, Electrical Engineering
 - Control of linear instabilities in axisymmetric boundary layers. Principal Investigator: **Prof Vinod Narayanan**, Mechanical Engineering
 - Development of small molecules to induce Mitochondrial damage by selectively perturbing anti-apoptotic Bcl-2 family proteins for next generation cancer chemotherapy. Principal Investigator: **Dr Sopan Valiba Shinde** (NPDP) and **Prof Sudipta Basu** (Mentor), Chemistry
 - Continuous production of scaffolds for drug delivery and tissue regeneration applications using microbubbles in Ionic liquid-biopolymer matrix. Principal Investigator: **Dr Mohit J Mehta** (NPDP) and **Prof Sameer Dalvi** (Mentor), Chemical Engineering
 - Drives for electric vehicle applications. Principal Investigator: **Prof Ragavan Kanagaraj and Prof Naran Pindoriya** (Co-PI), Electrical Engineering
 - Graph neural networks and their applications. Principal Investigator: **Prof Shanmuganathan Raman**, Electrical Engineering
 - Network for scientific cooperation for food safety and applied nutrition. Principal Investigator: **Prof Bhaskar Datta**, Biological Engineering

- Multi-omic analysis to identify biomarkers to demarcate oral cancer and healthy tissue for margin clearance. Principal Investigator: **Prof Anirban Dasgupta**, Computer Science & Engineering, and **Prof Sharmista Majumdar**, Biological Engineering (Co-PI)
- Design enablement of self aligned double poly silicon Emitter silicon bipolar transistor for RF applications. Principal Investigator: **Prof Nihar Ranjan Mohapatra**, Electrical Engineering
- Materials for sustainable and energy efficient buildings, Ecole Normale Supérieure De Cachan, France. Principal Investigator: **Prof Atul Bhargav**, Mechanical Engineering
- Understanding the impact of air pollution on solar photovoltaics and developing surface engineered panel materials for improved performance of solar plants, Duke University, USA. Principal Investigator: **Prof Chinmay Ghori**, Chemical Engineering
- Development and application of geomorphic tool for sustainable management of a Himalayan river system, India, The University Of Auckland, New Zealand. Principal Investigator: **Prof Vikrant Jain**, Earth Sciences
- Analytical and computational study of nonlinear acoustic metamaterials, Technion - Israel Institute of Technology, Israel. Principal Investigator: **Prof Jayaprakash K R**, Mechanical Engineering
- Problems in analytic and combinatorial number theory, Queen's University at Kingston, Canada. Principal Investigator: **Prof Atul Dixit**, Mathematics
- Indigenous cultural heritage as a facilitator for the sustainable development goals, Flinders University, Australia. Principal Investigator: **Prof Alok Kumar Kanungo**, Humanities
- Study of locomotor adaptation using a single degree-of-freedom bilateral gait trainer, University of Texas at Austin, USA. Principal Investigator: **Prof Vineet Vashista**, Mechanical Engineering
- Assessing gait and balance during walking using body-worn sensors, Columbia University, USA. Principal Investigator: **Prof Vineet Vashista**, Mechanical Engineering
- NIR porphyrin-microbubbles as multi-colour molecular imaging probes. Principal Investigator: **Prof Sameer Dalvi**, Chemical Engineering
- Development of a novel vacuum based process for producing porous metal structures. Principal Investigator: **Prof Abhay Raj Singh Gautam**, Materials Science and Engineering
- VR-based exergaming platform in conjunction with neuroimaging guided non-invasive electrical stimulation. Principal Investigator: **Prof Uttama Lahiri**, Electrical Engineering
- High-performance numerical simulations and experimental investigation of particle transport and turbulence in rotational flows: Applications to Eccentric and Conical Taylor-Couette Configurations. Principal Investigator: **Prof Uddipta Ghosh**, Mechanical Engineering
- High entropy alloy nanoparticles CeO₂ catalyst for Dry reforming of CO₂, (STARS) Principal Investigator: **Prof Sudhanshu Sharma**, Chemistry
- Ground motion prediction for site specific hazard analysis : demonstrated case studies from Gujarat, Western India, (STARS) Principal Investigator: **Prof Sanjay Singh Bora**, Earth Sciences
- Physics guided data science approach for predictive understanding of Hydrological Processes, (STARS) Principal Investigator: **Prof Udit Bhatia**, Civil Engineering
- Understanding the critical orientation for seismic excitation and developing associated GMPEs for Indian Subcontinent, (STARS) Principal Investigator: **Prof Dhiman Basu**, Civil Engineering
- Flood risk assessment in tropical rivers in the Anthropocene under climate change scenario using hydro geomorphic modeling, (STARS) Principal Investigator: **Prof Vikrant Jain**, Earth Sciences
- Harnessing low cost, high efficiency stable photovoltaics based on layered hybrid perovskites, (STARS) Principal Investigator: **Prof Rupak Banerjee**, Physics
- Electrochemical fabrication of sub-nm pores on mica and Si-nitride sheets for desalination applications, (STARS) Principal Investigator: **Prof Gopinadhan Kalon**, Physics
- Antibacterial polymers to combat drug-resistant bacteria, (STARS) Principal Investigator: **Prof Abhijit Mishra**, Materials Science & Engineering

CONSULTANCY PROJECTS

PROJECTS SANCTIONED DURING 2020-21

- Developing techniques for scalable energy disaggregation, Principal Investigator: **Prof Nipun Batra**, Computer Science & Engineering
- Implications of COVID-19 on Gujarat state from climate change perspective, Principal Investigator: **Prof Vimal Mishra**, Civil Engineering
- Groundwater quality monitoring for Ambuja setup in Mehsana, Principal Investigator: **Prof Manish Kumar**, Earth Sciences
- Groundwater quality monitoring for Gopinath Chem-Tech Ltd setup in Mehsana, Principal Investigator: **Prof Manish Kumar**, Earth Sciences
- DNA hydrogels for stimulus responsive drug delivery applications, Principal Investigator: **Prof Dhiraj Bhatia**, Biological Engineering
- Linear electric machine for elevator door, Principal Investigator: **Prof Ragavan K**, Electrical Engineering
- Review of ground improvement measures pertaining to construction of interchange cum Road over Bridge (ROB) at LC- 236 on MH-141 in Gujarat, Principal Investigator: **Prof Amit Prashant**, Civil Engineering
- Identification and characterization of debris/dirt for subsequent removal through alternate approaches and Computational Fluid Dynamics (CFD) simulations, Principal Investigator: **Prof Ravi Sastri Ayyagari Venkata S**, **Prof Vinod Narayanan**, Mechanical Engineering
- Metagenomics study of the ferment sample from M/S Synergia Life Sciences Pvt Ltd, Principal Investigator: **Prof Manish Kumar**, Earth Sciences
- Protection work for pipeline at Surat near Tapi river, Principal Investigator: **Prof Amit Prashant**, Civil Engineering
- Corrosion allowance analysis for carbon steel as MOC for cycle gas purge line, Principal Investigator: **Prof Amit Arora**, Materials Engineering
- Checking verticality and twist of 175 m high mast at All India Radio, Ahmedabad, Principal Investigator: **Prof Manish Kumar**, Civil Engineering
- Take Home Ration service of the Integrated Child Services Scheme: documenting the status in select states of India, Principal Investigator: **Prof Malavika A Subramanyam**, HSS
- Generating useful products through human waste processing, Principal Investigator: **Prof Bhaskar Datta**, Biological Engineering
- Regression analysis for CETP IEPs civil works, project facilities and EMI, Principal Investigator: **Prof Udit Bhatia**, Civil Engineering
- Regional training on climate science and modelling, Principal Investigator: **Prof Udit Bhatia**, Civil Engineering
- Study report for evaluation of net present value and environmental damage in monetary terms for illegal limestone mining in Junagadh and Gir Somnath district, Principal Investigator: **Prof Manish Kumar**, Earth Sciences
- Training of engineers for CU/CD triaxial testing, Principal Investigator: **Prof Ajanta Sachan**, Civil Engineering
- Area drainage study, road network design and logistic support for 5 GW wind-solar hybrid project at Rann of Kutch, Gujarat, Principal Investigator: **Prof Amit Prashant**, Civil Engineering
- Optimization crystallization trials for APIs and 3D-structure identification, Principal Investigator: **Prof Vijay Thiruvengadam**, Biological Engineering
- Optimization and purification of protein (s), Principal Investigator: **Prof Vijay Thiruvengadam**, Biological Engineering
- Consultancy for healthcare devices and solutions, Principal Investigator: **Prof Dhiraj Bhatia**, Biological Engineering
- Technical audit of select structural members in the priority reach of Ahmedabad metro rail project, Phase-1 from Vastral Gam to Apparel Park, Principal Investigator: **Prof Manish Kumar**, Civil Engineering
- Regression analysis for sewage treatment plant civil works, project facilities, and EMI, Principal Investigator: **Prof Udit Bhatia**, Civil Engineering
- COMSOL multiphysics finite element simulation of the conversion of TTIP liquid into vapors, Principal Investigator: **Prof Gopinadhan Kalon**, Materials Engineering
- Biomass pyrolysis/gasification to generate methane rich gas, Principal Investigator: **Prof Sudhanshu Sharma**, Chemistry
- Checking verticality and twist of 183m high guy mast at All India Radio, Rajkot, Principal Investigator: **Prof Manish Kumar**, Civil Engineering

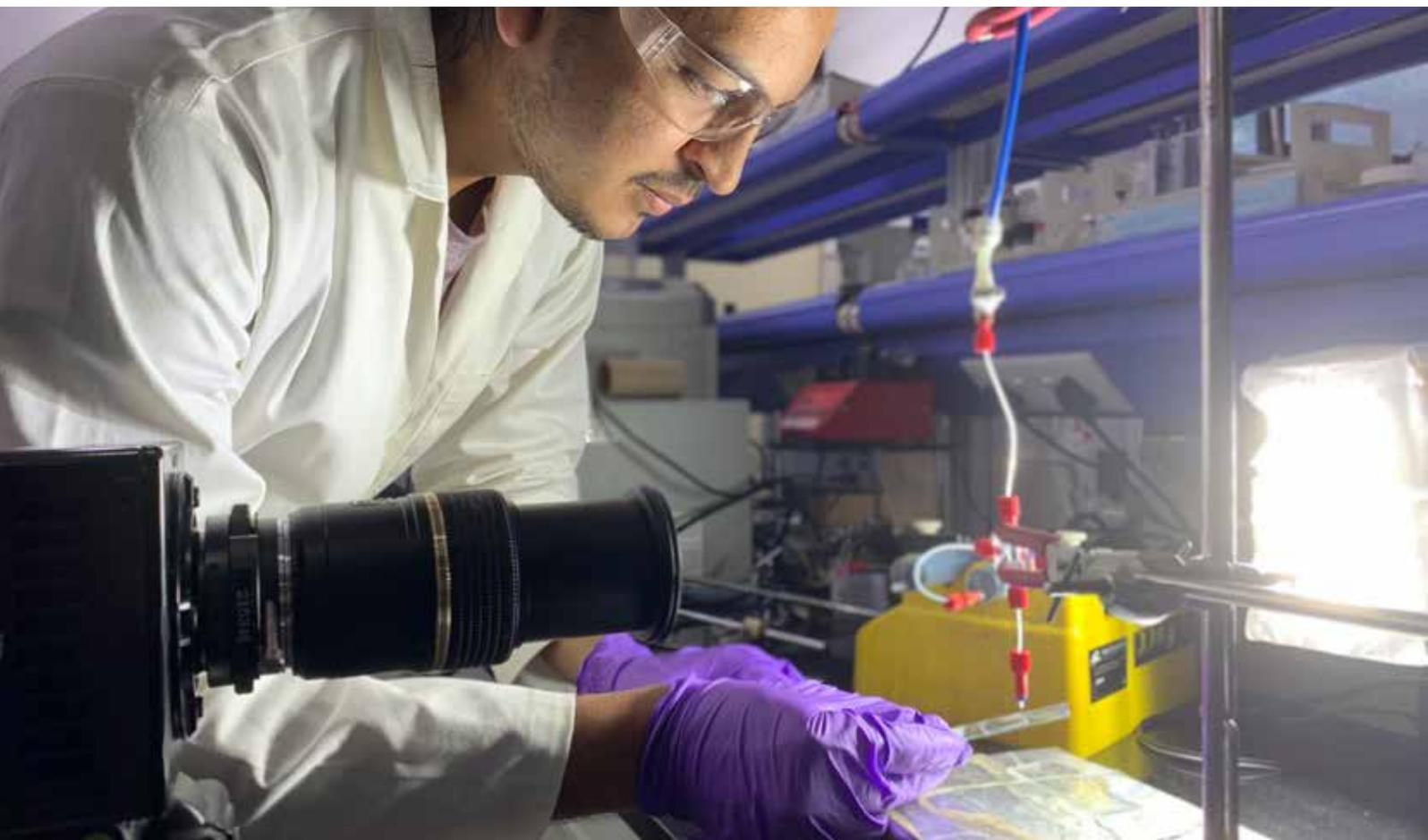
INTELLECTUAL PROPERTY

The patents granted during the year 2020-21 are as follows:

1. Pharmaceutical Composition and Process for Preparing the Same: Inventors are **Prof Sivapriya Kirubakaran, Prof Vijay Thiruvekatam, Kapil Juvale, Vijay Singh, Gayathri Purushothaman, and Althaf Shaik**. Patent number: 347060
2. Smart Eye System for Visuomotor Dysfunction Diagnosis and its Operant Conditioning: Inventors are **Prof Uttama Lahiri, Anirban Dutta**, and Abhijit Das. US patent number: 10,973,408

The patents filed during the year 2020-21 are as follows:

1. Magnetic hybrid nanocomposites and a process for preparation thereof: Inventors are **Manish Kumar Singh and Niravkumar Praduman Raval**
2. A Smart Gesture Tracker Band: Inventors are **Ruzan Areez Khambatta and Chandan Kumar Jha**
3. A System for Monitoring Hand and Finger Movements: Inventors are **Chandan Kumar Jha and Prof Arup Lal Chakraborty**
4. Anti-viral Surface Coating and A Process for Coating: Inventors are **Prof Emila Panda, Prof Virupakshi Sopinna, Ravi Teja Mittireddi, and Nishaben M Patel**
5. A catalyst composition and a process for its preparation: Inventors are **Prof Sudhanshu Sharma and Pradeep Kumar Yadav**
6. A fluorophore molecule and a process for its synthesis: Inventors are **Prof Sriram Kanvah Gundimeda, Tarushyam Mukherjee, and Prof Virupakshi Sopinna**
7. Indazole Derivatives and a Process for its Preparation: Inventors are **Prof Sivapriya Kirubakaran, Kapil Juvale, Prof Vijay Thiruvekatam, Sachin Puri, Namita Hegde, Aishwarya Menon, and Althaf Shaik**



RESEARCH ACTIVITIES EVENTS AND OUTREACH

Research and collaborative events like conferences, workshops, symposia and seminars form a vital part of academic activities that help stimulate discussions on a wide range of important topics. Many of these activities invite participation from other organisations and enhance the Institute's visibility at various levels. The following activities were organised during 2020-21:

CONFERENCES

CHEMCATCON 1.0

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

NPSC 2020

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

31ST IAGRG MEETING

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

WORKSHOPS

- Navigating the Faculty Application Process by **Prof Himanshu Shekhar** on May 15 and June 13, 2020, and by **Prof Harish P M** on June 20, 2020.
- Workshop on Emotional Resilience by **Ms Rashmi Datt**, an organisation development consultant, May 27, 2020.
- ACM-W GradCohort 2020, the third edition of a pan-India virtual workshop for women in computing, co-organised by IITGN, ACM-W India Council and ACM India Council, and supported by Google and TCS, July 24 to 26, 2020. **Prof Neeldhara Misra** coordinated the workshop.
- Quantum Information in QFT and AdS/CFT, Aug 6-7, 2020. The workshop was co-organised by **Prof Arpan Bhattacharyya**, IITGN; **Prof Shubho Roy**, IITH; and **Prof Aninda Sinha**, IISc Bangalore.
- Testing General Relativity using Gravitational Waves, Aug 13-14, 2020. The event was co-organised by **Prof Sudipta Sarkar**, IITGN; and **Prof Sumanta Chakraborty**, IACS, Kolkata. The event also hosted a special colloquium by **Prof Abhay Ashtekar**, Director, Institute for Gravitational Physics and Geometry, Pennsylvania State University, USA.
- Filming and Audio Production workshop for IITGN staff members by **Mr Devarsh Barbhaya**, Communication Assistant, External Communications, IITGN, Sep 30-Oct 1, 2020.
- EQAL- Emotional Quotient for Authentic Leadership by **Ms Rashmi Datt**, an organisation development consultant and coach, Oct 3, 2020.
- Understanding Gender by **Ms Manvita Baradi**, Director, UMC Asia, Oct 16, 2020.
- Future Faculty: A Life of a Scientist behind the Shadow of Science by **Prof Hardik Pandya**, Assistant Professor, Department of Electronic Systems Engineering, IISc Bangalore, Oct 25, 2020.
- Preparing Effective Graduate School Applications by **Prof Himanshu Shekhar**, Oct 24, 31, and Nov 1, 2020.
- Balancing Research and Teaching at a Teaching Intensive Institution by **Dr Mayuri Rege**, DST-INSPIRE Faculty, Department of Microbiology, Ramnarain Ruia Autonomous College, Mumbai, Nov 7, 2020.
- Basic 3D Modelling Workshop using Rhinoceros (Version 6) by **Mr Singhara Kannappan**, Design and Innovation Centre, IITGN, Nov 21, 2020.
- Instrumentation and Control for Technical Staff by **Prof S Rajendran**, **Prof Gopinadhan Kalon**, and **Mr Pragnesh Parekh**, Dec 14-24, 2020.
- Think. Design. Print. - 3D Printing Workshop by **Mr Tanvir Khorajiya**, Maker Bhavan, IITGN, Jan 21 & 22, 2021.
- Inspiring Research & Innovation Using IEEE Publications (IEEEExplore) by **Dr Dhanukumar Pattanashetti**, Senior Client Services Manager at IEEE, Jan 25, 2021.
- Advance Your Research Using SciFinder-n by **Mr Rohan Kohok**, customer success specialist, ACSII India, Jan 27, 2021.
- Web of Science: Taking Your Research to a Next Level by **Dr Subhasree Nag**, solution consultant, Scientific Research Division, Clarivate Analytics, Feb 1, 2021.
- EndNote-Reference Management Made Easy by **Dr Subhasree Nag**, solution consultant, Scientific Research Division, Clarivate Analytics, Feb 05, 2021.
- Workshop on Moodle by **Ms Neha Maheshwari**, IMS, IITGN, Feb 22, 2021.
- Basics of Writing and Getting Published A Quality Technical Paper by **Dr Dhanukumar Pattanashetti**, Senior Client Services Manager at IEEE, Feb 23, 2021.
- Integrating Scopus in Research Workflow by **Dr Shubhra Dutta**, customer consultant (Core Content) - South Asia A&G Team, ELSEVIER Publisher, Feb 25, 2021.
- **JAIST-IITGN International Workshop:** IITGN and Japan Advanced Institute of Science and Technology (JAIST) jointly organised an online international workshop on 'Education under the Pandemic and Post-pandemic Era' during Mar 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.
- Basic 3D Modelling Using Rhinoceros by **Mr Singhara Kannappan**, Product Designer, Design and Innovation Centre (DIC), IITGN, Mar 8, 10, 12, 2021.
- Demystifying the PhD: Managing Expectations and Reality by **Prof Himanshu Shekhar**, Assistant Professor, Electrical Engineering, IITGN, Mar 13 & 14, 2021.
- Think. Design. Cut. - Laser Cutting Workshop by **Mr Tanvir Khorajiya**, Maker Bhavan, IITGN, Mar 17-19, 2021.
- Integrating MENDELEY - Reference Management Software in Your Research Workflow by **Dr Shubhra Dutta**, customer consultant, South Asia A&G Team, ELSEVIER Publisher, Mar 18, 2021.

SYMPOSIA/SEMINARS/WEBINARS

VIRTUAL SEMINAR SERIES

Echoing the thought that learning should never stop, IITGN started a virtual seminar series by its faculty members that commenced from Apr 24, 2020, and continued till the end of the summer vacation of 2020. A total of 11 seminars were designed to be non-technical in nature for a general audience and covered diverse topics, including fascinating aspects of black hole physics, nanotechnology, culture and tradition of the Nagas, the relationship between humans and viruses, Ramanujan's advances in the theory of partitions, properties of glassy materials, languages and scripts of India, fluid mechanics etc. The series was coordinated by **Prof Sudipta Sarkar**.

IGRIP WEBINAR SERIES ON GEOSTRUCTURES

Initiative for Geotechnical Research and Innovative Practice (iGrip) at IITGN launched a webinar series on Geostrutures from Apr 27, 2020, which provided a forum for exchanging experiences and learning from the experts. A total of nine webinars were organised as part of the series, inviting global experts of Civil Engineering, including **Dr Naresh C Samtani**, **Mr Vivek Kapadia**, **Prof Michel Danino**, **Dr R Chitra**, **Dr Kenji Watanabe**, **Mr Vinay Kumar Singh**, **Dr U S Sarma**, **Mr Achal Khare**, and **Dr Vallam Sundar**. In total, nearly 2800 students, professionals, and researchers attended these webinars. The series was coordinated by **Prof Ajanta Sachan**.



FIRESIDE CHAT WITH PROF JAIN

Prof Sudhir K Jain, Director, IITGN, led an online Fireside Chat webinar on faculty recruitment on July 9, 2020. The webinar featured a free-wheeling conversation with Professor Jain on IITGN's ambitious journey to become an institution of global repute and its innovative strategies to recruit numerous world-class faculty across all disciplines. He also discussed IITGN's global vision, academic innovations, research aspirations, interdisciplinarity, programme objectives and award-winning campus. The event was moderated by **Prof Achal Mehra** and **Prof B Prasanna Venkatesh**.

LEADERSHIP CHAT SERIES

The Indira Foundation Leadership Development Initiative at IITGN launched a new online series called Leadership Chat, which would bring prominent leaders from various fields to IITGN to share their experiences, perspectives and thoughts on leadership with students as well as external participants. The

series hosted a total of five sessions from Sep 2020 to Mar 2021, wherein six experts/industry leaders from across the world, including **Mr Muktesh Pant**, **Mr Anshu Gupta**, **Ms Elena L Botelho**, **Mr Raj L Gupta**, and **Mr Nitin Rakesh & Dr Jerry Wind** interacted with the participants virtually. These conversations were moderated by **Mr Mukul Pandya**, Former Editor in Chief, Knowledge@Wharton and **Prof Achal Mehra**, Visiting Professor, HSS, IITGN.



Mr M Pant



Mr A Gupta



Ms E L Botelho



Mr R L Gupta



Mr N Rakesh



Dr J Wind

WEBINAR ON GANDHI AND THE ADIVASI QUESTION

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

WEBINAR SERIES ON STORYTELLING

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

SEMINAR SERIES ON INDIAN SCIENTISTS 2.0

The second edition of the Seminar Series on Indian Scientists was held online on Nov 21, 2020, with two virtual seminars on

the lives and works of Harish-Chandra and C V Raman. **Prof C S Aravinda** from TIFR CAM, Bengaluru, delivered a lecture on "Harish-Chandra: The Mathematician and the Artist". **Prof Rupak Banerjee** from IITGN talked on "The Life, Works and Legacy of Prof C V Raman". The seminar series was curated by **Prof Sudipta Sarkar** and **Prof Michel Danino**.

INDIAN SYMPOSIUM ON MACHINE LEARNING

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

TEQIP-III

TEQIP-III project at IITGN entered its third phase in Dec 2017 and started to work with the local engineering colleges. The Technical Education Quality Improvement Programme (TEQIP) conducts various short courses and workshops for faculty, students, and administrative staff. IITGN conducted a total of four online short courses for engineering faculty under TEQIP-III from Jan to Mar 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. Faculty members of IITGN virtually interacted with the participants and introduced new concepts and pedagogy for effective learning.

SABARMATI YOUNG RESEARCHERS SEMINAR SERIES

- Probabilistic Seismic Hazard: A Foundation for Modern Earthquake Design and Risk Assessment by **Dr Abhineet Gupta**, Director of Resilience Research, One Concern Inc, Oct 16, 2020
- Application of Digital Image Correlation Technique in Pavement Material Testing by **Dr Nithin Sudarsanan**, Postdoctoral Researcher, North Carolina State University, USA, Nov 12, 2020

INVITED LECTURES

- Conformal Invariance in Physics by **Prof Sunil Mukhi**, IISER Pune, May 28, 2020
- Holography and the Black Hole Information Paradox by **Mr Pushkal Shrivastava**, Graduate Student, ICTS Bangalore, June 2, 2020
- India Pride Project: Achieving the Unachievable by **Mr Anuraag Saxena**, Singapore-based author and commentator, June 6, 2020
- Emergence of Universe from Quantum Entanglement by **Prof Tadashi Takayanagi**, Yukawa Institute of Theoretical Physics, Kyoto University, Japan, June 9, 2020
- Colonialism, Coloniality and Decoloniality in the Indian Context by **Mr J Sai Deepak**, Litigator/arguing counsel, June 13, 2020
- Krishnadevaraya of Vijayanagara: India's First Global Leader, **Prof Srinivas Reddy**, IITGN, June 17, 2020
- Simulating the Quantum World with Laser-cooled Trapped Ions by **Prof Kazi Rajibul Islam**, Institute for Quantum Computing (IQC) and Dept of Physics and Astronomy, University of Waterloo, Canada, June 19, 2020
- Hawking Radiation in a Laboratory by **Prof Ted Jacobson**, University of Maryland, USA, June 26, 2020
- Is India Ready to Transform its Education System? by **Mr Adhitya Iyer**, TEDx speaker, June 27, 2020
- "My Soul is Moonburned": Bob Kaufman, and The Abomunist Manifesto, or "Dada Prodigies of Black" by **Prof Daniel Katz**, University of Warwick, June 29, 2020
- A Roundtable Discussion on 'Black Lives Matter Protests and its Impact on Global Politics' by **Prof Haydar Darici**, American University in Washington DC; and **Prof Anneeth Kaur Hundle**, University of California, Irvine, July 2, 2020
- Quantum Devices using Systems with Impurities by **Prof Ujjwal Sen**, Harish-Chandra Research Institute, Prayagraj, July 3, 2020
- [Part I] Li-ion Battery Safety by **Dr Judy Jeevarajan**, Underwriters Laboratories (UL), Chicago, July 6, 2020
- [Part II] Li-ion Battery Safety by **Dr Judy Jeevarajan**, Underwriters Laboratories (UL), Chicago, July 7, 2020
- Tip-induced Superconductivity by **Prof Goutam Sheet**, IISER Mohali, July 13, 2020
- The Tempest by **Mr Glenn Carle**, an author and an ex-CIA man, July 14, 2020
- Enrichment of Science Education at the School Level, **Mr Atul Kumar Vij**, Rishi Valley School (KFI), Madanapalle, AP, July 16, 2020
- Deconstructing Space-time by **Prof Sumit R Das**, University of Kentucky, USA, July 16, 2020
- Collectivity in Large and Small Systems formed in Ultrarelativistic Collisions by **Prof Rajeev Bhalerao**, IISER Pune, July 17, 2020
- Anyon Condensation and (some of) its Applications, **Prof Ling-Yan Hung**, Fudan University, Shanghai, July 21, 2020
- Recent Developments in Relativistic Hydrodynamics Theory for Heavy-ion Collisions by **Prof Amaresh Jaiswal**, National Institute of Science Education and Research, Bhubaneswar, July 23, 2020
- Tailor-made Dyes and Nanoparticles as Bright Fluorescent Probes for Biosensing and Bioimaging by **Prof Andrey Klymchenko**, University of Strasbourg, France, July 24, 2020
- Art of Creating First and Lasting Impression by **Major Suman Bazad**, Ex-Indian Army and Corporate Trainer, July 25, 2020
- Influence of a Local Internal Nonlinear Attachment on the Global Dynamics of a Circular Cylinder undergoing Vortex-induced Vibration by **Dr Ravi Kumar Tumkur**, MathWorks, July 29, 2020
- My key to the Lockdown by **SDC, IITGN**, Aug 8, 2020
- The Noise of Gravitons by **Prof Maulik Parikh**, Arizona State University, Aug 10, 2020
- Layered Hydroxides as Candidate Incommensurate Phases by **Prof Vishnu Kamath**, Bangalore University, Aug 14, 2020
- Where Dogs Gossip and Owls are Shamans: Multispecies Relations and Indigenous Ideas of Nature by **Dr Sahil Nijhawan**, University College London (UCL), Aug 21, 2020
- Metal-Catalyzed C-H Alkenylation Reactions by **Prof Jeganmohan M**, IIT Madras, Aug 21, 2020
- What is the pH at an Electrode Surface? by **Prof Katherine B Holt**, University College London (UCL), Aug 28, 2020
- Enzyme-enabled Materials by **Dr Christopher Blanford**, University of Manchester, Sep 11, 2020
- A Survey on Arithmetic of Elliptic Curves by **Prof Arnab Saha**, IITGN, Sep 16, 2020
- Narrative and Non-Narrative Tendencies - Indian Literature in the Vernacular and in English: A Conversation with Amit Chaudhuri by **Dr Amit Chaudhuri**, Novelist, Poet, Essayist, Musician and Professor at the University of East Anglia, England, Sep 16, 2020
- Hysteria: Symptom, Structure and Discourse by **Mr Arunava Banerjee**, a Psychoanalyst in the Lacanian orientation, New Delhi, Sep 18, 2020
- Alzheimer's is a Multifactorial Disease by **Prof Govindaraju**, New Chemistry Unit, JNCASR, Bengaluru, Sep 18, 2020
- Portable Molecular Diagnostic Platforms for Rapid Detection of Infectious Diseases by **Dr Aashish Priye**, University of Cincinnati, Sep 18, 2020
- Media and Social Justice: The Dalit and Tribal representation in today's media by **Mr Roxy Gagdekar**, BBC Gujarati, Sep 22, 2020
- A Failure to Launch: Boredom Proneness, Exploration and Agency by **Dr James Danckert**, University of Waterloo, Sep 22, 2020
- A Probability Sampler by **Prof Chetan Pahlajani**, IITGN, Sep 23, 2020
- Single-Molecule Fluorescence from Porphyrins Enabled by Gold Nanodimer Antennas by **Dr Pedro M R Paulo**, Instituto Superior Tecnico, Sep 24, 2020
- Theoretical Studies of the Reaction Dynamics of Nanocatalysts with Multiple Active Sites by **Prof Srabanti Chaudhury**, IISER Pune, Sep 25, 2020
- Unsustainable Use of Groundwater Resource: Threat to Food and Drinking Water Security by **Mr Dipankar Saha**, former Member (Head Quarters) CGWB, and former Member Secretary, CGWA, Sep 28, 2020
- Shadows, Echoes and Memory by **Prof Sayan Kar**, IIT Kharagpur Sep 30, 2020
- The Idea of Patriotism: History of a Concept by **Ms Sangbida Lahiri**, Doctoral Fellow, University of Calcutta, and **Dr Samrat Sengupta**, Sammilani Mahavidyalaya, University of Calcutta, Sep 30, 2020
- Amenable Groups and the Banach-Tarski Paradox by **Prof Issan Patri**, ISI Delhi, Oct 7, 2020
- Kings, Jurists, Ascetics and Outcasts: Discontinuous Histories of 'Sovereignty' in South Asia by **Prof Prathama Banerjee**, Centre for the Study of Developing Societies, Delhi, Oct 7, 2020
- Insights from Computational Modelling: Applications to Bio-molecules, Catalysis And Soft Matter by **Dr Prasad Phatak**, BASF India, Oct 8, 2020
- Sanitation in India - Exploring the Links between Waste, Caste and the Environment by **Mr Kanthi Swaroop**, PhD student, IIT Bombay, Oct 9, 2020
- Photoelectron Spectroscopy at Near Ambient Pressures: A Necessary Tool to Explore Materials under In-situ/Operando Conditions by **Dr C S Gopinath**, National Chemical Laboratory (NCL) Pune, Oct 9, 2020
- Groundwater Arsenic in the Himalayan Mega River Basin Aquifers Sources and Processes by **Prof Abhijit Mukherjee**, IIT Kharagpur, Oct 13, 2020
- Fire Burn, and Cauldron Bubble: Probing the Milky Way Star Formation and the Interstellar Medium using Radio Observations by **Prof Nirupam Roy**, IISc Bangalore, Oct 14, 2020
- How Do I Get to My Next Mental Model? by **Dr Britt Anderson**, University of Waterloo, Oct 15, 2020
- Patents, Innovation & Start Ups by **Dr Indranil Saha**, Founder, HIINXLEGAL, Oct 16, 2020
- In the Name of the Nation: India and its Northeast by **Prof Sanjib Baruah**, Bard College, New York, Oct 20, 2020
- Conservation of Quantum Information by **Prof Arun K Pati**, Harish-Chandra Research Institute (HRI), Allahabad, Oct 21, 2020
- How Can Mathematics Help to Keep the World Clean? by **Prof Ian Griffiths**, University of Oxford, Oct 21, 2020
- A Point-of-use, Non-electric, Affordable Sep-based Water Filter Designed via Surface Engineering of Silica Particles by **Dr Deepa Dixit**, Postdoctoral Fellow, IIT Delhi, Oct 22, 2020
- Twisted van der Waals Heterostructures by **Prof Pramoda Nayak**, IIT Madras, Oct 22, 2020
- fMRI and Machine Learning by **Dr Ayan Sengupta**, Research Affiliate at Cambridge University and an MRI Research Fellow at the Royal Holloway, University of London, Oct 23, 2020
- Role of Label-free Raman and SERS - From Decoding Nano-bio Interfaces to Precision Medicine by **Prof Soumik Siddhanta**, IIT Delhi, Oct 23, 2020
- Caste, Sexuality, Marginality by **Mr Dhruvo Jyoti**, Dalit Queer Journalist, Hindustan Times, Oct 27, 2020
- Contingency in/and the Novel: Kafka, Malouf, and the Event of Literature by **Dr Chinmaya Lal Thakur**, Doctoral Scholar, La Trobe University, Australia, and **Dr Arka Chattopadhyay**, IITGN, Oct 28, 2020
- Modular Square Roots by **Prof Alexandru Zaharescu**, University of Illinois at Urbana-Champaign, USA, Oct 28, 2020
- From the Lab Bench to a Translatable & Scalable Transdermal Delivery Technology: the Story of Droplet by **Dr Rathin Srinivas**, Founder and CTO of Droplet Inc and Cofounder of Novopyxis, Oct 29, 2020
- The Prospects of Career in Public Policy and Leadership by **Mr Ankit Bhatia**, Founder, Moolya Foundation, Leadership Development Initiative (LDI), Oct 29, 2020
- Discovery of Novel Synthetic Methodologies for Sustainable Organic Chemistry by **Prof D B Ramachary**, University of Hyderabad, Oct 30, 2020
- Applications of Data Science by **Ms Mathangi Sri**, Gojek, Oct 30, 2020
- Air Pollution and Health Burden in a Changing Climate: Perspectives for India by **Dr Sagnik Dey**, IIT Delhi, Nov 2, 2020
- Photonic Quantum Science and Technologies by **Prof Urbasi Sinha**, Raman Research Institute (RRI), Bangalore, Nov 4, 2020
- The Structure of the Regular and the Singular Set of the Free Boundary in the Obstacle Problem for Fractional Heat Equation by **Prof Agnid Banerjee**, TIFR Centre for Applicable Mathematics (CAM), Bangalore, Nov 4, 2020
- From Bacterial to Colloidal Streamers: Generalization of a Biophysical Phenomena by **Dr Alok Kumar**, IISc Bangalore, Nov 5, 2020
- Nobel Prize in Physics 2020 by **Prof Banibrata Mukhopadhyay**, IISc Bangalore, and **Prof Badri Krishnan**, Max Planck Institute for Gravitational Physics (Albert Einstein Institute), Germany, Nov 6, 2020
- Summating Stress: Conversation with an Everest by **Lt Col (Rtd) Romil Barthwal**, a mountaineer, marathoner and endurance sportsman, Nov 7, 2020
- Air Pollution-Land Use-Cloud Interactions: Impacts on Climate Change, Agriculture, Hydrological Cycle, Human Health and Monumental Heritages by **Dr Sachchida Nand Tripathi**, IIT Kanpur, Nov 9, 2020
- Limits to Adaptability in SOV Languages by **Dr Samar Husain**, IIT Delhi, Nov 11, 2020
- Webinar by **Dr Arvind Panagariya**, Columbia University, Nov 13, 2020
- Does Biomass Burning Matter? by **Prof Raza R**

- **Hoque**, Tezpur University, Nov 16, 2020
- Investigating Targeted Memory Reactivation during Sleep on Sensorimotor Performance in People With and Without History of Stroke by **Dr Brian Johnson**, Postdoctoral Fellow, National Institutes of Health (NIH), Nov 17, 2020
- Observational Probes of Cosmology by **Prof Shantanu Desai**, IIT Hyderabad, Nov 18, 2020
- How a Brief Exposure to Music Influences Our Judgment and Decision Making by **Prof Joydeep Bhattacharya**, Goldsmiths University of London, Nov 18, 2020
- Hilbert's Nullstellensatz and its Applications by **Dr Kriti Goel**, Early Career Fellow, IITGN, Nov 18, 2020
- Simulation Approaches in Battery Materials: Structural and Dynamical Complexities in Cocrystalline Electrolytes by **Dr Prabhat Prakash**, Early Career Fellow, IITGN, Nov 19, 2020
- Science of Energy from Biomass by **Prof H S Mukunda**, Advisor, ABETS, IISc Bangalore, Nov 20, 2020
- Effectiveness of Water Adaptation Responses in Reducing Climate and Associated Risks: Early Findings from a Meta Review by **Dr Aditi Mukherji**, International Water Management Institute, Nov 23, 2020
- The Making of Dalit Camera by **Dr Raees Mohammad**, Founder, Dalit Camera Media Foundation, Nov 24, 2020
- Resultant and Bezout's Theorem by **Prof Indranath Sengupta**, IITGN, Nov 25, 2020
- Neuroengineering Approaches for Motor Rehabilitation in Stroke and Traumatic Brain Injury Populations by **Dr Vikram Shenoy**, Kessler Foundation in New Jersey, USA, Nov 27, 2020
- Fast and Low Complexity Adaptive Signal Processing Algorithms for Digital Hearing Aids by **Dr Sankha Subhra Bhattacharjee**, Postdoctoral Fellow, IITGN, Dec 4, 2020
- Introduction to Method of Multiple Scales by **Prof Satyajit Pramanik**, IITGN, Dec 9, 2020
- Visual effects: Making the Impossible Possible by **Mr Srinivas Mohan**, a renowned VFX expert, Dec 10, 2020
- Creativity: Tool to Become a Disruptive Contributor by **Dr Arpan Yagnik**, Creative Aerobics Expert and an author, Dec 16, 2020
- Geomorphic Characterization of a Seasonal River Network in Semi-arid Western India by **Dr Sonam**, Research Associate, IITGN, Dec 18, 2020
- Quantum Engineering of Superconducting Qubits by **Dr William D Oliver**, Massachusetts Institute of Technology, Dec 22, 2020
- Wave Propagation in Fluid-filled Structural Acoustic Waveguides by **Dr Biswajit Bharat**, Postdoctoral Researcher, IITGN, Dec 23-24, 2020
- Leisure and its Discontents: Sociological Insights on Gender, Family and Aging by **Ms Ashwin Tripathi**, PhD student, IITGN, Dec 24, 2020
- Economic Ideas from Indian Civilization by **Prof Satish Deodhar**, IIM Ahmedabad, Dec 24, 2020
- Scientific and Technological Achievements of Indian Civilization by **Prof Bal Ram Singh**, Institute of Advanced Sciences (INADS), Massachusetts, USA, Jan 7, 2021
- Space to Earth: Legacy of Challenges and Opportunities by **Dr Mylswamy Annadurai**, Project Director of Chandrayaan-I & II and Program Director of Mangalyaan Mission, Jan 9, 2021
- Robotics to Characterize and Restore Human Movements by **Prof Sunil Agrawal**, Columbia University, USA, Jan 11, 2021
- Swami Vivekananda's Teachings for Modern Youth for a Better Tomorrow by **Swami Nikhileswarananda**, Shri Ramakrishna Ashram, Rajkot, Jan 12, 2021
- The Other Solid-State Electrolytes for Alkali Metal Batteries: Molecular Design and Mechanism by **Dr Prabhat Prakash**, Early Career Fellow, IITGN, Jan 15, 2021
- Low Ribblet Ratio Syngas to Fischer-Tropsch Diesel from over nanoFe-Co supported on Hierarchical-MFI Zeolite by **Prof Sreedevi Upadhyayula**, IIT Delhi, Jan 15, 2021
- Opportunities for Research in Germany and DAAD Funding Programmes for Research by **Ms Dhanashree Deodhar** and **Ms Girija Joshi**, DAAD, India, Jan 16, 2021
- Session on LinkedIn by **Ms Archana Williamson**, LinkedIn, Jan 16, 2021
- Psychological Responses to Reservation-based Discrimination: A Qualitative Study of Socially Marginalized Youth at a Premier Indian University by **Anupam Sharma**, Doctoral Scholar, Humanities and Social Sciences, IITGN, Jan 18, 2021
- Poetry, Obscenity and the Hungry Generation by **Malay Roy Choudhury**, well-known Bengali poet and writer in conversation with **Daniela Cappello**, Doctoral Candidate, Heidelberg University, Jan 25, 2021
- Case Study: Research in Chemical Industry by **Dr Deepak Sharma**, Bayer, US, Jan 28, 2021
- Harmony Exoskeleton: A Journey from Robotics Lab to Stroke Patients by **Prof Ashish D Deshpande**, University of Texas at Austin, USA, Jan 29, 2021
- The Fifth Element-Boron by **Prof E D Jemmis**, IISc Bangalore, Jan 29, 2021
- Critical Points of the Landscape Function by **Prof Koushik Ramachandran**, TIFR Bangalore, Jan 29, 2021
- Ethnonationalist-neocolonial "Development," Gender Discrimination and the Case of Kashmir by **Prof Ather Zia**, University of Northern Colorado, Greeley, Jan 29, 2021
- Network is Net-worth - Getting Best Out of LinkedIn by **Mr Saumil Shah**, IITGN, Jan 31, 2021
- Molecular Clocks: Modeling, Structure and Dynamics by **Prof Ashutosh Srivastava**, IITGN, Feb 4, 2021
- Dynamics of Aircraft Loss of Control by **Dr G Rohith**, Postdoctoral Fellow, IITGN, Feb 5, 2021
- Continued Fractions, Fredholm Determinants and Unstable Eigenvalues of Ideal Fluids by **Dr Shibi Vasudevan**, Postdoctoral Fellow, ICTS Bangalore, Feb 5, 2021
- Walking Among the Stars, a 3D Data Journey with Chandra by **Dr Arcand**, NASA's Chandra X-ray Observatory, Feb 9, 2021
- Essential Role of the Minority Sites in Catalysis on Small Nanostructures by **Prof Ali Haider**, IIT Delhi, Feb 11, 2021
- Norm Attainment of Model Operators by **Dr Kousik Dhara**, ISI Bangalore, Feb 12, 2021
- Harnessing Chaos by **Prof Sudeshna Sinha**, IISER Mohali, Feb 13, 2021
- Robotics for Assessment and Training of Dynamic Balancing During Walking by **Prof Zlatko Matjači**, University of Ljubljana and University Rehabilitation Institute, Republic of Slovenia, Feb 15, 2021
- Exploring Co-crystallization in Organic Solid State Chemistry by **Prof Deepak Chopra**, IISER Bhopal, Feb 19, 2021
- Beyond Abel and Jacobi by **Prof Kapil Paranjape**, IISER Mohali, Feb 19, 2021
- A Quantum Diamond Microscope for Mapping Magnetic Fields by **Prof Kasturi Saha**, IIT Bombay, Feb 20, 2021
- India's Power Sector Transition to 2030: Modelling and Insights by **Mr Raghav Pachouri**, The Energy and Research Institute (TERI), Feb 22, 2021
- Design Thinking for a Sustainable Future by **Ms Lakshmi Menon**, designer and social entrepreneur, Feb 22, 2021
- Corrosion Control by Coatings by **Mr Urvesh Vala**, L&T Chiyoda Ltd, Feb 25, 2021
- Pharmacokinetics of Controlled Release Formulations - in Silico and in Vitro Models by **Prof Prateek Kumar Jha**, IIT Roorkee, Feb 25, 2021
- A Three-Dimensional Ion Imaging Spectrometer for Studying Photo-Induced Fragmentation in Small Molecules by **Prof Vandana Sharma**, IIT Hyderabad, Feb 26, 2021
- When Adivasis Speak: Agency, Resilience and Resurgence by **Ms Ruby Hembrom**, Founder and Director, Adivaani, Feb 26, 2021
- An "all-purpose" Erdos-Kac Theorem by **Prof M Ram Murty**, Queen's University, Canada, Feb 26, 2021
- Symmetries in Physics by **Prof Nabamita Banerjee**, IISER-Bhopal, Feb 27, 2021
- Inferring Dissipation in Microscopic Systems by **Dr Sreekanth Manikandan**, Nordita fellow, Nordic Institute for Theoretical Physics (NORDITA), Stockholm, Sweden, Mar 1, 2021
- A Potential Synergy between Heritage Tourism and Sustainable Development Targets: An Insight on Naga Burial Sites by **Dr Alino Sumi**, Postdoctoral Fellow, Archaeological Sciences Centre, Mar 3, 2021
- A Sustainable Approach to the Burial Archaeology: Harappan Graves in India by **Dr Tosabanta Padhan**, Postdoctoral Fellow, Archaeological Sciences Centre, Mar 3, 2021
- Design and Control of Hand and Leg Exoskeletons for Neuro-Rehabilitation of Stroke Patients by **Prof Ashish Dutta**, IIT Kanpur, Mar 3, 2021
- Caste, Stigma and Reservation: Why Most Backward Castes Want SC Status? by **Mr Arvind Kumar**, PhD Scholar, University of London, Mar 4, 2021
- Molecules to Materials: Multi-Tasks from Single Molecule by **Prof G Prabu Sankar**, IIT Hyderabad, Mar 12, 2021
- The Idea of India before the British by **Dr Shonaleeka Kaul**, Jawaharlal Nehru University, Mar 13, 2021
- Gravitational Waves as a Tool to Probe Extreme Physics by **Prof Debarati Chatterjee**, Inter-University Centre for Astronomy & Astrophysics (IUCAA), Mar 14, 2021
- Swaraaj, Hind and Gandhi's Translation by **Dr Javed Khatri**, Navrachana University, Vadodara, Mar 17, 2021
- A Thermodynamic View of Dynamic Allosteric: Role of Rearranging Hydrogen Bond Network by **Dr Suman Chakrabarty**, SN Bose National Centre for Basic Sciences, Kolkata, Mar 19, 2021
- Adaptive Finite Element Method for Second Order Linear Non Self-Adjoint Elliptic Problems by **Prof Asha Dond**, IISER Thiruvananthapuram, Mar 19, 2021
- Structural Acoustics of Perforated Panels by **Prof Venkata Sonti**, IISc Bangalore, Mar 19, 2021
- Update on Aryan Invasion Debate by **Dr Koenraad Elst**, an oriental philologist & historian, Mar 22, 2021
- The Life and Death Knot of Transgender Psychoanalysis by **Dr Patricia Gherovici**, University of Pennsylvania (PSYS), USA, Mar 22, 2021
- Wearable Robotics for Sustainable Welfare by **Prof Nicola Vitiello**, BioRobotics Institute, SSSA, Pisa, Italy, Mar 24, 2021
- Multi-Scale Simulations for Advancing Sustainable Hydrogen Production via Electrochemical Water Splitting by **Dr Ananth Govind Rajan**, IISc Bangalore, Mar 25, 2021
- Elucidating Unusual Binding Behaviour in Diphenylether with Water and Alcohols Aggregates using Multi-Spectroscopic Approach by **Dr Mariyam Fatima**, Postdoctoral Researcher, Deutsches Elektronen-Synchrotron (DESY), Hamburg, Germany, Mar 26, 2021
- Generalizing Homogenization Theory for Problems in Reactive Decontamination by **Prof Ian Griffiths**, University of Oxford, UK, Mar 26, 2021
- Writing and Speaking the Vision by **Ms Cynthia Stephen**, a poet, an independent academic, media professional and human rights activist, Mar 26, 2021
- Campus Queer Collectives: Awareness, Inclusivity, Intersectionality by **Prof Gourab Ghosh**, NMIMS, Mumbai, Mar 30, 2021
- Semiotic Travels: Thinking Language between Indian and French Traditions by **Prof Harjeet Singh Gill**, Jawaharlal Nehru University, Mar 31, 2021

LABORATORIES AND FACILITIES

ARCHAEOLOGY LAB

The Archaeological Sciences Centre (ASC) lab is equipped with following facilities to conduct various scientific investigations and archaeological research: field emission scanning electron microscope (FESEM), X-Ray diffraction and fluorescence (XRF and XRD), mass spectrometry (ICP-MS and MALDI-TOF), ground-penetrating radar (GPR), 3D long-range and short-range laser scanners, and a binocular microscope with digital camera attachment for investigations of archaeomaterials. ASC has set up a ceramic petrology lab to investigate ancient pottery; this consists of a polishing and grinding unit (for making thin sections) and a polarizing microscope. ASC is currently setting up a small bone/teeth sampling unit consisting of a clean box and micro-drilling.



BIOLOGICAL ENGINEERING

The Biological Engineering laboratory facilities at IITGN include the Molecular and Cellular Biology Facility (MCBF), Cell Culture Laboratory (CCF), C Elegans facility, Crystallization Laboratory, Microbiology Laboratory, Proteomics and Peptide Synthesis (PPSF) facility, Medical Ultrasound Engineering (MUSE) Lab, and Stem Cells and Tissue Engineering Lab.

Facilities added in 2020-2021

MEDICAL ULTRASOUND ENGINEERING (MUSE) LAB is equipped with instrumentation dedicated for innovating in tissue characterization and elasticity imaging, molecular and contrast-enhanced imaging, ultrasound-mediated therapy, acoustic metrology and sensing, and tissue-mimicking phantoms for imaging and therapy. The facility has a programmable research ultrasound imaging system and equipment for generating and sensing ultrasound fields ranging from 1 to 35 MHz, which include ultrasound transducers, hydrophones, pulser-receivers, arbitrary waveform generators, digital and mixed signal oscilloscopes, and power amplifiers. The lab also includes workstations with GPU and a phantom fabrication area with standard wet lab equipment, a vacuum oven, a fume hood, and a calibrated tissue-mimicking phantom.

STEM CELLS AND TISSUE ENGINEERING LAB has BSL1+ facilities to handle mesenchymal stem cells and primary cell culture including tissues. The lab includes a cell room which has 2 biosafety cabinets, 1 CO2 incubator and vacuum facilities. The sample preparation room within the stem cells room includes molecular biology facilities like weighing balance, pH meter, stirrer, PCR machine, a small microscope and gel apparatus.

Equipment added this year

OXFORD NANOPORE TECHNOLOGY DNA SEQUENCER: A MinION DNA sequencer setup is functional. This platform is capable of generating long reads and can be used for sequencing DNA or RNA. Currently, the setup is being used for genomic and epigenomic analyses that help us understand functions of genes such as CGGBP1, chromatin biology and genetic mutational events relevant in tumorigenesis.

NANOPARTICLE TRACKING ANALYZER: Nanoparticle Tracking Analysis (NTA) is equipped with two lasers of wavelength 405 nm and 480 nm without zeta potential. The particles in the sample (liquid) are tracked and analysed for various sizes after being detected on a total of 11 positions. The particles can be visualised in real time and thus the shape and size of particles being analysed can be observed. Results are in the form of size distribution profile, i.e. percentage of particles of particular sizes. The instrument can be used in experiments where the particle formation and geometry needs to be observed such as nanoparticle synthesis and protein-aggregation studies.

FLOW CYTOMETER HIGH END CELL SORTER: The BD FACSAria Fusion flow cytometer high end cell sorter provides a powerful, sensitive and unmatched technique for monitoring different populations of biomolecules and cells within immensely heterogeneous mixtures. The instrument uses three solid state lasers for simultaneous measurement of 11 parameters (13 including forward and side scatter). Both components of the instrument namely the fluorescence/scattering analyzer and the cell sorter are housed within a single unit that does not require any custom alignment of optics. The instrument is capable of performing routine applications including cell cycle analysis, cell viability assay and immunophenotyping as well as high

end applications such as cell sorting and membrane potential measurements. The instrument will benefit a vast range of research projects at IITGN covering medicinal chemistry, drug delivery systems, nucleic acid biochemistry, membrane biology, protein-nucleic acid interactions, biomaterials development, nanomedicine and toxicology. The distinctive capabilities of the instrument cannot be matched by any other single instrument or even a combination of experimental approaches.

PROGRAMMABLE RESEARCH ULTRASOUND SYSTEM: The programmable research ultrasound system has hardware and software technologies that provide direct access to raw ultrasound data, while preserving the ability to perform high quality real-time imaging with custom software, at clinically-useful imaging frame rates. This system is designed to provide the researcher/developer with broad flexibility in defining each of the system's functional components, using familiar and powerful software interfaces based on common programming environments, such as MATLAB® and C++. Researchers can conceive, implement, and evaluate new approaches to ultrasound imaging and ultrasound therapy monitoring or delivery using such a system.

CHEMICAL ENGINEERING

The Chemical Engineering discipline has state-of-the-art laboratory facilities and setups related to different courses in BTech, MTech and PhD programs. The facility also includes a special characterisation facility such as a UV-vis spectrophotometer, HPLC, GC, particle size analyser, and a computer facility for process simulation laboratory. Simulation tools such as ANSYS, STAR-CCM, AspenTech suite, MATLAB, and COMSOL are also available. Besides, the discipline is equipped with the following research laboratories actively involved in different areas of research in undergraduate and graduate programmes:

COLLOIDAL ENGINEERING LABORATORY: The laboratory is involved in active research in nanoparticle synthesis, crystallization, drug polymorphism, and microbubble engineering for pharmaceutical and biomedical applications. The lab has a probe sonicator (Sonics VC 505), a particle size analyser (Beckman Coulter LS 13320) for measurement of particle sizes in the range of 40 nm - 2 micron and particle sizing systems (PSSS) zeta analyser (NICOMP380 ZLS) for estimation of zeta potential of aqueous suspensions of nanoparticles, Martin Christ freeze dryer (Alpha 1-4 LD plus and Alpha 2-4 LSC, Martin Christ, Germany) high-pressure vessel (operating conditions: 200 bar, and 100o C), particle size analyzer (PSS NICOMP Accusizer 780 AD), optical microscope (NIKON TS 100F), high-speed camera (Photron Europe, Model: FASTCAM Mini), in- situ Raman probe (Kaiser USA, Model: RXN-1 785), solution calorimeter (Paar USA, Model: 6755EE), water bath, glass jacketed reactor, clean bench cabinet, computer workstation, etc.

SOFT MATTER SCIENCE AND ENGINEERING LABORATORY: The lab is actively doing experimental research in stress and strain-controlled rotational rheometer, optical microscope,

instruments for colloidal characterisation. The equipment in the lab are; rheometer, optical microscope, tensiometer, refrigerated and heated circulatory bath (Model: IC301-K3), DLS and Zeta potential measurement instrument (Brookhaven), refrigerated tabletop centrifuge, a computer workstation with servo stabilizer.

DRY PROCESS TECHNOLOGY (DRYPROTECH) LABORATORY:

The state-of-the-art DryProTech Lab has several sophisticated instruments such as surface energy analyser (inverted gas chromatography), simultaneous TG-DSC from Netzsch, FT4 powder rheometer (Freeman Technology), laser diffraction particle size analyser (CILAS) for characterisation in dry and wet mode. In addition, the lab is equipped with V-blender and cone-mill (Prism Pharma), humidity- controlled glove box and Faraday cup with electrostatic charge measurement facility, planetary ball mills, furnace chamber, tube furnaces, catalytic reactor to study the performance of catalyst powders, etc.

FIRE RESEARCH LABORATORY: The Laboratory has a cone calorimeter (FFT, UK; Model: iCone mini), which is considered the most significant bench scale instrument in fire testing. This apparatus has been adopted by the International Organisation for Standardisation (ISO 5660-1) for measuring heat release rate (HRR) of materials under incident heat flux. The specimen can be exposed to a maximum of 100 kW/ m² heat flux. This device analyses the combustion gases and measures the produced smoke from the test specimen along with its time to ignition and mass- loss rate. The data collected from this bench-scale test can be used for fire modeling, prediction of real-scale fire behavior, pass/fail tests, etc.

DSIR-IITGN-CRTDH (COMMON RESEARCH & TECHNOLOGY DEVELOPMENT HUB, CRTDH):

The DSIR-IITGN-CRTDH is equipped with ICP Analysis Suite (Perkin Elmer), fluorescence spectrometer, multimode microplate, mass spectrometer (Spectrum Automation and Control) UV- Vis spectrometer (Analytic Jena AG), Model - MAX300-CAT (M/s Extrel CMS, LLC, USA), multi- purpose online gas chromatography, TOC analyser (Analytik Jena AG), HPTLC (CAMAG, Switzerland), basket centrifuge, and refrigerator circulator.

POLYMER ENGINEERING RESEARCH LAB (PERL): The laboratory is involved in both experimental and computational work in the areas of self-oscillating chemical reactions, shape memory polymers, smart soft materials, polymer processing, polymer gels and composites and pattern formation. The laboratory is equipped with computational facilities including state-of-the-art workstations and access to high performance clusters. The experimental facilities include lyophilizer (Martin Christ, Alpha 2-4 LSC Basic) for freeze-drying, centrifuge, refrigerated and heated circulating cooling bath (IC 301-K3), bath sonicator, magnetic stirrer (with temperature sensor), vacuum pump, clean bench cabinet etc. We are in the process of procuring a polymer extruder/mixer for polymer blending polymers in pellets or powdered form, hot press machine and a gel permeation chromatography instrument.

COMPUTATIONAL RATIONAL DESIGN LABORATORY: The laboratory is involved in developing computational methods to rationally design solid materials that show desired response to the process-conditions. The laboratory is equipped with four high performance computer workstations that are used to perform simulations at the molecular and nano scales. The workstations are equipped with the software to perform molecular dynamics and Monte Carlo simulations of biological and artificial systems, and equipped with graphics processing units (GPUs) for the visualization of simulation-results. The workstations are also used to develop and test the computer programs used to perform advanced Monte Carlo simulations.

CHEMISTRY

The Chemistry discipline's laboratory is equipped with state-of-the-art facilities for a variety of teaching and research activities for undergraduate and postgraduate students. Fume hoods equipped with Schlenk lines cater to a large segment of wet chemical synthetic work. The discipline also has a glovebox for performing chemical reactions under an inert atmosphere. The sophisticated instruments in the institute include 500 MHz NMR, Synapt G2S ESI-Q-ToF mass spectrometer, scanning electron microscope (SEM), atomic force microscope (AFM), MALDI-ToF and a single crystal x-ray diffractometer (SCXRD). The research instruments consisting of cyclic voltammeter, a circular dichroism spectrometer, BET surface area analyser, isothermal titration calorimeter, fast protein liquid chromatography, TGADSc, gas chromatography, FTIR spectrophotometer, UV-vis instruments (with reflectance accessory and 8-cell Peltier unit), analytical HPLC, spectrofluorometer with Peltier cooling, polariser and solid-state accessories, are used both for teaching and research. The discipline also has state-of-the-art optical microscopy setup capable of imaging single molecules and nanoparticles in confocal and wide field detection.

Instruments such as an EMCCD camera and advanced gas chromatography are being procured. Recently, preparatory high performance liquid chromatography (Prep-HPLC) is procured to purify peptides and charged small molecules with high purity and quantity for biological studies. Moreover, a flow cytometry instrument is also acquired to detect and sort fluorescently labelled single cells. This flow cytometer is also highly useful to detect cells in different apoptotic states. Chemistry discipline also obtained multi-angle dynamic light scattering (MADLS) which can measure the size and surface charge of the nano/micro particles in high precision from microliter volume. C3-High Pressure Homogeniser has also been installed. These instruments have significantly enhanced the discipline's capabilities in interdisciplinary areas covering chemistry, biology, material science and nanophotonics.

CIVIL ENGINEERING

The Civil Engineering discipline has developed laboratories in the areas of structural engineering, geotechnical engineering, water resource engineering and surveying/ GIS.

STRUCTURAL ENGINEERING LABORATORY: The Structural Engineering laboratory has the following material testing facilities for UG students: standard consistency, initial/final setting time of cement paste; soundness of cement; bulking of sand; slump test for workability of concrete; compaction factor test; vee bee consistometer test; specific gravity of cement; fineness of cement; fineness modulus, specific gravity, bulk density of fine/coarse aggregates; elongation and flakiness index of coarse aggregates; aggregate impact value; aggregate abrasion value (Los Angeles test); compressive strength 73 of cement cube and mortar cube; compressive strength of concrete cube (as per nominal mix); compressive strength of concrete cube (as per mix design); compressive strength of concrete by ultrasonic pulse velocity test; compressive strength of concrete by rebound hammer; finding of air content in concrete; concrete penetration resistance; penetration depth of bitumen; flash & fire point of bitumen; viscosity of tar; efflorescence of brick; water absorption of wood; viscosity of paint; fineness of paint. The laboratory also houses advanced conditioning and testing equipment such as a 300 ton compression testing machine, autoclave, medium-sized furnace, steam chamber, concrete screw pump and efficient concrete scanner device for structural analysis and to locate embedded objects in multiple layers with maximum detection depth for object localisation: 300 mm.

GEOTECHNICAL ENGINEERING LABORATORY: The Geotechnical Engineering laboratory is equipped with high-end research equipment along with basic soil testing. The soil dynamics laboratory is equipped with large (earthquake) and small strain (vibratory) testing. Large strain dynamic loading: cyclic triaxial test setup (0.01Hz-2Hz, stress and strain controlled); cyclic simple shear setup (0.001Hz-5Hz, stress and strain controlled) to evaluate liquefaction, shear modulus & damping ratio of soils up to 10,000 loading cycles. Small strain dynamic loading: bender element system to determine shear modulus under K₀, stress path, isotropic, UU, CU, CD compression and extension loading conditions. Shear strength facility consists of direct shear setup for cohesionless soils, unconfined compression (UC) test for cohesive soils, vane shear test for soft soils, and triaxial setup with DAQ and analysis software for all soil types. Pore pressure and volume change measurement facilities are available for compression/extension loading (UU, CU, CD tests), K₀ consolidation and stress path testing. Large direct shear setup is also available to study the interface behavior of various types of geosynthetics-soil system. Dew point potentiometer is available to determine total suction (0-300 MPa) of fine-grained soils, conventional tensiometer for coarse-grained soils, and filter paper setup for matric suction of all soil types. The facility includes falling and constant head devices for the permeability of fine and coarse-grained soils, four 3-gang oedometer (1D consolidation) setup, proctor setup, CBR for the strength of subgrade soil, sieve shaker, hydrometer, Atterberg limit (LL, PL, SL), swell pressure, specific gravity, relative density, core cutter, sand replacement, muffled furnace (900oC) for organic matter evaluation, optical and digital LCD microscopes. The field testing laboratory has plate load test of 300 kN capacity with motorized anchoring system, standard penetration test (SPT), dynamic cone penetration test

(DCPT) with automatic free-fall hammering system, vibratory plate compactor for field compaction, field permeability setup, ground penetration radar (GPR) with mono and bistatic operations facilitated with antennae of frequencies 100MHz, 400MHz with the bistatic operation and 200MHz and 900MHz with the monostatic operation including 20-80 multi frequency antennae, multichannel analysis of surface waves (MASW) setup with the provision of Seismic Refraction/Reflection Survey and Downhole/Crosshole tests. The following equipment were developed in the laboratory: multiaxial cubical device with flexible boundary system along with real-time feedback control system capable of conducting true-triaxial and plane strain testing of soils, constant rate of strain (CRS) consolidation setup, slurry consolidation setup for preparing the remolded specimens of fine-grained soils.

WATER RESOURCES ENGINEERING LABORATORY: The Water Resources Engineering laboratory has the following equipment for teaching purposes: a hydraulic bench, pitot tube, Reynold's apparatus, sharp-crested weir (notch), Bernoulli's apparatus, venturimeter and orificemeter, nozzle meter, hydraulic tilting flume, basic hydrology apparatus, free and forced vortex flow apparatus. In addition to the above, a river tray having levee breach facility, an automated hydraulic tilting flume and a piping system to study transients are being used for research purposes. A 3D velocity measurement device, Acoustic Doppler Velocimeter, is used in the flume experiments.

SURVEY AND GIS LABORATORY: The Survey and GIS laboratory has been developed with the procurement of various high-end survey equipment and GIS software. Survey equipment includes advanced integrated surveying kit which consists of kinematic GPS, robotic total station and related field and office software. It provides a common file and user interface to GPS and total stations that complement each other. Integrated surveying provides a platform where GPS techniques can extend a total station survey without the need for extensive traversing. Besides this several total stations, auto level, digital level and handheld GPS are also procured, which will be used in addition to the advanced integrated surveying kit. Multiuser ArcGIS Info kit is procured to carry out GIS analysis in teaching and research activities. ArcGIS package will add the pre-existing image processing software for handling the satellite data.

COGNITIVE SCIENCE

The Cognitive Science Laboratory is home to multiple state-of-the-art research facilities including behavioural cubicles, psychophysics & psychophysiological systems, eye tracking, virtual reality platforms, motion capture systems, and a driving simulator completely built in-house. With addition of research facilities for studying brain function, such as high-density 128 channel EEG system, transcranial direct current stimulator, transcranial magnetic stimulation with MRI guided neuronavigation system, it has been possible to address research questions that combine brain mechanisms with the study of human cognition.

EYE-TRACKING: The eye-tracking facility includes a Tobii TX 300 eye-tracker and comes with the Tobii Studio™ eye-tracking software. This is a state-of-the-art eye-tracking facility that can collect data pertaining to saccades, correction saccades, fixation duration, pupil size and blinks. The facility also includes the Tobii toolbox, which supports data collection using MATLAB, thus minimizing the use of Tobii studio for experimental design. Support is also available for E-Prime through extensions from Tobii.

HIGH-DENSITY ELECTROENCEPHALOGRAPHY (EEG): A high-density EEG system is available with 128 channel Geodesic sensor nets that are saline-based for quick application to participants. The system is integrated with E-Prime and MATLAB for stimulus presentation. NetStation software is used for recording and processing of the data. The data can also be exported to open-source and popular processing toolboxes such as EEGLab in MATLAB. The software capabilities include AmpServer Pro licence for real-time sampling of raw data up to 8KHz for Brain-Computer Interfacing Applications. The EEG system has now been setup for simultaneous Eye tracking and EEG recordings.

BRAIN STIMULATION: The facilities include a transcranial Magnetic Stimulation (TMS) system for non-invasive stimulation of the brain. The TMS system is coupled with a neuronavigation system which can use the MRI scan of a participant for precise targeting of single or repetitive magnetic pulses to localise brain regions of stimulation. The transcranial Direct Current Stimulation (tDCS) is used for non-invasive stimulation of the brain by using a small direct current across the scalp to modulate brain function. Even extremely low-level currents may simultaneously increase the brain's activity near the anode and decrease the activity near the cathode.

ROBOTIC SYSTEM: The bilateral Kinarm end-point robot is a stiff, graspable robot that ensures simultaneous control of both robots for comparison of inter-arm performance and the study of bimanual coordination.

DIGITISING TABLET: GTCO CalComp digitising tablet records the end point arm movement. It has a functional area of 36X24 cm and records the movement of the stylus on the surface of the tablet. It can record the stylus movement at the rate of 60 Hz.

MOTION CAPTURE SYSTEM: This custom system uses electromagnetic sensors (Ascension trakStar, Northern Digital) to record arm movements made in the horizontal plane. It is interfaced with the motion monitor (Innsport, Chicago, IL) as well as autonomously developed software to provide a virtual reality environment, which enables recording of arm motion data under a variety of different task conditions. This system can be integrated with a range of external devices including EMG, EEG and TMS equipment, which allows quantification as well as disruption of neural activity during arm motor tasks.

BEHAVIOURAL CUBICLES: Currently, there are three behavioural cubicles that house computers that support

behavioural data collection. The cubicles are sound-attenuated dark rooms. The computers run MATLAB with the Psychophysics toolbox and are used for research on decision-making, attention, agency, etc. They also support E-Prime and other software such as Blitz3D. These labs are also used as private spaces for paper-and-pencil tests and questionnaires that require an environment free from external interference. The Lab features an additional Survey room with multiple participant seating. Two additional cubicles are dedicated for psychophysiological experiments with a high refresh rate monitor and adjustable lighting.

PSYCHOPHYSIOLOGY LAB: The wireless physiology-based data acquisition system (Biopac Systems Inc) facilitates real-time data acquisition of physiological signals such as ECG, EMG, EDA and provides excellent signal quality with digital transmission with high resolution of 16 bit and at high speed up to 400 kHz aggregate. The system is compatible with the virtual reality-based programming platform Vizard from WorldViz Inc.

MULTISENSORY LAB: The Lab features research facilities for sound-attenuated testing of Active noise cancellation equipment with surround sound speakers. The lab features a driving simulator that was built completely in-house.

TACTILE PERCEPTION LAB: The Lab features custom-built arduino-based devices supplemented by 3D printing for conducting psychophysics experiments for texture discrimination, wetness perception, tactile stimulation with piezo electric vibrators.

EARTH SCIENCES

Earth Science at IITGN envisions holistic understanding of the Earth system through multidisciplinary studies of its major components like lithosphere, hydrosphere, atmosphere and biosphere, and their interactions at different spatio-temporal scales. The Earth Science lab 1 and 2 are home to various multi/interdisciplinary projects activities starting from contaminants fate and transport study combined with hydro-geochemical modelling, nanoparticle synthesis and their further environmental applications, “waste to wealth” technology, wastewater based epidemiology, sustainable utilisation of geotechnical materials, Earth surface processes and tectonic geomorphology. These labs are hubs of several international and national collaborative projects funded by noted funding agencies (such as MHRD, SERB, DST, DST-UKIERI, INSPIRE, MOES, MOEF&CC, KPCSD, GSBTM). The lab also promotes public/private partnership through several tailor-made consultancy projects/services.

EARTH SCIENCE LAB 1 is equipped with basic and sophisticated research facilities /equipment to conduct elementary and advanced level of water and soil chemistry. It aims to address the environmental maladies and provide a scientific sustainable solution to the society at the grassroots level. This laboratory has several experimental setups to assist research from macromolecular level to ultra-trace level with the help of

different instruments such as Ion-Chromatography (IC), Hanna (HI7698194) multiparameter pH/EC/DO probe, High purity milli-Q grade water (18.2 MΩ cm⁻¹, Milli-Q® Direct 8) purification system, Laminar flow hood, Desiccators, Biological safety cabinet, Incubator, Refrigerator, Ultracentrifuge, Electric Muffle Furnace, Hot Air Oven, Mechanical mixture, Sonicator, Hot plate, temperature-controlled magnetic stirrer, Autoclave, Potable pH and conductivity meter and Thermoscientific Ion Selective Electrodes. The lab is a true example for multidisciplinary studies, as the Masters and PhD research work is extended to different areas like nanomaterials, sustainable construction material. Also, the consortia of different discipline students make the lab environment very dynamic and productive.

EARTH SCIENCE LAB 2 includes a sample preparation facility to be analysed in major instruments. This lab aims to prepare dry as well as wet samples. The lab is equipped with rock crushing and grinding facility, sieving, hand-held strong magnetic separation, ultrasonic cleaning and leaching of sand grains and chemical analysis through fully functional fumehoods for normal and HF analysis.

ELECTRICAL ENGINEERING

The Electrical Engineering discipline currently offers five undergraduate laboratory courses and a basic laboratory course to students of other engineering disciplines. The Electrical Engineering laboratory is equipped with standard test and measurement equipment such as digital storage oscilloscopes, dual-channel arbitrary function generators, digital multimeters, LCR meters, multi output DC regulated power supplies, four-channel digital power scope, eight-channel ScopeCoder, source and measurement units, precision magnetic analyzer, RF spectrum analyzer, AC and DC digital power meters. The research facilities of the discipline are housed in specialised laboratories given below.

WAFER CHARACTERISATION LABORATORY: The Wafer Characterisation Laboratory currently houses a 6” wafer probe station, a semiconductor parametric analyser (with 6 SMUs, 1 LCR meter, 1 pulse unit), a power device analyzer, a 20 GHz vector network analyzer, a dynamic signal analyzer, a low-noise current preamplifier, ICCAP modeling software and set-up to measure packaged devices. This lab will have another probe station (8” with temperature range from -60 to 300 degC) and 43.5GHz vector network analyzer by the end of this year.

NANODC LABORATORY: The Nano Devices and Circuits (NanoDC) Laboratory is primarily used for analog/digital VLSI design and semiconductor device-related research. The laboratory is equipped with multi-user licenses for Cadence, Mentor Graphics, Synopsys, Xilinx ISE tools and GTS TCAD tools. The laboratory is also equipped with a variety of FPGA boards including Basys, Nexus, Spartan, Kintex-7 boards. Apart from this, the lab has other computational resources including an 80-core server, multiple workstations and machines that host the CAD tools

POWER SYSTEMS AND SMART GRID LABORATORY: The lab is equipped with a fully digital real-time power engineering simulation platform consists of Opal-RT (OP4508 F11-3+1) real-time digital simulator - OP5600 and customized modular hardware and firmware for hardware-in-the-loop (HIL) and rapid control prototype (RCP) studies in power systems and smart grid related research activities. The lab is also equipped with power systems simulation packages – PSCAD, CYMDIST and GAMS Optimisation tool.

INTELLIGENT REHABILITATION AND AFFECTIVE COMPUTING SYSTEMS LABORATORY: The Intelligent Rehabilitation and Affective Computing Systems Laboratory owns five systems for which patent has been applied (i) SmartEye for diagnosis of cognitive impairment, (ii) Instrole for characterization of one's gait, (iii) SwasTi which is AI enabled walking stick to prevent freezing of gait (FOG) in people with Parkinson's disease, and (iv) OnCallDoctor system for noninvasive measurement of various physiological parameters of the human body and (v) PTreadX which is a physiology-sensitive treadmill-assisted VR-based Gait Exercise Platform. In addition, this research lab is equipped with a split-belt treadmill platform, remote and wearable eye-trackers, Biopac for physiological data acquisition, haptic devices, EEG data acquisition, Transcranial Electrical Stimulator, Functional Electrical Stimulator, Cybergloves and VR headset.

COMPUTER VISION, IMAGING and GRAPHICS (CVIG)

LABORATORY: The lab houses Faro Focus 3DX330 and Einscan Pro+ laser scanners which are used to scan large structures and artifacts, respectively with 3D printers. The potential applications include digital heritage, shape analysis, and geometric processing. The lab also has coded aperture cameras fabricated with the help of ISRO-SAC for refocusing and extended depth of field recovery from a single image. The coded aperture cameras can be used with any DSLR to achieve these tasks. Several GPU enabled workstations are used to solve computationally intensive problems involving deep learning for computer vision applications. The lab also will host a human motion capture system for research on human dynamics.

PHOTONIC SENSORS LABORATORY: The Photonic Sensors Laboratory works on applications of near-IR and mid-IR tunable diode laser absorption spectroscopy, photoacoustic absorption spectroscopy, plasmonic nano-biosensing, microbial growth studies and fiber-optic biomedical engineering. The lab is equipped with 4312 nm and 4559 nm quantum cascade lasers (Alpes Lasers), a 1392 nm edge-emitting laser diode (Eblana), 1533 nm edge-emitting laser diode (Toptica), a 100 mW, 4.3-4.7 μm quantum cascade laser (Daylight Solutions), a 1650 nm edge-emitting laser diode (Toptica Photonics), VCSELs (1278 nm, 2004 nm, Vertilas), cooled and uncooled photodiodes. It also has a 50 MHz dual-channel, lock-in amplifier (Zurich Instruments), several laser diode current and temperature controllers (Thorlabs, SRS), an arbitrary waveform generator (Agilent), a 500 MHz, 1 GS/s digital phosphor oscilloscope (Tektronix), a digital delay and pulse generator, (SRS), and a 3 GHz spectrum analyzer (Agilent).

COMPUTATIONAL NANOPHOTONICS LABORATORY: The Computational Nanophotonics Laboratory investigates the fundamental physics of light interaction with nanostructured materials with an eye towards applications in imaging, sensing and energy harvesting. The myriad applications that the lab investigates include high-resolution and very wide field-of-view microscopes, monolithic integrated ultra-miniature cameras, ultra-sensitive non-destructive optical measurement techniques for probing objects and dynamics at the nanoscale, bioinspired sustainable energy harvesting and storage techniques. The lab is equipped with broadband supercontinuum lasers, UVVIS- NIR spectrometers and other tools for characterisation of optical nanostructures and meta-surfaces.

MULTIMEDIA ANALYSIS AND SECURITY (MANAS) LAB: The MANAS Lab presently focuses on investigating problems related to the security of multimedia and analysis of remote sensing images. The lab has standard commercial software tools for processing multimedia and develops custom computational systems. The lab is equipped with standard equipment for acquiring and processing multimedia data such as professional three-sensor cameras for capturing images and videos in raw format, high-fidelity pen and touch system for accurate ground truthing and GPUs enabled high-end computational servers that are used to solve computationally expensive inverse problems related to multimedia analysis and security.

ELECTRICAL MACHINES AND POWER ELECTRONICS

LABORATORY: The lab is equipped to carry out research work on design, control and diagnosis of various electric machines. These include transformers, rotating electric machines and power converters. Design and analysis of novel and existing topologies are carried out using 2D and 3D electromagnetic finite element analysis in Ansys Maxwell. Test-setups for experimentation on various rotating electric machine topologies are available in the lab. These include permanent magnet brushless DC motor, permanent magnet synchronous motor and switched reluctance motor. Analysis and modeling of conventional topologies are carried out on a unified test bench that consists of a DC machine, an induction machine and a synchronous machine. Lab is equipped with an eddy current dynamometer to load the motor and obtain the torque waveform. For machine health diagnosis, precision magnetic analyzer and impulse generator are used for carrying out FRA analysis. Lab facilities also include programmable power supply which is used to generate balanced and unbalanced supply to mimic grid behavior. The lab has basic power converters and their corresponding controllers and drivers fabricated. These converter topologies allow for the implementation of ac-dc, ac-ac, dc-ac, and dc-dc conversion.

MEDICAL ULTRASOUND ENGINEERING (MUSE) LABORATORY:

The MUSE Laboratory is equipped to conduct research in biomedical ultrasound imaging, therapy, and metrology. The current laboratory inventory includes single-element transducers (1 - 20 MHz center frequency), High intensity focused ultrasound transducers (2 MHz), two ultrasound diathermy systems, pulser receivers (1 - 30 MHz) frequency,

arbitrary waveform generators (1 - 50 MHz), a RF power amplifier, a programmable ultrasonic data acquisition system, a broadband hydrophone, digital storage and mixed signal Oscilloscopes (200 and 100 MHz bandwidths), a motorized 3-axis positioning system, a preamplifier (30 MHz bandwidth), a programmable power supply, a vacuum degasser, a calibrated tissue-mimicking ultrasound phantom, a dissolved oxygen probe, wet lab equipment (pipettes, a microbalance, hot/ stir plates, an overhead stirrer, and temperature-controlled circulation baths), and a custom acoustic attenuation spectroscopy system. The laboratory is equipped for experiments with biological materials and ex vivo tissue.

AUDIO SIGNAL PROCESSING LABORATORY: The primary focus of this laboratory is on the development and implementation of signal processing algorithms for audio devices including active noise control headphones, hearing aids and hearables. The lab houses equipment including Speedgoat Audio Performance Real-time Target Machine, Neumann KU100 Dummy Head Microphone, GRAS 45CA Ear Protector Test Module in addition to audio interfaces, measurement microphones and studio monitor speakers.

MATERIALS ENGINEERING

Materials Science and Engineering (MSE) discipline, renamed as Materials Engineering in 2020 comprises 4 active laboratories namely Metallography lab, Materials Characterization lab, Wafer characterization lab and Bionanomaterials lab. In the Metallography lab, there are a wide variety of manual and automatic polishing machines, abrasive cutting machines, vickers hardness indenters, optical microscopes, low energy roller, furnace, fume hood and chemical storage for mainly aiding at processing of the materials and specimen preparation. The materials characterisation lab has equipment that can perform surface characterisation (contact angle goniometer, SEM, AFM, profilometer, FTIR), structural characterisation, thermal characterization (TGA, DSC, STA), and elemental composition characterization (AAS, ICP-OES, ICP-MS, and XRF). Wafer characterization lab is focussed on preparation of thin films for optoelectronic applications mainly by sputtering techniques. Bionanomaterials lab is a positive-pressure lab (Class 10,000) equipped with instruments to synthesise and characterise (DLS, CPS, Xigo, Hyperthermia) nanoparticles. The lab also has a cell culture facility to perform preliminary toxicological assays on developed nanomaterials. We recently concluded the installation of our FIST-funded analytical SEM with capabilities of EDS, WDS, and EBSD. The instrument capabilities of Materials Engineering labs are being upgraded continuously by adding new equipment such as Jominy End Quench test, tube furnace, and UV-Vis NIR spectroscopy that have been added this year. A new lab-Materials Processing Laboratory is currently being set up and is expected to have a rolling machine, hot press, tribometer and many fume hoods for processing the materials in their dry and wet states.

There are hands-on training and practise sessions for the undergraduate students with the instruments during their lab and project courses. Postgraduate students routinely use

these instruments for their research activities. Moreover, an online instrument access system has been devised to enable easy booking of time slots for usage to ensure smooth access to all instruments. The users can find available slots and the respective TA allocated for a particular instrument.

MECHANICAL ENGINEERING

Mechanical Engineering discipline has done away with physically separate labs for different topics and instead has promoted an integrated approach as regards physical facilities as well as the lab courses. The facilities and equipment are being continuously upgraded. In addition to a few large demo experiments, a very substantial portion of the lab facilities are in the form of components and sensors that promote the learning-by-doing and 'do-it-yourself' (DIY) approach that the discipline promotes in the lab courses, course projects, and extra-curricular projects.

SOLID AND FLUID MECHANICS: The Solid Mechanics laboratory has this year successfully revived its 100 kN universal testing machine. The load cell, grippers and the controller of the machine have been replaced. Promoting the philosophy of DIY the lab will actively encourage students to test using the recently procured suite of structural lab equipment with the intent to improve overall learning among students in courses like Mechanics of Solids and Mechanics of Deformable Bodies that are currently offered at the undergraduate level. The procured suite includes: 1) bending moments in a beam, 2) shear force in a beam, 3) deflection of beams & cantilevers, 4) bending stress in a beam, 5) unsymmetrical bending & shear centre, 6) buckling of struts and 7) continuous & indeterminate beam. These rigs can be utilised both for in-class demonstrations as well as for student projects with simple objectives that improve students' understanding. Other facilities include: Charpy impact testing machine of 450J capacity (Mts), torsion testing machine (500 Nm) and Rockwell and Vickers hardness testing machines (Zwick Roell), and a fatigue testing machine. Strain gages and associated data acquisition systems are also available for a hands-on learning experience by conducting experiments.

The Fluid Mechanics laboratory has setups for conducting experiments on fluid statics and fluid dynamics. Several common turbomachines such as gear pump, centrifugal pump, pelton wheel along with various flow measuring devices and accessories have also been installed. This year, we have procured additional equipment such as series and parallel centrifugal pumps, hot wire anemometers, surface pressure sensors and digital micromanometers and equipments for visualisation of flow-field to aid in the experiments

MANUFACTURING: The Manufacturing laboratory has facilities such as lathes, milling machine, vertical machining center, electric discharge machine, welding, fitting and tin smithy equipment. It supports courses on manufacturing practices and processes and supports manufacturing activities in integrated design and manufacturing courses. It also serves as a workshop for the fabrication of undergraduate student projects as well as research-related equipment and accessories

CONTROL SYSTEMS: The Control Systems Laboratory is shared between several disciplines and covers a range of experiments that help the students understand both the theory and design aspects of the control system and the implementation aspects. Taking advantage of resources in Tinkerers lab and within the discipline, most experiments in control systems have transitioned to DIY approaches wherein the students are able to build experiments of varying complexities and implement various control strategies on them. In addition, few test rigs provide hands-on experience with sensors, data acquisition, calibration, stability analysis, PID controller tuning, modeling from experimental data, root locus-based design to meet performance criteria. The mechanical, electrical, and instrumentation components available for such activities were increased this year to support this approach.

ENERGY SYSTEMS: The motivation behind the Renewable Energy laboratory facility is to provide a broad range of experimental experience to the undergraduate and graduate students in the area of renewable energy. This facility comprises high-quality experimental setups in the area of wind, thermal and solar energy. This experimental facility includes thermal energy storage training system, solar concentrator training system, wind energy training system and solar PV training and research system. A fuel-cell test system and a heat transfer experimental module have been procured

ROBOTICS: In recent years, robotics has emerged as an important domain from teaching and research perspectives. Robots, essentially, are programmable electro-mechanical systems (machines) that require understanding and execution of a number of different disciplines. The process of development and testing these systems is creating a lot of interest among the students and faculties at IIT Gandhinagar. There are a number of regular and elective courses on offer each year for the students. The student project is an important component of these courses, where the learning-by-doing methodology is adopted. To name a few of these courses:

- Introduction to Robotics - a graduate-level course
- Mechatronics - an elective undergraduate-level course
- Dynamics and control - a mandatory undergraduate level course
- Artificial Intelligence - a graduate-level course
- Machine Learning Course - a graduate-level course

In addition to these regular courses, each year IITGN students organise technical events, such as Amalthea and Ignite, where a large number of competitions are based on robotics driven activities. Each year, a great number of students participate in externally organised robotics competitions, such as IIT Bombay e-Yantra, DRDO Robotics and Unmanned Systems Exposition (DRUSE), etc. A total of 12 teams comprising of IITGN undergraduate and graduate-level students are participating in the Robot making competition “Robofest- Gujarat-2019” under the Gujarat Science, Technology and Innovation (STI) Fund

DYNAMICS, VIBRATIONS AND WAVES: The facility currently has state of the art piezoelectric sensors like accelerometers, dynamic force sensors of varying sensitivities and form factors

catering to different applications. We have necessary data acquisition hardware and software for post-processing. We have acquired impact hammers that can provide controlled impulses for modal and structural testing. For vibration testing, we have 1.6kN vibration shaker and 200N modal exciter with dedicated controller hardware and software. We have procured a high fidelity stroboscope for conducting experiments related to structural dynamics. In addition, we do have high precision surface plates for mounting experimental setups. We have been using a 2m air-track for conducting experiments and dedicated inertial measurement units (accelerometers, gyros etc.) are available with us. Undergraduate students (ES321: Dynamics and Vibrations, Fall 2019) have completed their term projects. Graduate students (ES648: Nonlinear Dynamics and Vibrations, Spring 2020) have fabricated experiments as part of their course term-project.

PHYSICS

The Physics laboratory is equipped with state-of-the-art equipment for conducting experiments at the undergraduate and postgraduate levels. The MSc laboratory consists of eleven experiments covering topics in optics, solid-state physics, spectroscopy, modern physics, and electronics. The laboratory has apparatus to study the Hall effect and measurement of energy band gaps in semiconductors, the interaction of external magnetic fields with electron spins through electron-spin resonance, the interaction between the magnetic field and the magnetic dipole moment associated with the orbital angular momentum of electron through Zeeman effect, interferometers like Fabry-Perot and Mach-Zehnder, which are used extensively in measuring the wavelength of light and phase shifts. The Fiber-Optic characterisation equipment in the laboratory is helpful in finding numerical aperture and bending loss of multimode fiber. Experiments with lasers include the study of laser beam profile and understanding the principle of optical waveguides. The laboratory also offers various experiments on FET and MOSFET, which are semiconductor devices used as amplifiers in electronic circuits. Experiments with logic gates enable students to understand the functions of logic circuits as mathematical operators and amplifiers. The lab also has kits to demonstrate principles of amplitude and frequency modulation and demodulation under different conditions. The undergraduate physics laboratory has seven experiments covering topics from modern physics, optics, and acoustics. In order to encourage students to add some of their own ideas to experiments and find their appropriate scientific interpretations, the undergraduate laboratory curriculum has been designed to emphasize critical thinking and enhance the research aptitude of students. Apart from performing regular experiments in the syllabus, students are advised to pursue short-term projects in groups, under the guidance of the course instructor and the associates. Students come up with proposals based on fundamental principles of physics that are significant either from scientific or technological standpoints. The proposals are expected to have sufficient novelty and are reviewed rigorously by the physics faculties before they are pursued. The approved projects are supported partially by the discipline budget. The students

make use of the institute workshop, other laboratory facilities, and centers outside the physics discipline. This tinkering lab exercise ends with an open-to-all poster session at the end of the semester, during which the students get an opportunity to showcase their projects to the entire IITGN community, interact with and demonstrate their findings to other students and faculties.

The research labs in Physics Discipline are involved in state-of-the-art research in the fields of Experimental condensed matter physics and Nanomaterials. More specifically, dedicated research facilities have been established to pursue research activities in the areas of Nanomaterials for energy research, Physics of surfaces and interfaces, Growth and characterization of nanomaterials and thin films, Graphene-based nanofluidics/

CENTRAL INSTRUMENTATION FACILITY (CIF)

The Central Instrumentation Facility (CIF) has been established with an objective of providing sophisticated characterisation services to the researchers within and outside IITGN. It houses several high-end analytical instruments such as SEM, XRD, AFM, NMR, LC-MS, MALDI-TOF, ICP-MS & ICP-OES, Confocal Microscope, Single Crystal XRD, TEM, and Multipurpose XRD. We have recently added new instruments such as Advanced analytical FESEM with various capabilities for elemental analysis for Material Science and Research. The CIF aims to provide a central facility consisting of the latest and advanced analytical Instruments to facilitate multidisciplinary research and to cater to the needs of academic research institutes, universities, and industries for high-end material characterisation.

IITGN regularly conducts the Technical Education Quality Improvement Programme (TEQIP) training programme, where CIF facility staff and students are involved in giving short lectures towards the technical and application aspects of CIF Instrumentation. IITGN CIF is on the National I-STEM Portal to avail the usage of the facility by users around the country and internationally.

IITGN CIF CONNECTION WITH INDUSTRY

CIF has been catering the needs of industries at various levels. Many pharmaceutical industries like Sun Pharma, Piramal Pharma, Zydus Research centre, Cadila Healthcare, Torrent Pharma, Sud-Chemie are the regular users of our facility. Nearly 30 major industries are the users of the CIF IITGN. Some of the small and medium scale industries use our facility for material characterisation, hardness testing, elemental analysis etc. With the addition of new equipment such as Analytical FESEM, Transmission Electron Microscopy (TEM), Multi-purpose X-Ray Diffractometer, and, Inductively Coupled Plasma (ICP-MS/OES), we are observing growth in the number of users from the industry for their R&D work.

IITGN CIF CONNECTION WITH ACADEMIC INSTITUTES

CIF has been constantly providing services to the universities, institutes and R&D departments. The major goal has been to build an environment which would lead to major collaborations

desalination techniques, Ion/Proton transport, 2D heterostructures, Active matter, and Colloidal dynamics. The experimental facilities both for research as well as for teaching purposes include Physical Vapor Deposition system, Optical lithography system, Langmuir-Blodgett trough, Brewster Angle Microscope, Spin coater, high precision weighing balances, Optical microscopes, Rheometer, Source-Measure Units, Milli-Q system, sophisticated sample storage and centrifugation facilities and many more. The research and teaching facilities are being constantly upgraded to facilitate and encourage research aptitude in students under the overarching vision of creating a center in the Physics Discipline for interdisciplinary research and learning.

between academic institutes. Some of the institutes who are the regular users of our CIF are NIPER, IIIT-RAM, Nirma University, Gujarat University, IAR, CUG, PRL, IPR, CSMCRI, MSU, SP University, PDPU etc. We have been able to connect with a majority of the universities and institutes in the Ahmedabad-Gandhinagar region. Several students from Dental Colleges have carried out sample analysis using Scanning Electron Microscope (SEM). The CIF at IITGN remains open to all the science enthusiasts who never stop exploring science.



Recently added CIF instruments:

Advanced Analytical Scanning Electron Microscope was recently installed in IIT Gandhinagar. An advanced analytical FE-SEM partially funded by the Department of Science and Technology under Fund for improvement of S&T Infrastructure in Higher Educational Institutes (FIST).

The system provides users high resolution observation, high-speed elemental and crystallographic mapping of the sample. The microscope is used for advanced microstructure and spectroscopy characterization of bulk inorganic samples. The instrument is equipped with sophisticated capabilities like High resolution scanning electron imaging, Backscatter electron imaging, Energy dispersive X-ray spectroscopy using Oxford Ultimex, Wavelength dispersive X-ray spectroscopy using Oxford Wave and Electron Backscatter diffraction analysis for microtexture measurement using Oxford Symmetry.

BD FACSAria Fusion Flow Cytometer Cell Sorter

The BD FACSAria Fusion flow cytometer high end cell sorter provides a powerful, sensitive and unmatched technique for monitoring different populations of biomolecules and cells within immensely heterogeneous mixtures. The instrument uses three solid state lasers for simultaneous measurement of 11 parameters (13 including forward and side scatter). Both components of the instrument namely the fluorescence/scattering analyzer and the cell sorter are housed within a single unit that does not require any custom alignment of optics. The is capable of performing routine applications including cell

cycle analysis, cell viability assay and immunophenotyping as well as high end applications including cell sorting, membrane potential measurements. The instrument will benefit a vast range of research projects at IITGN covering medicinal chemistry, drug delivery systems, nucleic acid biochemistry, membrane biology, protein-nucleic acid interactions, biomaterials development, nanomedicine and toxicology. The distinctive capabilities of the instrument cannot be matched by any other single instrument or even a combination of experimental approaches.

LIBRARY

The library - a learning resource centre being an integral part of the academic and research work, continues to expand its collection both in print and digital form. It also designs and delivers innovative services to support teaching, learning, research and other scholarly activities. During the reporting year, the library has initiated a number of important activities and services.

LIBRARY COLLECTION

Print & Audio Visual Collection: The library's rapidly growing collection of research monographs, textbooks, reference books, conference proceedings, CDs, VCDs, DVDs, etc., cover the areas of academic and research interests of the Institute. The following table presents additions to the collection during the year 2020-21.

Total collection as on Mar 31, 2021:

Type of Collection	Additions in 2020-21	Total Collection
Books	1,164	30,216
Bound volumes	90	725
Children books	31	1404
Hindi books	01	455
CDs	01	971
DVDs	01	608
Technical reports	00	456
Theses and Dissertations	172	690
Total	1,460	35,525

Digital Resources: The library has been subscribing to several major e-resources both in bibliographic and full text forms. During the year, the library renewed the subscription to over 70 e-resources, out of which 52 were ordered and paid by IITGN library and the remaining 18 resources were ordered and paid by E-Shodh Sindhu (a national consortium for higher education electronic resources).

CIRCULATION AND INFORMATION SERVICES

- **Circulation of Books:** Despite the pandemic, the library continued its services, especially circulation of books. The total number of books issued to our users during the year was 7,146 as compared to 23,977 in the previous year.
- **Renovation & Air-conditioning of Mini-library:** The mini-library, which is open round the clock with a seating capacity of 30 persons, has now been renovated. A centralised air-conditioning facility has also been installed, offering much needed comfort and cozy environment to students.
- **Inter-library Loan:** Having established an excellent arrangement with major libraries and library networks, the library continued its resource sharing services. During the year, the library borrowed 56 books as compared to 142 books in the previous year and loaned 10 books to other libraries as compared to 19 books in the previous year.
- **Document Delivery Service:** To support the research activities, the library received 1,955 as compared to 3,967 articles in the previous year from other libraries and delivered 257 papers to other libraries as compared to 216 in the previous year. There is a marginal increase in delivery papers from our library.
- **Grammarly (Premium Accounts):** To extend the facility and to cover all users of the library, the number of accounts to access the writing tool 'Grammarly' has been extended up to 3,000. This has been very well received and extensively used by the Institute community.
- **Plagiarism Checking:** Library continued to offer this service in virtual mode and checked over 3,651 documents, which includes theses, assignment, and research paper manuscripts etc., using Turnitin and Ouriginal software.

MEMBERSHIPS

While the library continues to make an effort in making best use of the benefits and increased resources offered by more than 15 professional bodies, library networks, and consortia, a concerted effort was made to reach out to the industries, institutions, and individuals to increase the external membership.

Library External Memberships: During the year, the library added **16 new members**, which includes two corporate members, making the total membership 137.

LIBRARY ORIENTATION AND WORKSHOPS

To connect with and introduce library resources and services to freshers, the library organised five “Know Your Library Resources & Services” sessions, one each for PhD, MTech, MSc, MA, and BTech students. In addition, the library also organised the following eight workshops on various topics of interest to senior students. All these sessions were in virtual mode only.

DIGITAL REPOSITORY OF SCHOLARLY PUBLICATIONS

A ‘Digital Repository’ (<http://repository.iitgn.ac.in/>) created using an open source DSpace software has been kept up-to-date by adding the metadata with abstracts of most of the scholarly publications generated by the Institute community. During the year, a total of 937 documents have been added (as compared to 900 in the previous year) to the repository.

LIBRARY SERVICES DURING COVID-19

Despite the challenges posed by the pandemic, the library continued to operate all through the year (except three weeks in Mar-Apr 2020) in physical mode with certain restrictions and strictly following the COVID-19 guidelines. As the pandemic continued and spread widely, to support the on-campus as well as off-campus student community, the library quickly moved to virtual mode and started offering following services:

- Provided an off-campus (remote) access to all library subscribed e-resources using RemoteXs tool to all users.
- Extended due date of all issued books for a longer period.
- Continued delivering the services such as document delivery, plagiarism check, answering reference queries.
- Compiled a list of free resources on COVID-19, e-textbooks, virtual teaching & learning, simulated lab, and other relevant topics.
- Kept open for limited hours i.e., from 9 am to 9 pm.
- Conducted virtual orientation sessions and workshops.
- Arranged trial access to a good number of potential resources including streaming media.
- Reorganised the library space and facilities to meet the COVID-19 guidelines and took all the safety measures. Got a **UV-based system** designed and fabricated by Prof Sriram Kanvah with the assistance and support from the staff working to disinfect all books returned by users.
- Effort was made to quarantine all returned books for three days before they were scanned through the UV machine and shelved in the stacks.

NEWLY INITIATED SERVICES

Despite challenges posed by the pandemic, the library put together efforts and added following new services:

Library Honorary Membership: For the first time, the

library (on approval by the Senate) introduced the Honorary Membership, which is by invitation and at no charge, to those individuals who have made significant contributions or provided extraordinary support to the Institute. The library has so far reached out to nearly 20 such individuals and this proactive step and gesture on the part of the Institute has been very well received and appreciated.

- **IRINS - Indian Research Information Management Network System:** Library implemented the IRINS - a web-based Research Information Management (RIM) service developed by the Information and Library Network (INFLIBNET) Centre. The portal displays the scholarly profiles of more than 120 faculty members of the Institute. This serves as another platform to provide access to the scholarly work of our faculty members.
- **Community Service:** As a part of the Institute’s outreach services, the library joined hands with NEEV and assisted Shri Madh Seva Trust of neighboring Basan Village in procuring more than 30 books and organising their library collection. In addition, a good number of books of general nature donated by IIT Community have also been provided to this trust. The library continues to be in touch with this trust and assist them in managing their small collection of books.
- **CORAL - E-resource Management Software:** To manage the workflow and required information relating to over 70 e-resources subscribed by the library efficiently, CORAL - an open source electronic resources management system - consisting of interoperable modules designed around the core components of managing electronic resources has been implemented successfully.
- **Digital Repository & Electronic Theses and Dissertation Policies:** Library has created a Digital Repository which hosts metadata with abstract of all the scholarly publications and theses authored by the Institute faculty and students. To scale up this work and take it to the next level with full text of the content, the library, with the guidance from the Senate Library Committee, has prepared two comprehensive draft policy documents that are under the consideration of the Institute.
- **Archiving COVID-19 experiences:** In the challenging times of COVID-19 pandemic, the library took an initiative to capture the reaction, response and experience of the entire IITGN community. An attempt is being made to collect and preserve the narratives of faculty, students, staff, residents, security personnel, mess workers, construction workers, housemaids, and other individuals, who are directly or indirectly associated with IITGN. Omeka - an open source software is being used to test the feasibility of creating a digital version of this archive.
- **Read, Review & Roll!:** To encourage reading habit among the community, especially students, while they were away from the campus, the library launched an initiative called ‘Read, Review & Roll!’. The idea was to encourage users to shoot a small video describing a book, which had a deep impact on them. Four faculty members and one student have submitted their videos, which were made publicly available on YouTube.

- **Library Social Media Handles:** On July 31, 2020, library entered into the world of social media to reach out to more students via dedicated accounts on Facebook, Twitter, Pinterest, LinkedIn, Instagram, and Flickr. Important library notifications are posted there from time to time. It received a generous amount of response in a very short time. Besides, the library also initiated its blog.
- **Used Textbook Collection Drive:** To support the needy students, the library initiated a drive to collect the used textbooks from the student community. This has resulted in collecting more than 300 books, which are being shared with the needy students. The student leadership was extensively involved in this initiative.

LIBRARY STAFF ACTIVITIES

Library Professional Trainee's Alumni Group: Library has so far trained over 40 library professionals. A platform was formed for these professionals in mid-2020, where they can come together and continue to interact. A website with the details of each alumni has also been created. As a part of the group's activities, three meetings and two talks by library alumni were arranged in a virtual mode.

Library Professional Internship: A virtual internship programme was conducted by the library team for four Master of Library and

Information Science (MLISc) students from the School of Library and Information Sciences, Central University of Gujarat, from Sept 1 to Oct 31, 2020. This was an enriching experience for both students and the library staff.

Staff Publications

Das, Tapas Kumar, Kumbar, T S & Ahirwar, Ramswaroop (2020). Use of QR codes for enhancing access to library resources and services: a case study of IIT Gandhinagar library. *Annals of Library and Information Studies*, 67(03), 156-163. (ISSN: 0975-2404).



CENTRES

ARCHAEOLOGICAL SCIENCES CENTRE

The Archaeological Sciences Centre (ASC) was constituted in Dec 2012 with the twin objective of establishing at IITGN state-of-the-art facilities to be used by the archaeological community at large and conducting its own research in scientific and technological aspects of archaeology. It thus situates itself at the intersection of humanities and scientific disciplines.

CENTRE'S PROJECTS

Completed

Prof Sharada C V completed a Faunal report for Bhagatrav excavation (submitted to Prof Alok Kanungo for inclusion in the final Bhagatrav excavation report under preparation); the Faunal report includes classification tables, analyses and measurements, tables and photographs of identified animal bones.

Ongoing

- **Prof Alok Kanungo** pursued Mapping Kapadvanj Glass: the Last Surviving Traditional Tank Furnace in India (with external support from Corning Museum of Glass Rakow Grant, International Commission on Glass CTC Project Fund, and National Science Foundation). Analyses of reh sample from the surrounding area were initiated, and a draft documentary on lead-coated mirror manufacture was prepared.
- **Prof Sharada C V** pursued her projects Multi-element isotopic investigations to reconstruct human-animal interactions at the Indus Civilization site of Dholavira, Gujarat, India; and Dholavira worked bone assemblage: a study of its typology, technology, experimental reproduction and digitization (with grant from Indian Council of Historical Research); she initiated a new project, Palaeoproteomic approach to identifying animal species use for the worked bone industry at the Bronze Age settlement of Dholavira (with a small grant from Association of Environmental Archaeology). For these two projects, Prof Sharada visited three repositories of animal bone remains from Dholavira and conducted one round of sampling; she set up protocols for their analysis and initiated Strontium isotope analysis.

Newly Initiated

- **Profs Pramod Joglekar, V N Prabhakar and Sharada C V** started groundwork on a two-volume Handbook of Archaeological Sciences for South Asia; a complete list of seven chapters, shared among by the three scholars, was prepared for Vol 1 with detailed subsections; a tentative list of 24 scholars was prepared for specific case studies that will constitute Vol 2.
- **Profs Sharada C V and Michel Danino** initiated the creation of an extensive online bibliography and repository of

publications related to archaeological sciences; under their supervision, a few interns have collected and indexed over 5,000 sources so far.

COLLABORATIVE RESEARCH PROJECTS

- **Prof Alok Kanungo** pursued the projects, Traditional glass-making in India: rediscovering the manufacturing of Reh Glass, with **Dr Laure Dussubieux** (Field Museum, Chicago) with support from Negaunee Foundation and Field Museum; 200 reh and silica samples were analysed using LA-ICP-MS, ICP-MS and Multi-purpose TEM.
- A database on Isotopic signature and Elemental composition of raw materials for glass of all regions of India, and an index work for the first time in the scientific community has been in making.
- **Prof Alok Kanungo** (with **Prof Nishaant Choksi**) pursued the SPARC project Indigenous Cultural Heritage as a Facilitator for the Sustainable Development Goals (SPARC project in collaboration with **Prof Claire Smith** and **Chris Wilson** from Flinders University, Australia). PDFs conducted two-month-long fieldwork amongst the Nagas in Nagaland and the Rathwa Bhills in Gujarat; a research paper was published, with two more submitted.
- **Profs V N Prabhakar, Vikrant Jain, Vimal Mishra, Amit Prashant, Saptarshi Dey**, in collaboration with **Prof Jyotirnanjan Ray** (Physical Research Laboratory), pursued the project, Impact of sea-level fluctuations, climate change or tectonic activity on the decline of the Harappan settlement of Dholavira, Kutch, India (funded by DST under the Science & Heritage Research Initiative). In a first stage, sediment samples were collected from several areas around the Khadir Island (Kutch) and neighbouring islets to understand the nature and activity of the Rann in Harappan times; preliminary study of the terraces was conducted to determine whether they were created by the sea or a result of fluvial activity.

PUBLICATIONS

Book chapters

- 2020. **R S Bisht and V N Prabhakar**. Evolution of Early Human Settlements in the Sarasvati River Basin: Archaeological Evidences and Site Distribution Analysis, in Saraswati: The River Par Excellence, S K Acharyya, Kunal Ghosh and Amal Kar (eds). Kolkata: The Asiatic Society, 136-159.

- 2020. **M Danino**. Climate, Environment and the Harappan Civilization, in Critical Themes in Environmental History of India, Ranjan Chakrabarti (editor). New Delhi: SAGE Publications India, 333-377.
- 2020. **M Danino**. The Sarasvati River: Issues and Debates, in Sarasvati: The River par Excellence, S K Acharyya, Kunal Ghosh and Amal Kar, (eds). Kolkata: The Asiatic Society, 217-234.

Research papers

- 2019 (published 2021). **A K Kanungo** and **M Trivedi**. The Archaeology of Glass in South Asia: The State of the Field and New Directions, Royal Asiatic Society of Sri Lanka, 64(1): 1-30.
- 2020. **A Ghosh, C Saha**, and **A Reza**. Recently Discovered Intertidal Sites along the Shoreline of Bay of Bengal: East Medinipur District, West Bengal, Pratna Samiksha: A Journal of Archaeology, 11: 1-22.
- 2020. **A K Kanungo, K Raviteja, O Roy** and **J S Kharakwal**. Understanding Ancient Zinc Technology: An Experimental Study, Man and Environment, 45(2): 87-94.
- 2020. **M Danino**. Demilitarizing the Rigveda: A Scrutiny of Vedic Horses, Chariots and Warfare, Studies in Humanities and Social Sciences, XXVI (1, Summer 2019): 5-32.
- 2020. **A Pineda, S Channarayapatna, G Lembo, C Peretto**, P Saladie and U Thun Hohenstein. A Taphonomic and Zooarchaeological Study of the Early Middle Pleistocene 3 Colluvio Level from Isernia La Pineta (Molise, Italy), Journal of Archaeological Science: Reports, 33.

EVENTS & VISITS

- **ASC Webinar Series: Profs V N Prabhakar** and **Sharada C**

CENTRE FOR BIOMEDICAL ENGINEERING

The Centre for Biomedical Engineering at IITGN is focused on carrying out cutting-edge research in various areas of biomedical engineering and producing research results that are of social relevance to India, and by extension, across the world.

The main objectives of this Centre are:

- Research and development in biomedical engineering and healthcare technologies
- Developing low-cost technologies related to healthcare to help people in rural areas

Collaborating with foreign universities and prominent national and international institutes to conduct research in three major focus areas as follows:

- **Diagnostic/Therapeutic Tools and Techniques:** Developing novel methods to detect and treat diseases. The tools and techniques currently being developed use optical sensors, microbubble engineering, computational design, dye-based assays, therapeutic peptides and many others

V initiated a monthly webinar series on Recent Advances in the History and Archaeology of South Asia. The distinguished speakers so far have been: **Prof Ravi Korisetar** (formerly with Karnatak University) on “Prehistoric Colonization in the Indian Subcontinent”; **Prof Parth Chauhan** from IISER Mohali on “Prehistoric Humans, Animals and Art: Current Mysteries in Indian Paleoanthropology”; **Prof Shanti Pappu** and **Dr Kumar Akhilesh** from Sharma Centre for Heritage Education on “Time, Tools and Terrain: Rethinking Paradigms in Indian Prehistory”; **Prof Nayanjot Lahiri** from Ashoka University on “Are Archaeological Discoveries like Scientific Discoveries? Understanding the Discovery of the Harappan Civilization”; **Dr Nisha Yadav** from TIFR Mumbai on “Script of the Harappan Civilization”; and **Prof Cameron Petrie** from Cambridge University on “How Did Climate Change Impact on the Indus Civilization? Insights from the Land, Water and Settlement and Two Rains Projects”.

- **Dr Tosabanta Padhan** and **Dr Alino Sumi**, post-doctoral fellows in the project “Indigenous Cultural Heritage as a Facilitator for the Sustainable Development Goals”, initiated fieldwork in Gujarat (Chhota Udaipur district) and Nagaland (Phek and Zunheboto districts), respectively.

ASC FACULTY

The Centre’s faculty includes **Prof Michel Danino**, Visiting Professor and coordinator of the Centre; **Prof S P Mehrotra**, co-coordinator of the Centre; **Prof V N Prabhakar**, Associate Professor; **Prof Alok Kanungo**, Assistant Research Professor; and **Prof Sharada C V**, Assistant Professor. **Dr R S Bisht**, former Joint Director General of ASI, and **Prof Pramod Joglekar**, former Professor at Deccan College, Pune, are Guest Professors.

- **Automated Rehabilitation and Prosthetic Techniques:**

Robotics and virtual environments to provide newer, more efficient and more intuitive techniques for application by physiotherapists, neurologists and surgeons

- **Public Health Techniques:** Developing tools and techniques to prevent disease and promote health in the community

COLLABORATIONS

The Centre is engaged in collaborative projects with prominent national and international institutes and universities, including John Hopkins University, USA; National University of Singapore; Columbia University, New York; University of Chicago, USA; Royal Melbourne Institute of Technology, Australia; Indian Institute of Science, Bangalore, India; National Institute of Mental Health and Neurosciences, Bangalore, India; Christian Medical College, Vellore, India; Civil Medical Hospital, Ahmedabad, India; Zydus Hospitals, Ahmedabad, India; among others.

EVENTS

- The Centre, in association with the University at Buffalo (SUNY), USA, organised a webinar series on Translational Research in Neuroengineering and Neurorehabilitation. The series hosted ten webinars delivered by eminent speakers from the USA, UK, France and India. The webinar series concentrated on emerging applications of Neuroengineering with focus on rehabilitation. Experts on cerebrovascular and neurological disease and neurological disability from different countries disseminated their research during these webinars. The event was coordinated by **Prof Uttama Lahiri**, IITGN and **Prof Anirban Dutta**, University at Buffalo (SUNY).
- IITGN and IISc Bangalore co-organised First DNA Nanotechnology India Virtual Symposium on Sep 4-5, 2020. More than 3,000 participants virtually attended the two-day programme. Several eminent speakers and scholars shared their knowledge and expertise with the audience. The meeting provided participants a platform to connect and collaborate for scientific exchanges. The event was coordinated by **Prof Dhiraj Bhatia**, IITGN and **Prof Banani Chakraborty**, IISc Bangalore.
- International Workshop on Advanced Cell Culture, Microscopy, and Bioimaging - Phase 1, hosted by IITGN, in association with Gujarat State Biotechnology Mission (GSBTM), Feb 20, 2021. **Prof Dhiraj Bhatia** was the coordinator of the workshop.
- The Human-centered Robotics Lab at IITGN organised a webinar series on the theme 'Robotics for Rehabilitation and Elderly Care' during Feb-Apr 2021 semester. 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**.

PUBLICATIONS AND PATENTS

During the year 2020-21, the members of the Centre produced 65 journal publications, 15 conference publications, and 2 patent applications.

CENTRE FOR CREATIVE LEARNING (CCL)

The Centre for Creative Learning (CCL) is a space that nurtures scientific temper and the inherent creativity in students and teachers alike. CCL has developed **600+ unique STEM models** and activities and **interacted with 10,000+ teachers** and **50,000 students** across the country. The idea is to immerse oneself in a subject in order to learn it and to do rather than merely read. The Centre aims to overhaul pedagogy by making the lectures engaging, provide experiential learning, foster creativity and innovation with the sole focus on concepts.

PRODUCTS/TECHNIQUES

DEVELOPED BY THE CENTRE

The research groups involved with the Centre have already translated a few technologies into following products in areas of Diagnostic Tools and Automated Rehabilitation Techniques:

- **Instrole**, an instrumented insole that can compute various gait-related measures quantifying one's residual dynamic balance.
- **PtreadX**, a Physiology-sensitive Treadmill-assisted Virtual Reality based Gait Exercise platform. Bangalore-based investors have started showing interest in these technological solutions.

CENTRE FACULTY

The Centre for Biomedical Engineering is highly interdisciplinary and has members from various disciplines, including Electrical Engineering, Biological Engineering, Mechanical Engineering, Chemistry, Computer Science and Engineering, and Chemical Engineering. Faculty members include:

Prof Uttama Lahiri, Associate Professor and coordinator of the Centre; **Prof Karla P Mercado-Shekhkar**, Assistant Professor and co-coordinator of the Centre; **Prof Abhijit Misra**, Associate Professor; **Prof Arup Lal Chakraborty**, Associate Professor; **Prof Ashutosh Srivastava**, Assistant Professor; **Prof Bhaskar Datta**, Associate Professor; **Prof Dhiraj Bhatia**, Assistant Professor; **Prof Himanshu Shekhkar**, Assistant Professor; **Prof Iti Gupta**, Associate Professor; **Prof Joyce M Mekie**, Assistant Professor; **Prof Krishna Kanti Dey**, Assistant Professor; **Prof Krishna Miyapuram**, Associate Professor; **Prof Malavika Subramanyam**, Assistant Professor; **Prof Mithun Radhakrishna**, Assistant Professor; **Prof Nithin V George**, TEOCO Chair Associate Professor; **Prof Sivapriya Kirubakaran**, Associate Professor; **Prof Ravi Sastri Ayyagari**, Assistant Professor; **Prof Sameer V Dalvi**, Associate Professor; **Prof Sharad Gupta**, Associate Professor; **Prof Sharmistha Majumdar**, Assistant Professor; **Prof Sriram Kanvah**, Associate Professor; **Prof Sudipta Basu**, Associate Professor; **Prof Umashankar Singh**, Assistant Professor; **Prof Vijay Thiruvengatam**, Assistant Research Professor; and **Prof Vineet Vashista**, Assistant Professor.

EVENTS

- **Online Inservice Courses for KVS Teachers:** CCL conducted online in-service courses for teachers of Kendriya Vidyalaya Sangathan (KVS) and Jawahar Navodaya Vidyalaya (JNV) from across the country. The first round was conducted during May to July 2020 for Mathematics and Science teachers, and the second round of online in-service workshops was conducted in Nov and Dec 2020 on Math, Science, Computer Science, and Chemistry. The objective was to train the teachers about ways to engage students online.

- **Fall in Love with Maths Workshop:** With support from the Science International Forum (Kuwait), CCL conducted an online five-day workshop for more than 250 Central Board of Secondary Education (CBSE) school students in Kuwait from June 21-25, 2020. The objective of this course was to let students from grade 8 to 12 explore the beauty of Mathematics.
- **30-30 STEM Programme:** CCL, in collaboration with CBSE and IISER Pune, launched '30-30 STEM', a 30-week online education programme for teachers as well as students and their parents. Its objective was to unlock the beauty, mystery and magic of Science and Math around us and make STEM learning more engaging. Since its launch on Aug 16, 2020, the Sunday-weekly programme received an overwhelming response from all over the country, with each episode's viewership touching lakhs. So far, two seasons of the series have been completed. **Prof Manish Jain** is the main facilitator of the programme.
- **20-20 Lamps Series:** CCL launched '20-20 Lamps', an innovative online video series to illuminate Diwali with environment-friendly DIY decorations in the shape of geometric solids. As a part of this series, on each of the 20 days from Dussehra to Diwali, the CCL team released a video on its YouTube channel on how to make a new paper lamp using interesting mathematical concepts. These easy-to-make paper lamps were exclusively designed by the CCL team and received an overwhelming response from all over the country.
- **Joy of Engineering:** The Centre conducted two online sessions on 'The Joy of Engineering' for about 65,000 first-year students of nearly 150 engineering colleges of the APJ Abdul Kalam Technological University, Kerala, on Nov 30 and Dec 2, 2020. Both sessions were conducted as a part of the training for the newly-inducted engineering batch of the University. The sessions aimed to motivate students about engineering by focusing on problem-solving, algorithmic and critical thinking.
- **IITs' Foundation Programmes:** CCL conducted Foundation Programme sessions for the newly-inducted engineering batches of IIT Jammu, IIT Gandhinagar and IIT Kanpur. The sessions were aimed at motivating students about engineering and focused on problem-solving, algorithmic and critical thinking.
- **National Toy Fair:** The Centre participated in India's first Virtual Toy Fair conducted by the Ministry of Education from Feb 27 to Mar 2, 2021. CCL had 3 virtual stalls and was contacted by a lot of people for CCL's Science/Math toys.
- **Toycathon:** CCL participated in India's first Toycathon conducted by the Ministry of Education from Jan 5 to Jan 20, 2021. CCL played a very active role in planning and guiding the themes included in Toycathon 2021. CCL was also invited to deliver 3 talks for Toycathon. The event saw toys/games submitted by participants across various categories such as Indian civilisation, learning, heritage, culture, mythology, national heroes and important events.
- **Invited Talks:** CCL-IITGN was invited to deliver talks at several events/organisations throughout the year, following is a list of the same:
 - Presentations to National Committee as an expert member, advisor of National Committee on Toys for Pedagogy, National Toy Fair and Toy Hackathon Committee
 - Engagement in Online STEM Learning: a Case Study of 3030-STEM at ACM Compute 2020, Nagpur
 - Making and Storytelling: The secret sauce of futureproof learning at IISER Pune
 - A panel discussion on "Can science fascinate us like Cricket/Bollywood?" at India Science Month Online (ISMO) 2021
 - Teaching the Next Gen at IISER Pune
 - Regional Institute of Education, Bhopal
 - National Mission on Teachers and Teaching
 - Mission Prerna, Uttar Pradesh
 - Rajya Siksha Kendra - SED

EMINENT VISITORS

- **Ms Anita Karwal**, Secretary School Education and Literacy, India
- **Mr Manoj Ahuja**, Chairman, CBSE
- **Mr Shankar Maruvada**, CEO, EkStep Foundation
- **Prof Rajat Moona**, Director, IIT Bhilai
- **Prof Manoj Gaur**, Director, IIT Jammu
- **Dr Darshana Joshi**, CEO, Vigyan Shala
- **Mr Vijay Kiran**, DGSE, Uttar Pradesh
- **Mr Lokesh Jatav**, Former Secretary, Primary Education, MP
- **Mr Rahul Sharma**, Secretary, SEL, Jharkhand
- **Sanjay Singh**, Principal Secretary Education, Bihar
- **Dr Anil Sahasrabudde**, Chairman, AICTE
- **Dr Abhay Jere**, Chief Innovation Officer, Ministry of Education
- **Mr Abhishek Singh**, CEO, MyGov
- **Mr Maneesh Garg**, Joint Secretary, Ministry of Education
- **Dr Ashutosh Sharma**, Secretary, DST
- **Mr Vinod Rao**, Secretary, Primary and Secondary Education, Gujarat
- **Dr Amrendra Behera**, Director, NCERT
- **Mr Santosh Mall**, Former Commissioner, KVS
- **Ms Nidhi Pandey**, Commissioner, KVS
- **Dr Nakul Parashar**, Director, Vigyan Prasar
- **Mr Alok Mittal**, CEO, Indifi Technologies
- **Mr Praveen Bhagwat**, Founder and CTO, Mojo Networks Inc
- **Prof Anirban Hazra**, IISER Pune
- **Prof Amrita Hazra**, IISER Pune
- **Prof Trilochan Sastry**, IIM Bangalore
- **Prof Sandeep Pandey**, co-founder, Asha for Education

CCL TEAM

Prof Manish Jain is the coordinator and **Prof Neeldhara Misra** is the co-coordinator of the Centre. Other team members include **Gaurav Kumar Yadav**, **Jay Thakkar**, **Tapas Hira**, **Dr Sarita Yadav**, **Jyoti Gupta**, **Ashutosh Bhakuni**, **Satish Kumar**, **Dinesh Rathod**.

CENTRE FOR COGNITIVE AND BRAIN SCIENCES

The Centre for Cognitive and Brain Sciences at IITGN is well recognised within the country for being the pioneer among the IITs through research activities and academic programmes at the Master's and PhD levels. The Centre also aims to take a leadership role in cognitive science within the country with its interdisciplinary character and excellent student achievements. The Centre's research areas include philosophy of mind, perception, curiosity, attention, learning and decision making, motor control and rehabilitation, and neuro-developmental & neuro-degenerative disorders such as Autism and Alzheimer's disease.

The Centre continues to attract top-talent, supported by 9 full-time faculty, 33 MSc and 9 PhD students. The innovative MSc and PhD programmes that started in 2013 and 2010 respectively, prepares students for a career in cognitive science research or industry. The Centre's alumni have had successful transitions to academic and industry careers after their training, such as faculty positions at IIT Delhi, IIT Hyderabad, IIT Roorkee, Ahmedabad University, FLAME University, Wellcome Trust Early Career Award, CSRI Postdoctoral Fellowship, Fulbright Fellowship, IIT-DAAD Masters Fellowship, placements at TCS R&D, Shastri Indo-Canadian fellowship, Swiss Government Excellence Fellowship, Marie-Sklodowska Curie Fellowship etc.

EVENTS

- The Centre for Cognitive and Brain Sciences celebrated Brain Awareness Week from Mar 15 to 21, 2021. The virtual event included a variety of talks, panel discussions, workshops, and competitions targeted at a diverse audience ranging from core neuroscience researchers to high school students. Scholars and practitioners of cognitive and brain sciences from India and abroad shared their knowledge and perspectives through various sessions spanning across seven days. The event was coordinated by **Prof Pratik Mutha** and **Ms Shriya Naidu**.
- The Centre organised an informal webinar series with speakers from prestigious institutions from India and abroad on various topics covering fundamental research and applications of cognitive science.

CENTRE FACULTY

The Centre's faculty consists of **Prof Krishna Prasad Miyapuram**, Associate Professor and coordinator for the Centre; **Prof Meera Mary Sunny**, Associate Professor and co-coordinator of the Centre, **Prof Jaison Manjaly**, Jasubhai Memorial Chair Professor; **Prof Pratik Mutha**, Jibaben Patel Chair Associate Professor; **Prof Uttama Lahiri**, Associate Professor; **Prof Leslee Lazar**, Assistant Teaching Professor; **Prof Vineet Vashista**, Assistant Professor; **Prof Angus McBlane**, Visiting Assistant Professor; and **Prof Jooyoung Kim**, Assistant Teaching Professor.

DESIGN AND INNOVATION CENTRE

The Design and Innovation Centre (DIC) promotes collaborative projects, research and educational initiatives on design and innovation. DIC also nurtures student and faculty initiatives to develop innovative products and solutions through curricular and extracurricular projects, such as talks, seminars, symposiums, and workshops.

PROJECTS AND COLLABORATIONS

DIC provides design consultancy to other disciplines at the institute by assisting in product development and manufacturing. DIC specialises in humanising technology through usability and aesthetics.



Smart Instrumented Insole (For **Prof Uttama Lahiri** / Designer **Nirav Patel**)

Status: Completed

A structural packaging was developed keeping in mind human factors for achieving a compact homogeneous structure. The insole can be inserted in any shoe; technical variations are possible with the same structural configuration. DIC also took initiative in product presentation to various

agencies and it is gaining commercial interest.



Water Purifier (For **Prof Chinmay Ghoroi** / Designer **Singahara Kannappan**)

Status: Completed

Reiteration of the previous model was carried out with the in-house 3D printer. The product is currently in testing stage.



Smart Walk (For **Prof Uttama Lahiri** / Designer **Nirav Patel**)

Status: Ongoing

The complete Smartwalk system has a holistic approach for gait abnormalities. The lab-tested technology provides tactile, audio and visual cues to prevent freezing and falls for stroke patients. The wearable

units are packaged in four different compact, well detailed and developed units.



Cable driven flexible robotic manipulator (For Prof Madhu Vadali / Designer Nirav Patel)

Status: Completed

A manipulator was designed that is controlled by two metal cables that would be connected to the motors.

In addition, an experimental setup was designed to test the manipulator, which may help in further research.



Gait assisted system, Exo-suit (For Prof Vineet Vashist / Designer Nirav Patel)

Status: Ongoing

Designing this product was initiated when the technology of wearable gait assisting systems was tested. The design mostly focuses on the thigh and calf muscles which are controlled by a motorised backpack. The proof of concept has proved to be

successful and the product system is under development for optimisation and finer details.



Set of writing pen and table for autistic children (For Prof Uttama Lahiri / Designer Nirav Patel)

Status: Ongoing

DIC designed a writing table for autistic children to help a PhD student in collecting the data at an MRI facility. A pen/stylus grip was also developed to quantify the pressure while writing. Multiple sensors were embedded on the hexagonal grip. It is also a part of the PhD

student's study on autistic children. The products are designed in such a way so that they can be highly compatible with the autistic population.



A chair setup for eye tracker (For Prof Uttama Lahiri / Designer Nirav Patel)

Status: Ongoing

A VR (Virtual Reality) based tool has been developed to document the response time using an eye tracking set-up. The task needs to provide a

record of EEG (electroencephalogram), PPG (photoplethysgram) and location of visual focus. Therefore, a set-up was fabricated on a chair with UPVC pipes that will stabilise the participant's head, reducing the effort and time required by the participant and researcher.

EVENTS

The DIC team started "Design Dialogue", a series of talks on design and technology. As a part of this series, the Centre invited successful designers to share their experiences with the IITGN community to spark interest among students to explore this interdisciplinary field.

Following talks were organised under this series between Dec 2020 to Mar 2021:

- Designing the Rupee Symbol by **Dr D Udaya Kumar**, Head in Department of Design, IIT Guwahati, Dec 10, 2020
- Kangaroo Mother Care: Designing for behaviour change by **Mr Pushkar Ingale**, Founder of Cohesive Labs, Pune, Jan 16, 2021
- Designing Methodologies and Co-creation by **Ms Nancy Kumar**, Strategic Design Manager, Growth & Innovation, Airbus, Feb 10, 2021
- A Drawing a Day by **Mr Prabhat Mahapatra**, Experience Design Manager, Adobe, Noida, Mar 20, 2021

WORKSHOPS

DIC conducted following workshops for students to nurture the skills that they can employ to visualise and convert their concepts into reality:

- A **Natural Dye Workshop** was conducted as an outdoor workshop by **Mr Nirav Patel**, Designer, DIC, on Feb 20, 2021. It received an enthusiastic response. Although, due to social distancing requirements of COVID-19, only 20 participants were allowed.
- A workshop on **Basic 3D Modelling using Rhinoceros** was conducted in a series of three sessions in Mar 2021 by **Mr Singhara Kannapan**, Designer, DIC. The series was aimed at developing basic understanding of 3-D modelling using Rhinoceros and help the students visualise complex 3-D forms/assemblies. The software is a versatile tool to construct and modify 3-D objects and can be used with various prototyping machines such as 3-D printers and laser cutting machines.

DIC TEAM

The Centre's faculty includes **Prof Leslee Lazar**, Assistant Teaching Professor and coordinator for the Centre, **Prof Amit Arora**, Assistant Professor and co-coordinator of the Centre, and **Prof Manasi Kanetkar**, Assistant Teaching Professor. **Mr Niravkumar Patel** and **Mr Singhara Kannapan** are design associates with the Centre.

DR KIRAN C PATEL CENTRE FOR SUSTAINABLE DEVELOPMENT

The Dr Kiran C Patel Centre for Sustainable Development (KPCSD) at IITGN undertakes cutting-edge research on sustainability and related challenges of high societal importance and promotes cost-effective and sustainable solutions through its strong outreach and technology-transfer programmes.

Following are the main objectives of this Centre:

- Identify and conduct interdisciplinary research on sustainability related problems of high societal importance
- Develop practical solutions to sustainability challenges by integrating research, traditional knowledge and field understanding, and translate them into prototypes, patents, and publications
- Establish an effective technology-transfer programme for sustainability solutions in the field
- Implement sustainability solutions on campus and its neighborhood
- Develop a strong outreach programme of training, education, awareness and community engagement on sustainable livelihood and development
- Promote networking and collaboration among scholars, policy makers, industry, non-profit organisations and other stakeholders on sustainability
- Promote educational programmes on sustainability at IITGN

FOCUS AREAS

- **Water:** desalination, safe drinking water production, water resources, river flow
- **Pollution & Waste Management:** air, water & soil pollution, waste segregation, treatment and recycling, waste to resource techniques
- **Energy:** renewable energy, efficiency and energy management
- **Climate Change:** extreme events, prediction and simulation
- **Natural Resources, Wildlife & Ecosystems:** biodiversity conservation, ecotourism, traditional ecological knowledge, environmental humanities

PROGRAMMES

- **Research:** research and consultancy on sustainability and promoting national and global collaborations
- **Practice:** lab-to-field technology transfer and implementation on campus and the neighbourhood
- **Education:** curriculum development at IITGN and advance education on sustainability nationally and globally
- **Outreach:** conferences, networking, training programmes and workshops for scholars and professionals

ACTIVITIES

With the aim of encouraging urgent research on COVID-19 and its societal impact, KPCSD established the **COVID-19 Research Awards** for research by IITGN faculty and students on all aspects of the pandemic. The awards are designed to encourage

research that advances understanding of the pandemic and its psychological, educational, economic and societal impact. Four research works mentioned below were selected for the award.

1. A chronicle of SARS-CoV-2: Part-I - Epidemiology, diagnosis, prognosis, transmission and treatment by **Manish Kumar, Kaling Taki, Rohit Gahlot, Ayushi Sharma, and Kiran Dhangar.**
2. A cross-sectional study of psychological wellbeing of Indian adults during the Covid-19 lockdown: Different strokes for different folks by **Anupam Joya Sharma and Malavika A Subramanyam.**
3. Dynamics of psychological responses to Covid-19 in India: A longitudinal study by **Anvita Gopal, Anupam Joya Sharma and Malavika A Subramanyam.**
4. First proof of the capability of wastewater surveillance for COVID-19 in India through detection of genetic material of SARS-CoV-2 by **Manish Kumar, Arbind K Patel, Anil V Shah, Janvi Raval, Neha Rajpara, Madhvi Joshi and Chaitanya G Joshi.**

KPCSD provided a seed grant to **Prof Amit Arora** and **Prof Madhu Vadali** for the proposal “Golden Plastic - Turning plastic waste into local businesses through 3D printing”. The seed funding proposal is related to a larger funding proposal for the project titled “Golden Plastic”, submitted to the DST Indo-Portugal Bilateral joint call in collaboration with Instituto Superior Técnico (IST), Portugal. The seed grant is expected to facilitate kick-starting preliminary feasibility studies and proof-of-concept prototypes at IITGN.

The Centre also funded a project related to COVID-19: “Weekly Surveillance of Wastewater for SARS-CoV-2 Gene Detection in Gandhinagar for Pandemic Curve Monitoring”. The objectives of the project, led by **Prof Manish Kumar** of the Earth Sciences discipline, were to detect and quantify variation in the genetic material of SARS-CoV-2 in the various wastewaters of Gandhinagar to understand the pandemic situation; to maintain weekly resolution of the data for three months in genetic material loadings in the wastewater treatment plant at different stages and different time period; to establish applicability of Wastewater Based Epidemiology (WBE) for COVID-19 surveillance as a potential tool for public health monitoring at the community level; and to understand the pathogen diversity (viral and bacterial) from wastewater in order to establish early signs of WBE as a prediction tool.

EVENTS

- KPCSD organised a total of 14 webinars as a part of the **Sustainability Seminar Series** between Sep 2020 and Mar 2021. The online series invited various prominent scholars and professionals to discuss their works on sustainable development covering broad topics of water, pollution, energy, climate change and natural resources, wildlife and ecosystems. The speakers included **Prof Abhijit Mukherjee, Dr Sejal Worah, Amb. Venkatesan Ashok, Dr**

Virendra Tiwari, Mr Emilio Gabrielli, Mr Henrique Veiga, Prof P P Mujumdar, Prof Subimal Ghosh, Prof Auroop Ganguly and others from renowned organisations such as WWF-India, The Energy and Resources Institute, CSIR - National Geophysical Research Institute, IISc Bangalore, IIT Kharagpur, IIT Bombay, and Federal Government of Brazil. The webinar series was attended by nearly 800 attendees, from India and several locations across the globe.

- **WIN WATSAN Webinar Series 2020** titled “Innovations and Empowerment for Sustainable WATSAN Solutions” was conducted as a six-part series from Sep 3 to Oct 8, 2020. It was organised in collaboration with WIN Foundation, Arid Communities & Technologies, Centre for Environmental Planning and Technology (CEPT), IIT Bombay, and IIT Kharagpur. Leading innovator-practitioners from premier institutions, social organisations and startups, presented their actual innovations. The series also provided an opportunity to the Water and Sanitation community to interact with various leaders and experts in the domain, with opportunities to collaborate. **Dr Jaichander Swaminathan**, Kanchan and Harilal Doshi Chair and Assistant Professor for Water, Centre for Sustainable Development, presented “Water Treatment and Desalination: Addressing Bottlenecks in Energy and Materials”. **Dr Manish Kumar** and **Dr Chinmay Ghoroi** demonstrated innovations in materials for water treatment such as biodegradable low-cost materials for contaminant remediation, and nanoscale surface modifications for disinfection.
- The **Indo-UK Virtual Conference** on the 5C’s of Water Vulnerability: Climate Change, Contaminants, Co-occurrence, Conflicts, and COVID-19 was held from Dec 14 to 16, 2020. The Dr Kiran C Patel Centre for Sustainable Development co-sponsored the event with IITGN’s Earth Science discipline, the UK-India Education Research Initiative (UKIERI), Newcastle University, British Council, and the Department of Science and Technology, Government of India. The three-day event attracted more

than 200 participants from all over the world. **Prof Manish Kumar** from IITGN and **Dr David Werner** from Newcastle University were the conveners of the workshop.

- The Centre hosted its third Annual **Sustainability Fair** online on Mar 26, 2021, on the theme of “Renewable Energy and Water Resources”. **Shri Vijay Rupani**, Hon’ble Chief Minister of Gujarat, inaugurated the event. The event featured keynote talks by **Dr Kalanithy Vairavamoorthy**, Executive Director, International Water Association; **Dr Ashok Das**, Founder CEO, SunMoksha; and **Dr Rajendra Singh**, Chairman, Tarun Bharat Sangh, who delivered lectures on topics related to challenges and opportunities in the international water sector, sustainable energy for rural development, and community decentralised water management, respectively. Online interactive networking sessions and about 50 virtual exhibition stalls by industries and organisations working on renewable energy, water and other sustainability issues were featured at the Fair. More than 600 participants attended the event from all over the world. The event was coordinated by **Prof Achal Mehra**, **Prof Naran Pindoriya**, and **Ms Falguni Tailor**.

CENTRE FACULTY

The Centre’s faculty consists of **Prof Achal Mehra**, Visiting Professor and coordinator of the Centre; **Prof Vimal Mishra**, Associate Professor and co-coordinator of the Centre; **Prof Ambika Aiyadurai**, Assistant Professor; **Prof Nipun Batra**, Assistant Professor; **Prof Atul Bhargav**, Associate Professor; **Prof Udit Bhatia**, Assistant Professor; **Prof Arup Chakraborty**, Associate Professor; **Prof K Chelvakumar**, Visiting Professor; **Prof Michel Danino**, Visiting Professor; **Prof Chinmay Ghoroi**, B S Gelot Chair Professor; **Prof Vikrant Jain**, Professor; **Prof Manish Kumar**, Assistant Professor; **Prof Pranab Mahapatra**, Professor; **Prof CN Pandey**, Visiting Professor; **Prof Naran Pindoriya**, Associate Professor; **Prof Sudhanshu Sharma**, Assistant Professor; and **Prof Jaichander Swaminathan**, Kanchan and Harilal Doshi Chair Assistant Professor.



CENTRE FOR SAFETY ENGINEERING

The Centre for Safety Engineering (CSE) of IITGN pursues high-impact research and quality education in the field of safety. It is committed to promoting a culture of safety and is mainly focused on fire safety. The main objectives of the Centre are:

- Undertake research and consultancy projects to ensure safe and accident-free society
- Teach courses on safety
- Disseminate knowledge related to safety through conferences, workshops/symposia to enable safety professionals to keep abreast of current trends
- Training staff and students on safe working practices in all aspects of IITGN's operations such as labs and event organisation

Faculty members have undertaken several research projects along with their undergraduate and postgraduate students. Three Master's students under Prof Gaurav S completed their MTech thesis on important topics like (a) Quantitative analysis and understanding of building fires in India, (b) Characterisation of fire behavior inside non-AC rail coach, and (c) Description of fire behavior in public transport buses.

Among the journal publications from the Centre, the paper titled "Performance of combustibile Facade Systems with Glass, ACP and Firestops in Full-Scale, Real Fire Experiments" has been selected as the Editors choice of Fire Technology among the top 15 papers of the year.

Dr Pravinray Gandhi, the Guest Professor in the Centre, was selected as 2021 recipient of the Arthur B Guise Medal, the most prestigious research award given by the Society of Fire Protection Engineers (SFPE) Foundation. The Guise Medal recognises eminent achievement in the advancement of science and technology of fire protection engineering.

CENTRE FACULTY

The Centre's faculty include **Prof Chinmay Ghoroi**, B S Gehlot Chair Professor and the coordinator for the Centre; **Prof Gaurav S**, Associate Professor and the co-coordinator of the Centre; **Mr R A Venkitachalam**, Centre Advisor; and **Dr Pravinray Gandhi**, Guest Professor.





External Affairs

MoUs

IITGN has been constantly building strong and mutually beneficial relationships with internationally renowned academic institutions and non-academic organisations. Several partnerships forged in the year 2020-21 that will benefit the students and the faculty.

INTERNATIONAL

ORGANISATION / INSTITUTION	OBJECTIVE
Dr Hemant Kanakia	To support the Kanakia Young Researcher Seminar Series at IITGN with an aim of attracting and recruiting top-notch faculty talent at the Institute
Dr Dinesh O Shah	To support a faculty chair in any area of engineering or natural sciences at IITGN
Universidade Federal de Goiás (UFG), Brazil	To develop academic and scientific cooperation through teaching, research and/or extension activities
Dr Vilas Mujumdar	To support a faculty chair in any area of engineering or natural sciences at IITGN

NATIONAL

ORGANISATION / INSTITUTION	OBJECTIVE
Vegshakti Mahila Kalyan Sangathan (VMKS)	To establish Vegshakti Mahila Kalyan Sangathan Scholarship to support two female students from economically weaker sections for a period of four years
National Institute of Pharmaceutical Education and Research- Ahmedabad (NIPER-A)	To provide a formal basis for interaction by partnering in knowledge creation, technology development and human resource development through R&D projects and using lab infrastructures
Nirma University, Ahmedabad	To collaborate in teaching, research and training as well as exchange of scientists, faculty and students in collaborative projects
HQ 14 Corps (Engineers)	To undertake technological research/study/ development of project on sewage disposal and management at high altitude areas

ORGANISATION / INSTITUTION	OBJECTIVE
Gujarat Council on Science & Technology (GUJCOST)	To carry out research work on “High sensitive detection of atmospheric pollutant gases to monitor the effects of industrial emissions on urban air quality”
Gujarat Council on Science & Technology (GUJCOST)	To carry out research work on “Design, dynamic study and control of a cable driven flexible robotic manipulator”
Gujarat Council on Science & Technology (GUJCOST)	To carry out research work on “Developing new plasmonic antenna- reactor platform for efficient storage of solar energy as clean fuels”
Gujarat Council on Science & Technology (GUJCOST)	To carry out research work on “Gold nano heater mediated targeting of powering in cancer for next generation chemo photo thermal therapy”
Gujarat Council on Science & Technology (GUJCOST)	To carry out research work on “High Performance Fiber Reinforced Concrete (HPFRC): Introducing a capacity based mix design framework”
Centre for Development of Advanced Computing (CDAC)	To set up state-of-the-art 650 TF HPC facility under the National Supercomputing Mission (NSM) for the research and development activities
Testbook Edu Solutions Private Limited	To provide access to the content of Testbook to the End Users for assessment of their knowledge and analysis of the core areas of improvement
HSR Innovation Center Trust, New Delhi	To carry out research on “Geosynthetic Reinforced Soil Walls and Abutments for High Speed Railway System”
Mrs Rashmi and Mr Manish Sharma, Bangalore	To support a faculty chair in any area of engineering or natural sciences or humanities and social sciences at IITGN
Central Salt & Marine Chemicals Research Institute (CSIR)	To provide a formal basis for initiating interaction between CSIR-CSMCRI and IITGN and to establish a programme of exchange and collaboration
Gujarat Council on Science & Technology (GUJCOST)	To carry out research work on “From single molecules to live cells: In situ, multiplexed, high-throughput imaging with DNA-nanotechnology”
Gujarat Council on Science & Technology (GUJCOST)	To carry out research work on “Development of industry friendly technology for fabricating highly reactive, non-toxic, and transparent antiviral surface coating”
Shri Gordhanbhai B Gelot, Ahmedabad	To create Sarita G Gelot Endowment Fund to nurture educational excellence at IITGN by setting up Sarita G Gelot Laboratory for Intelligent Rehabilitation & Affective Computing Systems

IITGN RESEARCH PARK

ORGANISATION / INSTITUTION	OBJECTIVE
Optimized Solutions Limited	To carry out their research and development activities at IITGN Research Park



IIT GANDHINAGAR RESEARCH PARK

The IIT Gandhinagar Research Park seeks to push the boundaries of innovation and research by fostering a strong connection between industry and academia. Industries can set up their offices at the IITGN Research Park to carry out R&D activities. This allows them to be part of a vibrant community and gain access to R&D professionals, students and state-of-the-art R&D infrastructure at IITGN.

The IITGN Research Park activities have begun to increase, with more companies interested in setting up their research-related activities here.

NEW COMPANIES AT IITGN RESEARCH PARK

During the year 2020-21, a total of six new companies have established their activities at IITGN's Research Park:

Name of the Company	Specialisation
Redpine Signals	Chipset and system level products in AI space
Jay Chemicals	Specialty chemicals
Everest Instruments	Dairy and food testing equipment
Havi Technologies	Robotics
KriGen Pharmaceutical Pvt Ltd	Pharmaceutical research
InfyU Labs Pvt Ltd	AgriTech sector

COMPANIES AT IITGN RESEARCH PARK

A total of 15 companies are operating from the IITGN Research Park as on Mar 31, 2021:

Name of Company	Area Currently Occupied (sq ft)	Area of interest
Gujarat Urja Vikas Nigam Limited (GUVNL)	1500	Electric Power
WIN Foundation	504	Water and Sanitation
Tawata Technologies	130	Specialty Chemicals
DP Pulveriser Industries	130	Pulvarising technologies
NASSCOM	2000	IoT and IT
PanIIT Alumni Reach For India Foundation (PARFI)	160	Skill Development
Optimized Solutions Limited	180	Electronics and Embedded Systems
CPWD	355	Construction
Pal Rematerials	130	Materials Properties
Redpine Signals	355	Semiconductors
Jay Chemicals, Vapi	260	Chemicals
Everest Instrument Pvt Ltd	130	Dairy and Food Testing Technologies
Havi Technologies Pvt Ltd	160	Robotics
Krigen Pharmaceuticals Pvt Ltd	260	Pharma R&D
InfyU Labs Pvt Ltd	130	Agritech

OTHER DEVELOPMENTS

- The construction work for the permanent buildings of the Research Park is at an advanced stage of completion
- **The 5th meeting of the Advisory Council** for IIEC and Research Park took place on Oct 23, 2020 under the chairmanship of **Mr Kris Gopalakrishnan**, Co-founder, Infosys Ltd. Keeping in view the prevailing Covid-19 situation, the meeting was held virtually on Zoom with 14* external members. The members appreciated the progress made by the Research Park and Entrepreneurship Center and provided some valuable inputs for future growth, including 1) Approaching family run businesses in Gujarat; 2) Developing sectoral approach to reach out to Industry; 3) Planning virtual roadshows; 4) Creating investment corpus for supporting entrepreneurial activities; 5) Expanding mentor pool for entrepreneurs, among others.

*Following external members (in addition to the chairman) attended the meeting:

Shri Ajai Chowdhry, founder, HCL
 Shri Piruz Khambatta, founder, Rasna International
 Shri Sarthak Jain, co-founder, Nanonets
 Shri Anand Parekh, Reliance Industries
 Shri R Gopalakrishnan, Tata Sons
 Ms Soumya Rajan, founder, Waterfield Advisors
 Shri Vijaya Kumar Ivaturi, founder and CTO, Crayon Data
 Shri Maulik Jasubhai, chairman and chief executive, Jasubhai Group
 Shri Sudhir Mehta, Pinnacle Industries Ltd
 Dr Anita Gupta, head, NSTEDB, Department of S&T, Government of India
 Shri Sanjay Randhar, Gujarat Venture Finance Ltd
 Shri Praveen Roy, Scientist F, Department of S&T, Government of India
 Shri Ashank Desai, Mastek Limited
 Shri N G Subramaniam, TCS



IITGN INNOVATION AND ENTREPRENEURSHIP CENTER

IITGN Innovation and Entrepreneurship Center (IIEC) is a Technology business incubator to support the incubation and technology commercialisation initiatives of the Institute. It aims to foster techno-entrepreneurship through innovative and creative thinking, using an interdisciplinary approach.

With the advent of the COVID-19 pandemic, IIEC continued to provide its support to the incubated startups. During the initial phase of the nationwide lockdown, a few of the startup companies used their skills and resources to try to develop products like ventilators, sanitisation systems, etc. A total of 15 startups were supported by IIEC under incubation and pre-incubation programmes during the year 2020-21. Besides, IIEC helped three of the startups to receive seed funding of around Rs 36 lakhs during the year.

Some of the key programmes conducted under the aegis of IIEC include:

ENTREPRENEURIAL MINDSET 101

IIEC conducted 'Entrepreneurial Mindset 101' - an online mentorship programme for students interested in entrepreneurship. The programme was conducted between Apr 30 and June 2, 2020, to equip students with the fundamentals of the startup world. 23 BTech, MTech, MA and PhD students completed the programme, which was delivered by **Mr R A Venkitachalam**. The students also had the opportunity to interact with a cross-section of entrepreneurs, including some of the IITGN startups from earlier batches.

DEVELOPING HIGH GROWTH VENTURES IN TURBULENT TIMES

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

NIDHI SEED SUPPORT PROGRAMME

IIEC received a sanction of funds worth Rs 10.50 crores from the Department of Science and Technology, Government of India under the Nidhi Seed Support Programme. The first installment of Rs 2.1 crores has been received. The funds will be utilised to support promising startups incubated at IIEC by providing them seed funding to the order of Rs 25 to 50 lakhs.

NIDHI PRAYAS PROGRAMME

IIEC received funds of Rs 60 lakhs for implementing the Nidhi Prayas programme in the year 2020-21. Under this programme,

43

startups supported during the last 5 years

300+

employment opportunities generated by the startups

70%

of startups incubated at IIEC have survived for more than 2 years

80+

alumni of IITGN have co-founded startup companies

an innovator/team/startup is provided with the funding support of up to Rs 10 lakhs for converting the idea into a prototype. Out of the total budget, Rs 50 lakhs are available for prototyping grant and Rs 10 lakhs for operational expenditure.

The first call for proposal for this programme was announced in Sep 2020. We received a total of 93 applications. After initial screening and feedback from IITGN faculty members on the technical merit of the ideas, a total of 52 applicants/teams were called for virtual presentations during Nov 30 to Dec 3, 2020. The applications were evaluated by a panel of experts, which included IIEC mentors and faculty members from IITGN. At the end of the selection process, 10 teams were recommended for support under the programme. The details are mentioned below:

Teams recommended for support	Teams Joined	Prototyping grant (in Rs)	First installment released (in Rs)
10	9	48 lakhs	16.5 lakhs

MENTOR CLINICS BY IIEC

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.

LAUNCHPAD 2021

The Institute approved LaunchPad, an initiative for final-year students of IITGN to provide them with an opportunity to try their idea with the support from IIEC. As a part of this programme, students get a platform where they validate their start-up idea and receive mentoring from IIEC. Student

teams are also provided with product development funding support and fellowship to cover sustenance. Two teams of seven students have started working on their ideas under this programme.

START-UPS' ACHIEVEMENTS

- MiCoB, a start-up in 3D concrete printing, incubated at the IIEC, was among the teams shortlisted under Global Housing Technology Challenge 2019. The Startup also received a marketing support grant of Rs 10 Lakh from the Industries Department, Government of Gujarat.
- Chandan Kumar Jha, co-founder at Nearchi Innovations (Rehab Relive), participated at Indo-Swiss Academia Industry Training programme. The programme was organised by the Department of Science and Technology, Government of India; Swissnex India; and Society for Innovation & Entrepreneurship (SINE), IIT BOMBAY; to assist academics and early stage startups.
- Chandan Kumar Jha won at National Bio Entrepreneurship Competition (NBEC-2020) under the Student Team Innovation Category and received a grant of Rs 3 Lakhs.
- Necesario Innovations (Snapper) and MiCoB received seed grants of Rs 23 lakhs and Rs 20 lakhs respectively for their startup idea. Imtiyaz Ansari, founder of Necesario Innovations (Snapper) received the 'Young Achievers Award 2020' by Indian Achievers Forum.
- InfyULabs was among the top 4 teams of UNDP Youth Co:lab programme 2020. It was a runner up under the 'Emerging Agri Innovator Category' at the 3rd FICCI Awards for Agri startups.

STARTUPS UNDER INCUBATION

- Snapper (Necesario Innovations)** is a wireless photo booth camera for taking wide and aerial angle selfies, that too without the internet, having to install any app, or asking any stranger. The startup has received seed support of Rs 23 lakhs from the Government of Gujarat in Dec 2020 for product development and marketing.
- MiCoB Technologies** is an entrepreneurial venture started by a group of PhD students at IITGN. The startup has developed a full-scale concrete printing facility at Academic Block 9 of IITGN and has started printing high-end furnishing items. The company is being supported by **Shri Parimal Karani** for scaling up of the operations. The company also received marketing support of Rs 10 lakhs from the Government of Gujarat and recommended for support of Rs 7.5 lakhs under the Nidhi Prayas programme.
- Geo-Cardo Radar Technology Private Limited**, founded by **Ms Silky Agarwal**, class of 2015, IITGN, works on non-destructive geophysical exploration for subsurface investigation using Ground Penetrating Radar (GPR) technology. The startup reached a revenue of approx Rs 4 crores, creating employment opportunities for more than 40 persons in FY 2019-20. However, due to the current COVID-19 crisis, the operations are reduced significantly as compared to the previous year.
- Whitepanda** is a content development platform connecting

businesses in need of content, to talented freelance writers. The startup is able to generate around Rs 4-5 lakhs revenue per month and has raised Rs 50 lakhs in angel round.

STARTUPS UNDER PRE-INCUBATION

- AgroCast Analytics** is founded by **Mr Harsh Shah**, a PhD scholar from IITGN. AgroCast is an agrarian forecasting and analytics firm. It provides seven days prior precision farming information for efficient farming practices.
- Habitel Technologies** is working on developing clinical additive manufacturing solutions which include Anatomical Modelling to help surgical planning.
- Svakatha** is introducing design and apparels technology solutions using Artificial Intelligence (AI) and Virtual Reality (VR). During the lockdown period, it organised a virtual fashion show and created an AI-based platform for fashion suggestions. It has developed a wardrobe suggestion app and is conducting pilots.
- Insitu Agritech** plans to grow all kinds of plants without soil, sunlight and 90% less water consumption.
- Golden Plastics** proposes to develop a single consolidated system that takes plastic waste as input and directly prints various 3D products from it. Thus, it valorises waste plastic into usable commercial products.
- Kairios Robotics'** primary objective is producing a quadcopter drone with advanced control capabilities to be used as a platform in research labs. Once validated, the same technology will be ported for commercial use in sports photography, professional photography, robotics for natural disaster rescue operations, military and defence use, etc.
- Nearchi Innovations (Rehab Relive)** is engaged in developing an engaging Virtual Reality-based rehabilitation system that will entice stroke patients (with disability) to perform gamified exercises for prolonged duration to recover from their disability quickly. The system will also monitor the quality of movements made by the patients in real-time and track the recovery progress by generating different quantitative assessments of the hand kinematics and a simplified aggregate score.
- MB2 Nanomaterials** is a project related to solid propellants additive substitute used in missiles and rockets for defence, space and other commercial applications.
- E-Vega Mobility** is into designing hardware devices for testing and analysing lithium-ion batteries using state-of-the-art Machine Learning (ML) algorithms. The product will solve the current complex, time taking and costly practice for lithium battery testing.
- Lecistar** develops hybrid solar gas cook-stove which works on biogas/LPG/natural gas along with solar electricity. Hybrid solar gas stove works on patent pending micro-flame internal combustion burner technology, which reduces energy consumption.
- Plasma Propulsion** aims to develop a 3kW DC motor for EV domain. As an outcome of this project, a cost-effective, 3kW DC motor for EV use cases would be developed, which offers better performance, reduced supply chain dependency on foreign countries.



Awards and Recognitions



FACULTY AWARDS AND RECOGNITIONS

Following faculty members of IITGN received special awards and recognition from external bodies during 2020-21:

- **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, Mathematics, has been selected for the membership of the **Indian National Young Academy of Sciences (INVAS)** 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, Chemistry, and her team have received a **Biotechnology Ignition Grant (BIG)** in the category of ‘Drugs & Drug Delivery’ from the Biotechnology Industry Research Assistance Council (BIRAC).
- **Prof Uttama Lahiri**, Associate Professor, 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, 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, Electrical Engineering, was re-appointed as a member of the **Technical Committee of Biomedical Acoustics** (term: 2020 - 2023) by the president of the Acoustical Society of America. Professor Shekhar has also been awarded the **Har Gobind Khorana-Innovative Young Biotechnologist Award** by the Department of Biotechnology, Ministry of Science and Technology, Government of India. This award includes a research grant and a three-year fellowship, which will enable him to pursue ultrasound-based approaches for treating breast cancer.
- **Prof Neeldhara Misra**, Assistant Professor, Computer Science and Engineering, has been selected for the prestigious **Indian National Academy of Engineering (INAE) Young Engineer Award** for the year 2020.
- **Prof Nishaant Choksi**, Assistant Professor, Humanities and Social Sciences, has won a **Rapid-Response Grant on COVID-19** from the prestigious Social Science Research Council (SSRC) to study ‘The effects of reverse migration among the indigenous communities following India’s COVID-19 induced lockdown’.
- **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.
- **Prof Srinivas Reddy**, Guest Professor, Humanities and Social Sciences, has authored a new book “**RAYA**”, a critical biography of Krishnadevaraya, Emperor of the Vijayanagara Kingdom. The book portrays Krishnadevaraya’s life, who is considered one of the greatest rulers of India.

FACULTY EXCELLENCE AWARDS

The following faculty members were awarded the Faculty Excellence Awards for the year 2020-21 for their exemplary work in teaching, research, institution building, and outreach activities.



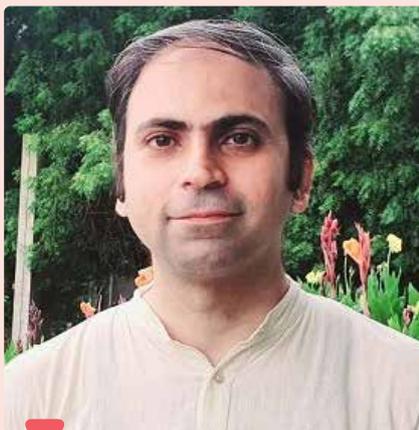
EXCELLENCE IN TEACHING AWARD
PROF SUDIPTA SARKAR

in recognition of his outstanding contributions and achievements in teaching.



EXCELLENCE IN RESEARCH AWARD
PROF PRATIK MUTHA

in recognition of his outstanding achievements in research including publications in high impact peer reviewed journals with IIT Gandhinagar students.



EXCELLENCE IN INSTITUTION BUILDING AWARD
PROF KABEER JASUJA

in recognition of his outstanding contributions and achievements in Institution building activities especially as Associate Dean, Undergraduate Studies and as Head, Counselling Services.



EXCELLENCE IN OUTREACH ACTIVITIES AWARD
PROF CHINMAY GHOROJ

in recognition of his outstanding contributions to outreach activities through industry engagement and partnerships.

FACULTY CHAIR POSITIONS

Several well-wishers of the Institute have established endowed chair positions at IITGN to reward excellence and help retain outstanding faculty. Three faculty members were awarded Faculty Chair positions with effect from May 1, 2020:



N RAMA RAO CHAIR
PROF ANIRBAN DASGUPTA

Professor in Computer Science and Engineering



JIBABEN PATEL CHAIR IN ARTIFICIAL INTELLIGENCE
PROF SHANMUGANATHAN RAMAN

Associate Professor in Electrical Engineering jointly with Computer Science and Engineering



JIBABEN PATEL CHAIR
PROF PRATIK MUTHA

Associate Professor in Biological Engineering

List of Other Faculty Chairs at IITGN*

Name of the Faculty Chair	Name of the Donor	Current Occupant
JASUBHAI MEMORIAL CHAIR	Mr Maulik Jasubhai	Prof Jaison A Manjaly, Professor, Philosophy & Cognitive Science
B S GELOT CHAIR	Shri Gordhanbhai B Gelot	Prof Chinmay Ghoroi, Professor, Chemical Engineering
TEOCO CHAIR	Mr Atul Jain	Prof Nithin V George, Associate Professor, Electrical Engineering
MAULANA ABUL KALAM AZAD CHAIR	Mrs Hamida Banu Chopra	Under this Chair, eminent scholars of Urdu are invited as visiting professors or scholars-in-residence for lectures, seminars and other scholarly endeavours.
KANCHAN AND HARILAL DOSHI CHAIR	Mr Navin Doshi and Mrs Pratima Doshi	Prof Jaichander Swaminathan, Assistant Professor, Mechanical Engineering
SMT AMBA AND SRI V S SASTRY DISTINGUISHED VISITING CHAIR	Dr A V Anilkumar	Under this Chair, every year, a currently active distinguished academic of international stature from the fields of engineering, humanities or science is invited to spend atleast one month at IITGN for lectures, interactions and research collaborations.

* (Upto Mar 31, 2021)

STUDENTS' AWARDS AND RECOGNITIONS

- **Camellia Chakraborty** and **Debarpan Ghosh**, MTech students in Biological Engineering, have received one of Europe's most prestigious fellowships for PhD, the **Curie EuReCa Fellowship**, for doing PhD at Institute Curie, Paris, France.
- **Pradipbhai Dahyabhai Prajapati**, a BTech student in Electrical Engineering, has been selected as a **Cargill Global Scholar**. Every year, only 10 second-year undergraduate students from all over India are selected for the prestigious program.
- **Kailash Prasad**, a PhD scholar in Electrical Engineering, has received **Intel PhD Fellowship** for the year 2019-2020. It is a highly competitive fellowship that gives students the opportunity to work with top-notch researchers at Intel.
- **Rajesh Hadiya**, a PhD scholar in Biological Engineering, has been selected for the prestigious **SERB-CII Prime Minister's Fellowship for Doctoral Research**.
- **Pankaj Pandey**, a PhD scholar in Computer Science and Engineering, has been selected for the **SERB-DST Prime Minister's Fellowship for Doctoral Research**, coordinated by FICCI.
- Six IITGN PhD scholars - **Prasanna Kulkarni** and **Yogesh Singh** from Mechanical Engineering; **Ashish Tiwari**, **Sachinkumar Suthar**, and **Kailash Prasad** from Electrical Engineering; and **Rajes Ghosh** from Physics - have bagged the prestigious **Prime Minister Research Fellowship** (May 2020 cycle).
- Two of IITGN PhD scholars, **Jaydeepsingh Chavda** from Chemistry discipline, and **Shanti Shwarup Mahto** from Earth Sciences discipline, have been selected for the **DST-INSPIRE Fellowship**.
- **Deepika Meena**, a PhD scholar in Humanities and Social Sciences, has been selected for a **National Fellowship by the Ministry of Tribal Affairs**, Government of India.
- **Shivani Sharma**, a PhD scholar in Humanities and Social Sciences, has been awarded the **Shastri Research Student Fellowship** (SRSF) by the Shastri Indo-Canadian Institute, in the second round of programmes for the year 2019-2020. She has also received the prestigious **Charles Davis Award 2020** for the Outstanding Graduate Student Presentation at the 73rd Rocky Mountain Modern Language Association Annual Convention held in Texas in Oct, 2019. The research paper she presented is a collaborative study with **Dr Arnapurna Rath**.
- **Soumen Roy**, a PhD scholar in Physics, **Prof Anand Sengupta**, Associate Professor of Physics at IITGN, and **Prof K G Arun** from CMI Chennai, have jointly made a key contribution by developing a new technique that helped in extracting fainter components (higher-harmonics) of the astrophysical gravitational-wave signals from the merger of two asymmetric black holes.
- Two of IITGN's PhD scholars, **Chandan Kumar Jha**, Electrical Engineering, and **Nakshi Desai**, Biological Engineering, have won the **Student Startup Grant Challenge** from the CIIE at IIM Ahmedabad. Chandan has received the grant for his work on developing a virtual reality-based hand rehabilitation and assessment platform for stroke survivors, whereas Nakshi has bagged the grant for her idea on disease diagnostics/testing, specifically for prostate cancer.
- **Chandan Kumar Jha** has won the **BIRAC cash prize** of Rs 3 lakhs in the student-team innovation category at the National Bio Entrepreneurship Competition 2020.
- 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 versions. <https://amzn.to/3oLfUxB>.

EXCELLENCE AWARDS TO STAFF

Following staff members were awarded Staff Excellence Awards for the year 2020-21 by **Prof Sudhir K Jain**, on the occasion of 72nd Republic Day on Jan 26, 2021. Through these awards, the Institute formally recognises the sustained devotion and exemplary service of its employees.

- **Dr Deepa Shah**, Medical Consultant
- **Ms Bhavna Dharani**, Jr Accountant
- **Ms Anjanaba Zala**, Jr Accountant
- **Mr Devarsh Barbhaya**, Communication Assistant
- **Mr Lal Sinh Zala**, Security Guard
- **Mr Shailesh Thakor**, Housekeeping Staff
- **Mr Dasharathbhai Makwana**, Housekeeping Staff
- **Ms Gitaben Ramesh Thakor**, Mess Staff



DR DEEPA SHAH

For her dedication and outstanding services in leading the team of the Medical Center in providing appropriate medical attendance to the IITGN community particularly during difficult times.



MS BHAVNA DHARANI

For exemplary devotion to duty and accomplishing the assigned works in Accounts office diligently and in timely manner.



MS ANJANABA ZALA

For exemplary devotion to duty and accomplishing the assigned works in Academic office diligently and in timely manner.



MR DEVARSH BARBHAYA

For outstanding contributions towards external communication initiatives of the Institute particularly his efforts towards executing the first online convocation of the Institute.



MR LALSINH ZALA

For exemplary devotion to duty and being a part of the ever watchful team in providing a secure environment for Institute personnel and property.



MR SHAILESH THAKOR

For his dedication and hard work in the Institute's mission for maintaining neat, clean and hygienic campus.



**MR DASHARATHBHA
MAKWANA**

For his dedication and hard work in the Institute's mission for maintaining neat, clean and hygienic campus.



**MS GITABEN RAMESH
THAKOR**

For her dedication and hard work in the student's mess and being a part of the Institute's motto towards creating safe and hygienic mess.

CAMPUS DEVELOPMENT AWARDS

The Institute felicitated following community members with Campus Development Awards for the year 2020-21 on the occasion of 72nd Republic Day on Jan 26, 2021, for their outstanding contributions in campus development and management related activities:

- **Ms Berawala Timirben Yakunj**, Jr Assistant
- **Mr Chirag Patel**, Outsourced Maintenance Staff
- **Mr Vishnu Deth J J**, Assistant Engineer, Electrical
- **Mr Mohsin Kureshi**, Security Guard
- **Mr Gagan Singh Thagunna**, Guesthouse Pantry
- **Mr Deepak Agnihotri**, Associate, Research Park
- **Mr Bhartkumar V Parmar**, Hostel Caretaker



MS BERAWALA TIMIRBEN YAKUNJ

In recognition of her significant contributions to organic farm-related activities on campus.



MR CHIRAG PATEL

For his continued and excellent engagement towards maintenance works on campus.



MR VISHNU DETH J J

Towards his peerless and dedicated service in many spheres of campus life.



MR MOHSIN KURESHI

For his dedication and diligent service for the security of the campus.



MR GAGAN SINGH THAGUNNA

For his dedicated service to the Institute Guesthouse.



MR DEEPAK AGNIHOTRI

For his continued dedication and diligent service.



MR BHARTKUMAR V PARMAR

For his dedicated service as hostel caretaker.

AWARDS AND RECOGNITIONS TO IIT GANDHINAGAR

EAT RIGHT CAMPUS AWARD

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



THE RANKINGS 2021 - IITGN AMONG THE TOP 800 GLOBALLY

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

IITGN ESCALATES IN NIRF INDIA RANKINGS 2020

IITGN climbed 16 positions to be ranked 35th in the overall category and retained its 24th rank in the engineering category in the India Rankings 2020 by the National Institutional Ranking Framework (NIRF). This reflects IITGN's commitment to educational excellence and meaningful research with a focus on interdisciplinarity, liberal arts, design and creativity, which are at the core of all its academic programmes.







Outreach Activities

NEEV: IITGN'S COMMUNITY OUTREACH PROGRAM

NEEV is a community outreach programme of IITGN that provides training and mentoring pertaining to skill development and entrepreneurship, to women and youth from the surrounding villages, such that it helps them with their livelihood. Since 2014, NEEV has conducted over 75 projects and activities for 2500+ beneficiaries from the Ahmedabad/Gandhinagar areas, including 15 villages near IITGN. **Ms Soumya Harish** is the coordinator, and **Ms Roshni Patel** is the program associate of the NEEV programme.

STITCHING LIVELIHOOD GENERATION PROJECT

The mission of the “Stitching Livelihood Generation Project” was to generate livelihood opportunities through the vocation of sewing, for village women from the areas surrounding IITGN. The goal of the project was to achieve the stated mission through training, mentoring, hand-holding, and providing access to market linkages. Under this project, the following initiatives were taken from Apr 2020 to Mar 2021:

A total of

1. 25 women in the age group of 18-40 years from the villages of Palaj and Basan were trained to stitch products such as reusable cloth masks, curtains, cushion covers, tote bags, laptop bags, pouches, palazzos etc. The trainer for the project was **Ms Ritu Singh**, program intern, NEEV. The training was conducted in the NEEV training room at IITGN.
2. The training enabled the women to achieve cumulative earnings of around Rs 3.7 lakhs through:
 - i. **Market linkages:** Bulk orders for masks and curtains were facilitated by NEEV throughout the year. Around 70,000 masks were made by the women. 650 curtains for two of the new IITGN hostels were stitched by these women. Products made by village women were also sold through stalls put up at IITGN.
 - ii. **Mentoring support:** Connecting women to vendors and providing help with costing.
 - iii. **Hand holding support** was provided throughout to ensure quality and timely delivery of orders. The products were made either in NEEV's training room or at the homes of the women.

- iv. **Exposure visit** to the manufacturing unit of Stitchman Inc, an export quality bag manufacturer based in Ahmedabad, was organised for nine village women on Aug 28, 2020.

COMPUTER SKILLS TRAINING COURSE

The mission of this project was to increase computer literacy among youth and women from the villages surrounding IITGN. Through this course, the participants were taught basic computer operation, MS Word, MS Excel, MS Powerpoint, logging into the network, use of the internet, email basics, search engines, etc.

1. The first batch of eight participants (four women and four men) from the villages of Palaj and Basan, in the age group of 19 - 37 years were provided training in basic computer skills for four weeks during Oct 12-Nov 07, 2020. The course was held in a room set-up. The trainer was **Ms Hemangi Patel** from H&B Computer Education in Gandhinagar.
2. The second batch of fourteen participants (eight women and six men) from the villages of Palaj and Basan, in the age group of 18 - 32 years were provided training in basic computer skills for four weeks during Mar 1-27, 2021. The course was held in the computer lab in IITGN. The trainer was **Mr Umesh Vaghela** from Gandhinagar.

CHOCOLATE CONFECTIONERY MAKING PROJECT

Ten women from Basan village in the age group of 17-37 years were provided training in making 15+ variations of chocolate based confectionery through the 'Chocolate Confectionery Making Workshop' conducted in the campus during Oct 12-16, 2020. The trainer was **Ms Neepa Sanghvi** from Ahmedabad. The trainees were also taken on a visit to an Ahmedabad based vendor of tools, raw materials, packaging on Oct 15, 2020. Notably, eight women collectively sold products worth around Rs 34,000 through stalls put up at IITGN and through orders facilitated by NEEV during the Diwali festival season.

DECORATIVE CANDLE MAKING PROJECT

A 'Decorative Candle Making Workshop' was conducted for 10 women from Palaj during Oct 21-23, 2020, and for seven women

from Basan during Nov 3-5, 2020, wherein the participants were taught to make 10+ variations of colorful and aromatic candles. The workshop was held on the IITGN campus. The trainer for the Palaj group was **Ms Neepa Sanghvi** from Ahmedabad and the trainer for the Basan group was **Ms Roshani Patel** from NEEV.

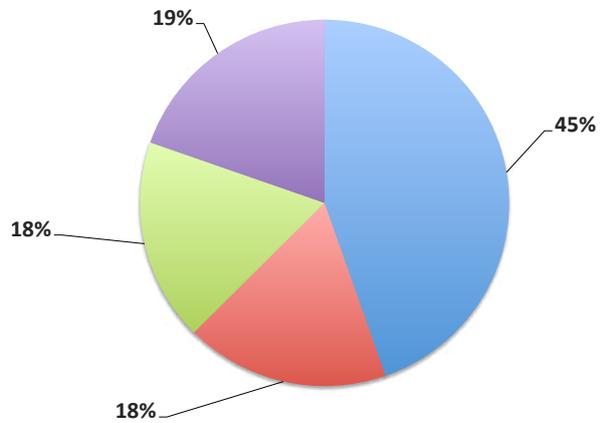
DRY-SNACKS MAKING PROJECT

NEEV organised a 'Dry-Snacks Making Workshop' on campus for 11 women from Basan village, in the age group of 18-45 years, during Oct 26-30, 2020. The trainer was **Ms Geetaben Katva** from Ahmedabad. The participants were taught to make dry-snacks such as shakarpara, mathri, besan ladoos and chakli. The trained village women collectively sold products worth around Rs 8,000 through stalls put up at IITGN campus and through pre-orders facilitated by NEEV during the Diwali festival season.

NEEV Impact - Livelihood Generation for Village Women during 2020-21

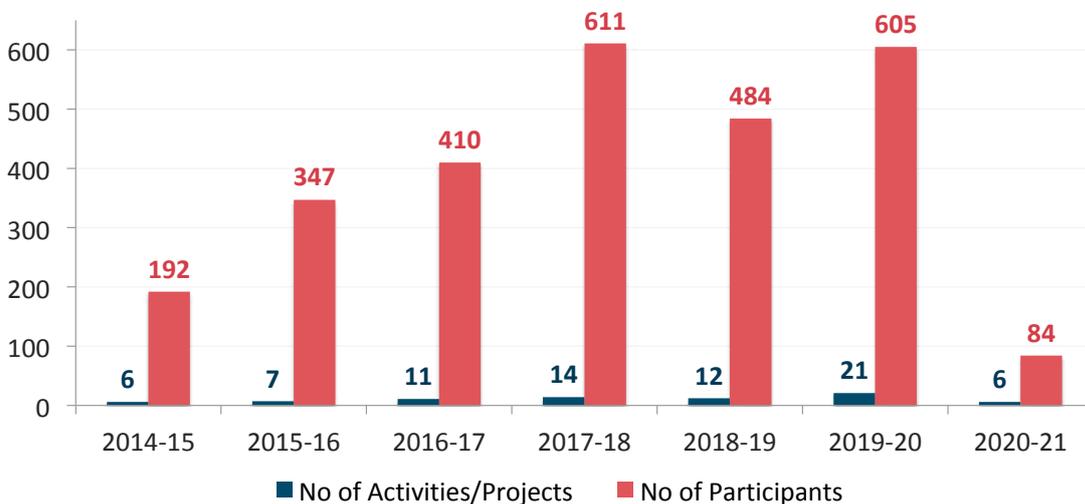
Name of the Workshop	No of Women Trainees	Cumulative Earning (in Rs)
Stitching Livelihood Generation	25	3,70,000
Chocolate Confectionery Making	10	39,000
Decorative Candle Making	10	8,000
Dry Snacks Making	11	8,000
Total	56	4,25,000

- Stitching Livelihood Generation
- Chocolate Confectionery Making
- Decorative Candle Making
- Dry Snacks Making



NEEV Activities Over the Years

Year	No of Activities/Projects	No of Participants
2014-15	6	192
2015-16	7	347
2016-17	11	410
2017-18	14	611
2018-19	12	484
2019-20	21	605
2020-21	6	84
TOTAL	77	2733



NYASA: IITGN'S COMMITMENT TO SOCIAL OUTREACH

Taking forward IITGN's commitment and conscious efforts for the welfare of the construction workers and their families on IITGN campus during the pandemic, the Institute constituted Shramik Kalyan Samiti in coordination with Nyasa's volunteers to address the challenges faced by labourers and provide all possible support for their welfare, health and safety.

FUNDRAISING EVENT

Nyasa launched a fundraising event to provide monetary aid to more than 900 construction workers of the campus and their families to help them recover from the crisis at the beginning of the pandemic. The fundraising event, which saw an enthusiastic response from the IITGN community, was led by **Mr Akash Keshav Singh**, an alumnus of IITGN. Additionally, the Institute provided a matching amount to the total donations received to double the welfare fund.

DISTRIBUTION OF COVID-19 RELIEF MATERIALS

Nyasa, in collaboration with the Shramik Kalyan Samiti, did mobile recharges, distributed essential items such as packaged food, biscuits, sanitary napkins, mosquito coils etc and also arranged food distributions, DMart and grocery sales in the construction workers' colonies with help of volunteers of IITGN Control Room. Nyasa volunteers helped the workers in completing online formalities to go back to their hometowns. The Samiti also distributed cloth masks, made with the help of local village women trained by NEEV, to the construction workers. The Nyasa team made efforts to boost the morale of the workers by providing them with carrom boards, TV, mosquito nets, and arranging movie nights for construction workers and coolers for the guards with help from the Shramik Kalyan Samiti.



ACTIVITIES FOR HEALTH CARE

Nyasa arranged regular vaccination for kids with the help of the Public Health Centre, Palaj. The medical centre team of IITGN was also available for construction workers. Moreover, Nyasa and Shramik Kalyan Samiti arranged special food kits for COVID-19 positive labourers whenever the need arose. Reusable and one-time-use sanitary napkins were procured and distributed in the workers' colony through the assistance of AVNI and Desai Foundation. The volunteers also distributed

condoms in labour colonies and carried out awareness camps on menstrual hygiene, male contraceptive measures and COVID-19. Nyasa, in collaboration with IITGN's Welfare Council, helped in organising a Blood Donation camp on campus.

DISTRIBUTION DRIVES

Continuing the past endeavours, the team Nyasa called for donations from the IITGN community and conducted distribution drives for the donated items like clothes, winter wear, toys, umbrellas, footwear, belts, bags, purses etc for on-campus workers (like housekeeping staff, mess staff etc) and construction workers. On the occasion of Uttarayan on Jan 14, 2021, Nyasa volunteers distributed sweets and kites among the children of construction workers with generous contributions from **Mr Kaushikkumar Chavda** and **Mrs Sheela Shah**. Similarly, food and stationery were distributed to the children on Feb 16, 2021, on the occasion of Saraswati Pooja, by the Saraswati Pooja volunteers of the institute. The team also distributed chocolates to the children of the construction workers in collaboration with NEEV.

EDUCATIONAL ACTIVITIES

During the early days of the pandemic, Nyasa distributed books and stationery items amongst the children of Nyasa school. Besides, Nyasa volunteers worked hard to formally enroll some of the children of construction workers in Basan village's government school. Invaluable efforts of **Mr Sunil Patel** (Basan school principal), **Mr Ajay Singh** (from Basan Library), **Prof Gaurav S**, **Prof Sharada C V**, and **Mr Sanjay Singh** (from IITGN) are greatly appreciated to make this a reality. The children will start their schooling from the academic year 2021-22. Special training programme will be conducted for these kids which will help them to be inducted into formal education.

OTHER ACTIVITIES

Nyasa and Shramik Kalyan Samiti worked in close collaboration for development of a TV room and reading room at one of the labour colonies, which is currently under construction. Team Nyasa has collected books as donations from the community to place in the reading room.

Nyasa, in association with the Shramik Kalyan Samiti, is planning to give a token of appreciation to all the on-campus workers, including construction workers, gardening & maintenance team, mess workers, and house-keeping staff for their continued efforts to keep the Institute functioning smoothly.

The team with help of IITGN Green Office, has been experimenting to upcycle used plastic and clothes into decorative items like door hangings, baskets, mats, etc by involving the labourers. AVNI (a company producing menstrual products) has expressed interest in setting up a stitching facility of reusable sanitary napkins in the neighbouring villages to promote sustainable living.





Events and Activities

SIGNIFICANT ACTIVITIES



UNION EDUCATION MINISTER AT IITGN

Union Education Minister **Dr Ramesh Pokhriyal 'Nishank'** visited IITGN on Feb 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 provided guidance on the key work areas and India's vision for educational excellence.

INSTALLATION OF 650 TF SUPER COMPUTING SYSTEM

The Department of Science and Technology (DST) has approved the installation of a 650 TF Supercomputing System (70:30 CPU & GPU), with appropriate data centres with storage capacity at IITGN. The selection has been made based on the available infrastructure at the Institute to operationalise the system. IITGN has signed a Memorandum of Understanding (MoU) with the Centre for Development of Advanced Computing (CDAC) on Oct 12, 2020, for installation of this facility under the National Supercomputing Mission (NSM). The facility is expected to boost research activities and ties with academic institutes and industries in the vicinity of IITGN.

INITIATIVES FOR GRADUATING STUDENTS

IITGN took several initiatives to help its graduating students whose future plans may have been interrupted by the COVID-19 pandemic. The Institute launched a one-year Postgraduate Diploma Program (PGDIIT) in several streams for the Academic Year (2020-21) for students of the graduating class. This Postgraduate Diploma also aims to help graduating students who are interested in exploring but are not fully committed to a Master's programme. A candidate completing the PGDIIT can subsequently choose to apply to enrol for the MTech degree. In addition, IITGN also offered two Fellowships - 'IIT Gandhinagar Junior Fellowship in Leadership' and 'Sabarmati Bridge Fellowship' to enable graduating students to make use of this time to develop career-enhancing leadership skills or embark on cutting-edge research.



E-SRIP

This year, due to the COVID-19 pandemic, the annual internship programme of IITGN, SRIP, was conducted virtually only for the Institute's students. A total of 20 students from IITGN participated in the six-week-long online programme from Apr 22-June 7, 2020, and worked on a wide range of research projects under the guidance of 17 faculty members. The programme was coordinated by **Prof Manish Kumar** (CE) and **Prof Iti Gupta**.

ONLINE CLASSES AND NEW GRADING SYSTEM

IITGN switched to the online mode of teaching and learning from June 08, 2020. The Institute had also introduced a new grading system for the disrupted academic term, under which no letter grades were awarded in the second semester of the academic year 2019-20 for any course. Instead, two new grades were introduced - 'P(E)' (Pass Emergency) and 'I/F' (Incomplete/Fail) for all the courses of the semester. In addition, all students who get an 'I/F' grade were also given one more opportunity to complete the course requirement and improve their performance to earn a 'P(E)' grade. This revised grading policy was designed to reflect continuous learning, ensure fairness and reflect the disruptive impact of the pandemic on the educational system.

JEE OPEN HOUSES

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



FOUNDATION PROGRAMME 2020

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

NEW ACADEMIC PLAN FOR FIRST-YEAR BTECH STUDENTS

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





PHYSICAL EDUCATION REQUIREMENTS FOR BTech AND POST-GRADUATE STUDENTS

With an aim to encourage physical activities and sports among all the students for its multiple benefits for overall well-being and personality development, the senate of IITGN decided to revise the Physical Education (PE) requirements for all BTech and post-graduate students. As per the modified PE requirements, instead of two compulsory PE courses only during the first two semesters of the BTech programme, now the students will be required to take a total of six PE courses during the first six semesters as part of their graduation requirements. Likewise, the Institute senate decided to introduce PE requirements to post-graduate courses as well, to further enhance interaction between UG and PG students. Now all post-graduate students (including MA, MSc, MTech, PGDIIT and PhD) are required to complete two PE courses (one each in their first two semesters) as part of their graduation requirements. The Institute will provide several sporting and other physical activity sessions to cater to the diverse interests of the students.

INTRODUCTION OF BSC (ENGINEERING) DEGREE

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

WORK AND STUDY MTECH PROGRAMME

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

EARLY-CAREER FELLOWSHIP

The Institute launched IIT Gandhinagar Early-Career Fellowship (IITGNECF) for recent doctorates from India with an outstanding academic track record. The fellowship strives to empower exceptional researchers in pursuing their long-term research and academic aspirations. Under IITGN-ECF, the young scholars will have an opportunity to work with IITGN faculty members on exciting research problems, transformative projects, and will also engage in other scholarly activities. ECF fellows receive a fellowship of Rs 1 lakh per month. In addition, IITGN offers its ECFs a professional development grant of up to Rs

2 lakh per year to support international travel for attending conferences, workshops, training programmes, etc. It received an overwhelming response from young doctorates from all over the country. The Institute recruited eight ECF fellows during the year, who have come from some of the top-notch academic institutions in the country.

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.

O-CEO PROGRAMME

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

CERTIFICATION IN SCIENTIFIC WRITING

Considering the significance of effective research communication skills among the Master's and Doctoral students, IITGN is starting a certification programme in scientific writing. The programme intends to gauge students' skills and knowledge in scientific writing and to promote skill development. The 'Certification in Scientific Writing' would encourage research scholars to work on scientific writing from an early stage in their tenure, serve as a milestone for measuring student progress, facilitate emergence of tutors in scientific writing, contribute to skill-building of IITGN students, and enable students to use scientific writing competencies during their life-long learning process. The certification process will be conducted twice every year in two phases, and the doctoral students will be eligible to apply.

WRITING STUDIO AT HOME

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

MATERIALS SCIENCE AND ENGINEERING RENAMED AS MATERIALS ENGINEERING

Considering expert recommendations, the Institute Senate approved the name change of the Discipline and Degrees from Materials Science and Engineering to Materials Engineering. This change would not affect the existing curriculum or research practices. The name change will be effective from the graduating batch of 2021.

COURSE IN COMMUTATIVE ALGEBRA

The Discipline of Mathematics at IITGN, in association with IISc Bangalore, virtually hosted an NCM Advanced Instructional Course in Commutative Algebra from Jan 2 to May 2, 2021. A total of 26 lectures and 26 tutorials were conducted between Jan 2 and Mar 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.

5TH EDITION OF IKS COURSE

IITGN started the 5th edition of its unique elective course, Introduction to Indian Knowledge Systems (IKS), online from Jan 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.

74TH INDEPENDENCE DAY

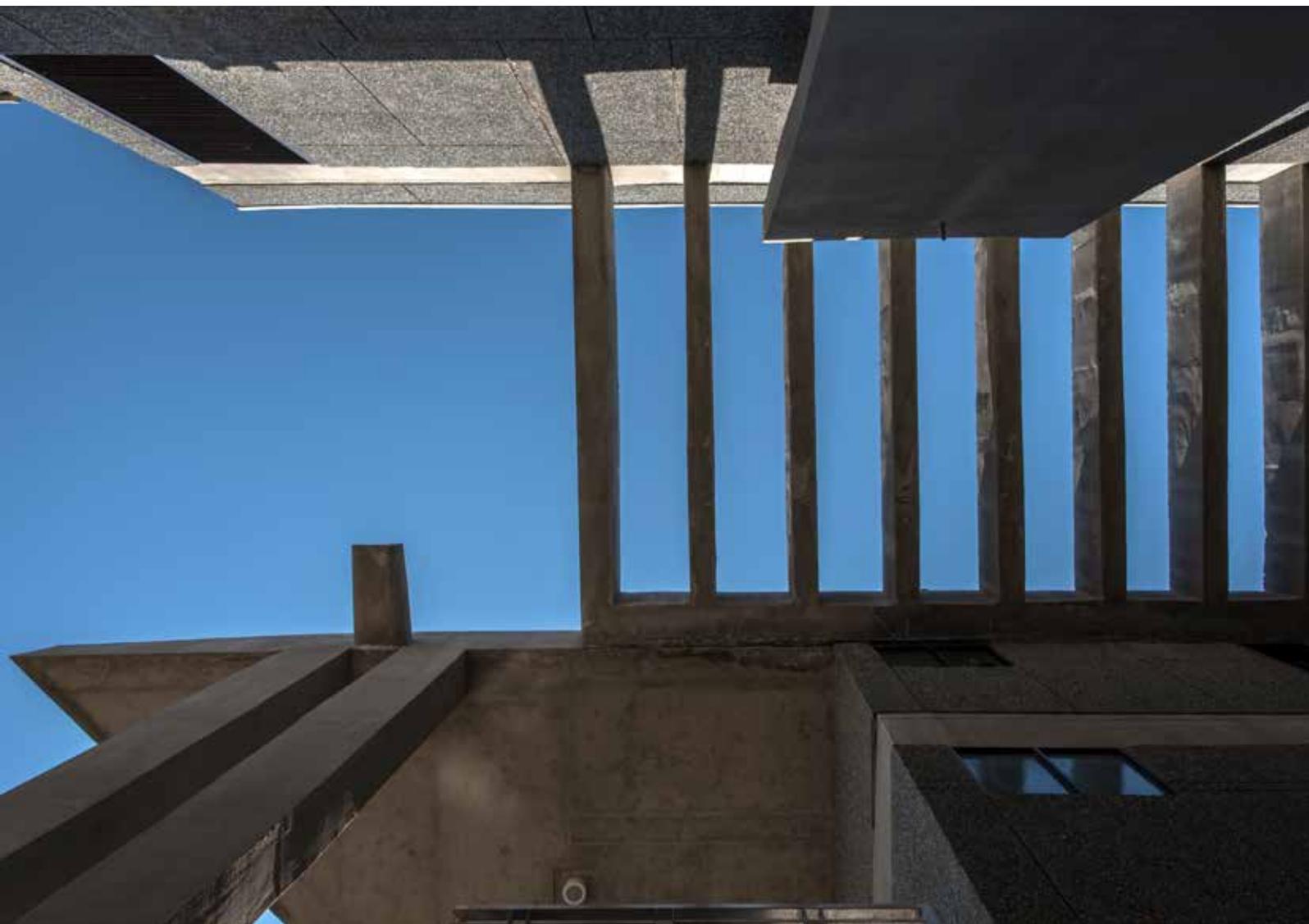
IITGN celebrated the 74th Independence Day with minimal physical gathering following utmost precautions. Most of the IITGN community members remotely joined in the live webcast of the programme on the Institute's YouTube channel. Keeping their spirits high and paying tribute to the nation, IITGN students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

REPUBLIC DAY 2021

IITGN 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.

WORLD WATER DAY 2021

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



STUDENTS' EXTRA CURRICULAR ACTIVITIES

KALA SAMANVAY BY SPIC MACAY

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

UDAAN 2020

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

IITGN RISE

During July-Sep 2020, the Student Council at IITGN launched 'IITGN RISE' with an objective to motivate students to participate in various activities and to provide a platform for interaction across various years and disciplines. Meant to be an overarching structure that would cover almost all the major events and competitions organised by various clubs this semester, the entire student body (around 1600 students) were divided into four groups based on their disciplines. They earned various points and a leaderboard was maintained throughout the semester.

INCREDIBLE 2.0

The Cultural Council organised IncrEdible 2.0, the second

edition of culinary competition at IITGN, on Oct 31, 2020. A total of seven teams comprising IITGN students and staff members showcased their culinary skills and prepared a variety of mouthwatering dishes with proper hygiene and precautionary measures. The teams also got a chance to sell their items and win some exciting prizes.

YOUR HOME YOUR DESIGN

The Welfare Council, IITGN organised two editions of 'Your Home Your Design' competition in Sep 2020 and Jan 2021 which invited the students to design and do a makeover of their hostels. In the first edition, five teams of students competed and displayed their amazing skills in designing the nooks and corners of the 'Ijokha' (I) hostel corridors within a span of two weeks. In the second edition, the students had 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.

AMALTHEA 2020-21

Amalthea, the annual student-driven technical summit of IITGN, 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 Oct 2020 to Jan 2021. The event received tremendous response, with about 2000 participant registrations from across the globe.

STUDENT LEADERSHIP CONCLAVE

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

IGNITE 7.0

Ignite - the annual intra-college technical fest of IITGN - returned with its seventh edition this year during Mar 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.

SPORTS ACTIVITIES

FIT IITGN CAMPAIGN

IITGN's Sports Council had initiated 'Fit IITGN' campaign from Apr 4, 2020, with an aim to help the community stay fit while staying indoors amid the lockdown. Virtual fitness sessions were held everyday from 6-7 PM, including warm-up, basic/core exercises, a combination of exercises as per planned schedule, tabata training, cool down exercises along with yoga and meditation. The council had also arranged weekly guest lectures by renowned sports personalities and fitness instructors from across the country, including **Mr Virdhawal Khade** (Arjuna Awardee Indian Olympian swimmer), **Mr Anshul Kothari** (Asian and Commonwealth Games swimmer), **Mr Harmeet Desai** (Arjuna Awardee Table Tennis player), **Mr Devendra Jhajharia** (Indian Paralympic javelin thrower), **Mr Aaron Tyler** (a UEFA (B) licensed coach), **Mr Gulab Chauhan** (ex-FIFA referee), **Mrs Amanat Kagzi** (a nutritionist), and **Dr Harish Padinjarethil** (a senior sports officer at IIT Bombay).

WININDIA CAMPAIGN

In the wake of the COVID-19 pandemic, all the 23 IITs across India, under the mentorship of **Mr Sunil Shetty**, a renowned Bollywood actor, had taken a joint initiative to promote fitness and mental health. IITGN also participated in the campaign. The sports secretaries from all IITs had planned an online fitness/health campaign for their institute's community. Online challenges were floated regularly and people had to record and share their videos on social media to get points.

WEBINAR ON NATIONAL SPORTS DAY

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

FITNESS BOOT CAMP

A one-month fitness boot camp was organised for the campus community from Sep 24 to Oct 24, 2020. It included several fitness activities such as running, stretching, cross fitness training, team spirit building games, squats, crunches, jumping jack, sit-ups, push-ups, cool-down exercises, and so on. Throughout the month, the Physical Fitness team used to conduct one-hour sessions for the community every morning and evening.

ONLINE FITNESS CHALLENGE

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

based on performance in different categories such as the most improved, the most regular etc.

WEEKLY CYCLE RIDES

With an aim to inculcate the habit of fitness, IITGN's Sports Council organised cycle rides for the community members on every Sunday. In Sep 2020, two rides of about 15 and 25 kms were organised and around 15 people joined in each trip. The weekly cycle ride activity was later resumed in Dec 2020. Going beyond the target of 25km set in the first edition, the participants were given a target of 40 km to ride every Sunday within or outside the IITGN campus.

ONLINE CHESS TOURNAMENTS

Amid the COVID-19 crisis and lockdown situation, IITGN's The Knight Players initiated an online chess tournament for the institute community. Later, the Chess Club of IITGN organised multiple training sessions and conducted various chess tournaments. Weekly online competitions helped the club members practice and hone their skills for various inter-institute tournaments. Members of IITGN's chess club participated in various competitions such as a triple-team battle between students of IIT Gandhinagar, IIT Tirupati and NIT Bhopal; and All India Chess League conducted by IIT Bombay. In the 'Beat the Warden' challenge, the Hostel Warden **Prof Raghavan Ranganathan** challenged the students to compete with him in a game of chess. The chess club of IITGN also organised an inter-college team battle in collaboration with IIT BHU, which saw participation of around 300 players from 13 institutes across the country.

CHILDREN'S DAY OUT

In an attempt to revisit the memories of carefree childhood days, the Sports Council and Cultural Council of IITGN jointly organised 'Children's Day Out'. The four-day event that started on Oct 29, 2020, received a highly encouraging response from the IITGN community. As many as 100 students, staff members, faculty members, and their family members participated in various traditional games and activities.

REPUBLIC DAY QUIZ

The Sports Council of IITGN 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 two editions of 'Beat the Warden Chess Challenge' wherein **Prof Raghavan Ranganathan**, Hotel Warden, challenged the entire IITGN community to beat him in Chess. The event, during both the editions, was conducted in a virtual format in two different phases - the qualifiers and the finale. The first edition was organised on Oct 24-25, 2020, whereas the second edition of the competition was held on Jan 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 'Beat the Former Dean' challenge on Mar 14, 2021. The IITGN 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 by using the strava app to avoid crowding and maintain social distancing.

YOGA AND WELLNESS

With the continuously changing situation of the pandemic, the Physical Education Section of the Institute adopted various approaches to maintain the health and wellness of the community. It started yoga and meditation classes for students and community members, initially offline and later in online mode. Before March, it had also engaged students in innovative stamina building exercises through outdoor open gym sessions.



STAFF ACTIVITIES

STRIDES 4.0

The Staff Development Cell (SDC) organised the fourth edition of 'Strides' on Oct 31, 2020. The theme for this year's virtual cultural event was 'Unrelenting Steps'. The IITGN community, including staff members, faculty members, and their families showcased their talents in dance, singing, poetry recitation and quiz.

A SERIES OF SESSIONS BY SDC

The Staff Development Cell (SDC) organised various events/sessions for the development of the Institute's staff members. These events included Choice is Yours- a motivational session; Art of Creating First and Lasting Impression; My Key to the Lockdown an interactive experience sharing session; Building Resilience and Reaching out to Others; and Network is Net-worth - Getting best out of LinkedIn.

LET OUR MINDS THINK AND FINGERS TYPE

The Staff Development Cell (SDC) started off a new initiative 'Let our minds think and fingers type' for the staff members. As part of the initiative, the staff members have to spend five minutes a week every Friday towards improving their typing skills and type together.

STAFF TRAINING

- **Ms Kamini Patel**, Assistant, Administration Department, IITGN attended an online training programme on 'Establishment Rule-1' from Nov 16 to 20, 2020, from the Institute of Secretariat Training & Management (ISTM), New Delhi.
- **Ms Komal Sangtani**, Assistant & PA to Director attended an online training course on 'Effective Communication: Writing, Design and Presentation Specialization' from Coursera.

REACHING OUT

- Pan IIT Alumni USA invited **Prof Sudhir K Jain** as a Keynote Speaker in the inaugural virtual conference series for discussing the impact of COVID-19 on education (“The New Education Norm: Post COVID-19”) held on June 25, 2020. The other speaker was Prof Pradeep Khosla, Chancellor of the University of California, San Diego. **Prof Prabhat Hajela**, Provost of Rensselaer Polytechnic Institute, New York, was the moderator.
- **Prof Sudhir K Jain** chaired a session on “Crisis as an Opportunity: Leading in the Pandemic”, in a virtual conference “The Republic of Letters: Groundbreak 2020”, during June 24-26, 2020. The conference was organised by Ashoka University and Harappa Education to reimagine a new world of learning in India.
- IIT Alumni Centre Bangalore invited **Prof Sudhir K Jain** as a speaker to discuss ‘Educational Innovation for a Post COVID-19 World’, in a webinar held on July 4, 2020. **Prof P D Jose** (IIM Bangalore) and **Dr Susheela Venkataraman** (Asian Development Bank) moderated the e-seminar. The webinar can be seen on the following link: https://youtu.be/_ZAJZ4wXBMI
- **Prof Sudhir K Jain** was invited as a speaker to share his views on seismic safety in India as part of a webinar titled ‘Advancing the Seismic Resilience Agenda in India’. The webinar was hosted by the World Bank on Oct 29, 2020.
- **Prof Sudhir K Jain** participated in a virtual conversation with **Dr Nikola Mišković**, Faculty of Electrical Engineering and Computing, Sveučilište u Zagrebu (University of Zagreb); **Ambassador Raj Srivastava**, Ambassador of India to the Republic of Croatia; and **Mr H K Pandey**, Second Secretary (Pol, Com & Cons), Embassy of India in Zagreb, on Dec 10, 2020, to discuss education and research-based collaborations between the two institutions.
- NIPER-Ahmedabad invited **Prof Sudhir K Jain** as the Chief Guest of its 5th Foundation Day celebration on Dec 16, 2020. Professor Jain addressed the celebration virtually and highlighted the importance of collaboration in the development of the scientific ecosystem.
- **Prof Sudhir K Jain** was invited as a speaker at ‘Prarambh’ - Startup India International Summit - organised in a virtual format by the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India, on Jan 15-16, 2021. The programme brought together top policy makers, industry, academia, investors, startups and stakeholders from across the globe.
- The National Skill and Entrepreneurship Innovation Conclave invited **Prof Sudhir K Jain** as one of its guest speakers on Feb 25-26, 2021. The online conclave was organised by APAC News Network and was hosted by the Department of Labour and Skills, Government of Kerala. The talk can be viewed through the following link: <https://bit.ly/3w4FSQT>
- Confederation of Indian Industry (CII) invited **Prof Sudhir K Jain** to deliver a talk in CII Gujarat Annual Meeting 2021 and Gujarat Economic Conclave on Mar 4, 2021. The theme of the Conclave was ‘Gujarat - Redefining Growth in the New Normal’.
- **Prof Sudhir K Jain** delivered a talk on ‘Some Challenges and Opportunities for Seismic Safety: A Perspective from India’ in the first Croatian Conference on Earthquake Engineering on Mar 24, 2021.





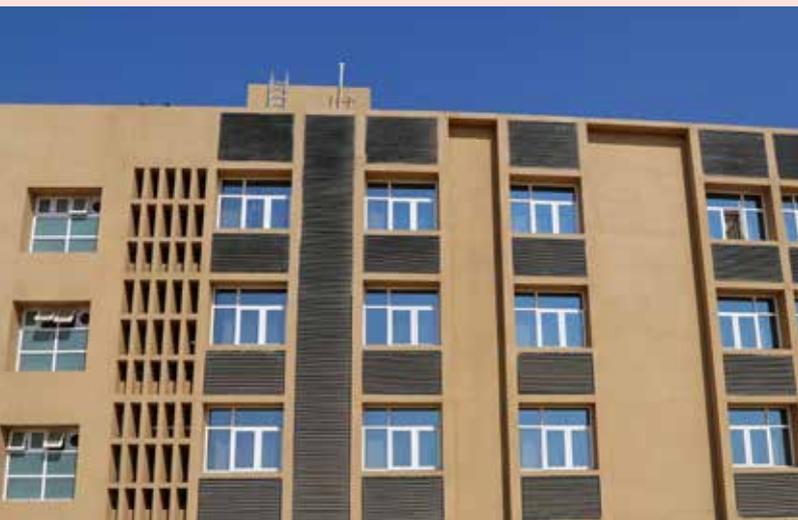
Campus



CAMPUS DEVELOPMENT

CONSTRUCTION UPDATES

Construction of the central arcade, guest house, 1 BHK and a few studio apartments, and a few hostel blocks has been completed and handed over to IITGN. The Bank and the Medical Centre have started their operations at their new location in the central arcade. Construction of the open air theatre, remaining hostel and housing blocks, director's residence, research park and sports complex is nearing completion. Construction of Academic 2 has been hampered due to the COVID-19 pandemic.





ANIMAL CARE FACILITY

An animal care facility has been created on the campus where medical care can be provided to the campus animals (pets as well as street animals). The facility is equipped with electricity, water supply, ventilation and some furniture along with a separate room and examination table for use by a veterinarian. Community members can use this facility to feed street animals as well (the campus already has many other pre-designated feeding spots).

GREEN CAMPUS

IITGN encourages its community to keep the campus green and clean through various programmes like Foundation Programme for new students, World Environment Day and Earth Day, cleaning and plantation drives etc. The Institute has also constituted a Green Office Committee to guide the community members about waste management and other cleanliness related issues with help of a solid waste management consultant. To keep the community engaged, the Green Office regularly organises activities like plogging and educational games to promote waste segregation at source.

The organic farm and campus produce committee established by the Institute plans and executes ideas of fruit and vegetable plantations on the campus. This year, the organic farm expanded their scope of operations and included a few major areas for fruit plantations. Many campus residents are enjoying home-style pickles thanks to well-planned efforts of the organic farm team.

Some of the infrastructural assets and aspects that continue to contribute towards the green practices include carefully planned architecture, eco-friendly sewage treatment plant, rain water harvesting system, biogas and composting system, waterless urinals in hostels, drip irrigation system and solar photovoltaic installations.

- From Apr 2020 to Mar 2021, the institute generated 6,77,481 kWh solar power, which is 9 per cent of the total electric consumption of the campus during that period.
- In 2020, a total of 1.5 crore litre rainwater was harvested in Jal Mandaps, which provided the campus with about 20 days of water supply.
- From Apr 2020 to Mar 2021, 1.62 lakh kg manure was supplied for horticulture, which was made from organic waste through the biogas plant and compost pits.

CAMPUS EXPERIENCE

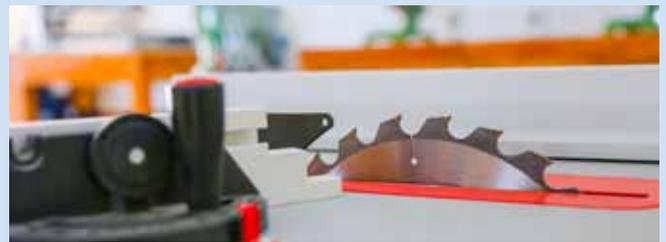
The campus has a range of cafeterias and food outlets, general store, salon, laundry service, music room, gym, sports fields and other recreational facilities that continue to be used by all campus residents. The Institute has a medical centre and an ambulance that is available round the clock for an emergency. Some unique concrete furniture is placed in the common areas of the campus that are used for informal meetings. The Institute has also installed a snapper camera on the campus (a tech product developed by one of the startups incubated at IITGN), which can be used to take photographs of larger groups with ease.



MAKER BHAVAN

The Maker Bhavan at IITGN promotes the adoption of active learning approaches within the academic programme at the Institute. A makerspace, with teamwork areas, a variety of digital manufacturing equipment, and electronics labs, forms the central hub of this initiative. A range of workshops during the year, from Metal 3D printing to laser cutting, have motivated students to embrace hands-on learning projects and convert their ideas into real prototypes. The makerspace has also provided resources for student projects in semester-long academic courses as well as faculty research projects. The Maker

Bhavan is also receiving interest from startups and industries that wish to access the space and consult with the associated resource persons. The Maker Bhavan is thus pushing ahead towards its broader goal of turning students into doers, leaders and innovators in whichever field they choose to pursue after graduation.



TINKERERS' LAB

IITGN emphasises project-based active learning both inside and outside the classroom. The Tinkerer's Lab realises this vision by providing a space for the student community to experiment with hands-on learning. Through projects from academic courses or hobby clubs, we enable "learning by doing" to train the next generation engineers. Our lab is designed to especially encourage undergraduate students to work with their hands and solve real world problems. We are equipped with machines like Dual Extrusion 3D Printer, Laser Cutting and Engraving Machines, Vinyl Cutter and PCB Milling Machines and electronic components for students to experiment feely and exercise imaginations. During the global pandemic, although we had to restrict usage for research scholars, we were able to transfer our active learning paradigm to an online mode. We successfully

conducted a Virtual Build-a-thon, Augmented Reality workshop and MATLAB workshop. We have also used this time to update our facilities by procuring updated equipment and components, streamline our booking systems and also redesigning our website (<https://students.iitgn.ac.in/tinkerers-lab>).

EVENTS

- Tinkerers' Lab, IITGN organised an online 12-hour long event on May 24, 2020. The virtual Build-a-thon was held for first-year and second-year undergraduates. The event was held on the online platform TinkerCAD where the participants have to come up with an Arduino based disaster management system.
- Tinkerers' Lab at IITGN, in collaboration with DigiS (game development club of IITGN), and Tinkerers' Labs of IIT Hyderabad & IIT Bombay, organised a workshop on Augmented Reality on Nov 01, 2020.



INFORMATION SYSTEMS & TECHNOLOGY FACILITY (ISTF)

The Information Systems & Technology Facility (ISTF) continues to provide user-level services to the IITGN community. ISTF's state-of-the-art networking infrastructure enables provision of information systems and computational facilities to users who live in and outside the campus. ISTF is responsible for managing the following:

- NKN Network, internet and email services, firewall security, communication devices
- Computing facilities and HPC Lab
- Computer hardware and software, ISTF facilitates VEGA, Aneesur, Sabarmati, NodeX HPC cluster that enables the users to perform parallel computing and GPU-based computing relevant to their research interests

The ISTF houses video conference rooms via the National Knowledge Network (NKN) line. The infrastructure of the rooms is also equipped to facilitate virtual classes. ISTF has been proactive in facilitating online learning facilities and also encouraged members to make the best use of software and other tools like Zoom, Google Meet and Microsoft Teams. We have also procured iPads and tablets to streamline teaching and learning during this pandemic situation so that the semester classes can be continued. VPN service has been provided to the students so they can work remotely during this unprecedented pandemic. Moreover, we have implemented online proctoring software (Mettl), which could be seamlessly used to conduct online assessments. In addition to the above, ISTF team members have technically supported the outgoing PhD students and their supervisors to conduct the Final Doctoral Defenses seamlessly.

The ISTF constantly undertakes various in-house projects to enhance their skill sets and stay up-to-date with recent technology. The team has successfully completed the following projects:

- Online learning management system integrated with Gmail, Zoom and Panopto
- Development of new ISTF website
- Implemented IT infrastructure at new hostels, guest house, studio apartments and central arcade





Medical Centre at IITGN

MEDICAL CENTRE

The Medical Centre's team of doctors, nurses, and staff were on the frontline in the fight against the COVID-19 pandemic throughout the year. The centre served the community's healthcare needs with a team of four consulting doctors, a gynaecologist, a paediatrician, and two trained male nurses and an assistant nurse on a full-time basis.

FACILITIES FOR COVID CARE

The medical centre at IITGN was already equipped with an ECG machine, pulse oximeter, oxygen concentrator, nebuliser, glucometer, otoscope, suction machine, and eye check-up facility for routine medical check-ups and a 24-hour ambulance for any emergency. With the onset of the global pandemic, the Institute arranged additional facilities in the medical centre for COVID patients, including quarantine and isolation rooms, O₂ concentration machines, O₂ cylinders, monitors, pulse oximeters, thermal guns and thermometers, in-house laboratory collection centre for pathology tests, etc. Trained nurses, assistant nurses and housekeeping staff for COVID patients were also appointed. The in-house pharmacy of the Institute stocked most essential medicines for common illnesses as well as for COVID treatment.

To provide timely and specialised medical care in case of any emergency during the first wave of the pandemic, the Institute

entered into an MOU with Ahmedabad Municipal Corporation for hospitalisation of staff, students and faculty in COVID designated Hospitals.

The Institute's medical centre provided free medical support and consultation to IITGN's construction workers as well. Free screening tests for workers were performed in the workers housing colony. Ambulance services were also made available to workers needing medical examination or treatment. Several workers and their family members utilised the service during the lockdown and subsequently.

COVID Care Facility at IITGN

With an increasing number of COVID positive cases on the campus during the second wave, IITGN converted its newly constructed guest house into a 190-bed isolation cum Covid Care Facility to treat COVID positive patients from the community with mild to moderate symptoms. More than 240 Covid patients were served at the facility between Apr 1 through May 15, 2021, including a peak of 95 in mid-April. The facility provided them basic medical services, such as regular temperature and oxygen monitoring, advice from doctors and nurses of the Institute, medicines, blood and RT-PCR tests, hard-to-access health services, such as oxygen concentrators and tanks, and nutritious meals four times daily. Institute medical staff and ambulance services are available 24x7. The facility also helped patients find beds in local hospitals if needed. Counselling services offered psychological support to patients, medical staff, and their families.





Support for the Institute

CHAIRS AND SCHOLARSHIPS

ENDOWMENT FUNDS BY GORDHANBHAI B GELOT



Smt Sarita G Gelot and Shri Gordhanbhai B Gelot

Shri Gordhanbhai B Gelot has set up **Kankuben Bakshiram Gelot Endowment Fund** in honour of his late mother. The Institute will use this endowment to support the **Kankuben**

Bakshiram Gelot Chair for a woman faculty, and **Kankuben Bakshiram Gelot Scholarship** for a woman undergraduate student in any area of engineering or natural sciences at IITGN. Shri Gordhanbhai has generously made another major gift to establish Gordhanbhai B Gelot Endowment Fund. In appreciation of this, IITGN shall name its research laboratory for Artificial Intelligence as Gordhanbhai B Gelot Laboratory for Artificial Intelligence and Data Science. He has also set up **Sarita G Gelot Endowment Fund** in honour of his wife, which will be used to encourage and support excellence in research and education among students and faculty of IITGN. In appreciation of this, IITGN will name one of its research laboratories as 'Sarita G Gelot Laboratory for Intelligent Rehabilitation and Affective Computing Systems'. Shri Gordhanbhai runs a Small Scale Industrial (SSI) unit in Umargam (South Gujarat) for more than four decades. He has a postgraduate degree in Industrial Microbiology from Gujarat University and has also worked with American and French pharma multinational corporations.

DR DINESH O SHAH CHAIR

Dr Dinesh O Shah, Professor Emeritus in the Department of Chemical Engineering at the University of Florida, USA, has made a large gift to establish **Dr Dinesh O Shah Chair** at the Institute. Dr Shah did BS and MS from the University of Bombay



and PhD in Biophysics from Columbia University, USA. He is a passionate educationist, scientist, philanthropist and was reported to be among the top one percent of most frequently cited scientists in the World (1999) by the Institute of Scientific Information, UK. He has received numerous teaching,

research and service awards during his tenure of more than three decades at the University of Florida. He has also contributed significantly to promote education, research and cultural activities at educational institutions in India and Florida.

SMT MEERA AND PROF GIRISH K SHARMA CHAIR



Mrs Rashmi and Mr Manish Sharma

Mrs Rashmi Sharma and **Mr Manish Sharma**, Bangalore-based well-wishers of the Institute, have made a generous gift in honour of their parents to support educational and research excellence at IITGN. The Institute will use the gift to create an endowment by matching the amount

to establish **Smt Meera** and **Prof Girish K**



Smt Meera and Prof Girish K Sharma

Sharma Chair in any area of engineering, natural sciences or humanities and social sciences at IITGN. 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.

DR VILAS MUJUMDAR CHAIR

Dr Vilas Mujumdar, an eminent engineering leader based in



Virginia, USA, has made a large gift to establish **Dr Vilas Mujumdar Chair** in any area of engineering and natural sciences at IITGN. Vilas 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. Dr Mujumdar is 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.

KANAKIA YOUNG RESEARCHER SEMINAR SERIES



Dr Hemant Kanakia, Co-Founder and former Chief Executive Officer, Gemplex Internet, Inc, USA has committed a significant donation to support the **Kanakia Young Researcher Seminar Series** at IITGN with the aim of attracting and recruiting top-notch faculty at the Institute. This initiative will support

visits of young doctoral students nearing completion of their degree, recent PhD graduates, and postdoctoral scholars from internationally reputed research organisations to IITGN to deliver seminars, short courses, and other substantive engagements at the Institute.

KUTCH SCHOLARSHIP

A well-wisher of IITGN, who does not wish to be identified, has sent a gift to establish **Kutch Scholarship** for all BTech students at IITGN. The Institute will create an endowment fund by matching the donation amount. 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.

VEGSHAKTI MAHILA KALYAN SANGATHAN SCHOLARSHIP

IITGN and **Vegshakti Mahila Kalyan Sangathan (VMKS)**, a registered society under the aegis of NHSRCL, have entered into an MoU with IITGN. The MoU was signed between **Ms Sarita Khare**, President, VMKS, and **Prof Sudhir K Jain**, Director, IITGN, on Oct 8, 2020. As a part of this benevolent agreement, IITGN will establish 'Vegshakti Mahila Kalyan Sangathan Scholarship' at the Institute, which would provide financial support of Rs 75,000 per student each year, towards educational expenses of two selected female students for four years of their BTech at IITGN.

SHANTI SAROOP AGARWAL SCHOLARSHIP

Mr Ankit Agarwal, a BTech alumnus of 2017, has set up **Shanti Saroop Agarwal Scholarship** in honour of his late grandfather. The scholarship of Rs 1 lakh per student per year will support undergraduate students of the institute. Ankit is the co-



Ankit Agarwal



Late Shri Shanti Saroop Agarwal

He was the recipient of the Director's Silver Medal in BTech, Mechanical Engineering.

founder of Agmaco Industries in Ghaziabad. While at IITGN, Ankit was the founding President of the Shastrarth Socratic Society, a student-run organisation that focuses on important issues, events and trending topics.

ARUNA SCHOLARSHIP



Abhishek Kandoi



Mr Shri Kishan K & Mrs Rajkumari K

Mr Abhishek Kandoi, a pioneer batch BTech graduate, has set up **Aruna Scholarship** in honour of his parents. This scholarship of Rs 1 lakh per year will support undergraduate students at IITGN. Abhishek started his career with Underwriters Laboratory (UL),

USA, and is currently working with Applus Laboratories UAE as Business Head. He has pursued a course in Public Policy at The Takshashila Institute during 2017-2018. He has also been an entrepreneur and worked on a social venture TinkerTank Design and Technology Pvt Ltd, which was incubated at IIT Gandhinagar.

ANJNA AND ANIL TARA CHANDRA SCHOLARSHIP



Shivani Rani



Mrs Anjna & Mr Anil Chandra

Ms Shivani Rani, an MTech alumna of 2013, has set up **Anjna and Anil Tara Chandra Scholarship** in honour of her parents. This scholarship of Rs 1 lakh per year will support postgraduate students at IITGN. Shivani had received the

President's Gold Medal (MTech), Institute Gold Medal (Civil Engineering, MTech), and the Award for Overall Outstanding Performance in Sports at the 2013 Convocation. She received her PhD degree in the area of asphalt mix design and pavement construction from the University of Oklahoma, Norman, USA. Currently, she is an Associate Civil Engineer at the City of Lawton, Oklahoma, USA. Shivani was also recognised as one of the "Most Inspiring Women in India" by Engineering Watch Magazine in the year 2014.

CHETAN DHANDE SCHOLARSHIP



Late Chetan Dhande

Fifteen alumni of the class of 2013 at IITGN have jointly established a scholarship in the loving memory of their beloved batchmate **Late Chetan Dhande** who passed away on Feb 10, 2018, in an unfortunate hiking incident. The scholarship is of Rs 1 lakh per year and will support undergraduate students of the institute.

Chetan was a BTech (Mechanical Engineering) undergraduate from the Class of 2013. He had worked at Honda Cars, India for two and a half years after his graduation and at Honda R&D, Japan for two years.

EMPATHY FUND

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

SMT SUMITRABAI MANOHAR KANADE SCHOLARSHIP



Mr Saurabh Vaichal, a BTech alumnus of 2016, has set up **Smt Sumitrabai Manohar Kanade Scholarship** in honour of his maternal grandmother. The scholarship

of Rs 1 lakh per year will support undergraduate students of the Institute. Saurabh completed his BTech in Mechanical Engineering from IITGN and went on to pursue his Master's in Industrial and Systems Engineering from Texas A&M University. Currently, he is working as a Senior Data Analyst at The Home Depot in Atlanta. While at IITGN, he was a winner of Underwriters Laboratories - IIT Gandhinagar (UL-IITGN) Water Challenge 2013, which allowed him to visit UL, Chicago, during summer.

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



Srinivasa Ramanujan

Mr Akash Bapat

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.

LALITA & SHYAM BIHARI SCHOLARSHIP



Shri Shyam Bihari and Late Smt Lalita Sharma

Dr Ankita Arora

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 IITGN. 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.

GAURI SUGAN AGARWAL SCHOLARSHIP



Late Smt Sugni Devi Agarwal and Late Shri Gauri Lal Agarwal

Mr Ravi Agarwal

Mr Ravi Agarwal, a BTech alumnus of 2013 in Mechanical Engineering, has set up **Gauri Sugan Agarwal Scholarship** in honour of his late grandparents **Mr Gauri Lal Agarwal** and

Mrs Sugni Devi Agarwal. This scholarship of Rs 1 lakh per year will support BTech women students at IITGN. After graduating from IITGN, Ravi worked in management 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.

DONORS LIST

Name	Category	Country/City/Town of the Donor
Rs 1 CRORE - Rs 4,99,99,999		
Maker Bhavan Foundation	Well-wisher	Washington DC
Gordhanbhai B Gelot	Well-wisher	Umargam
Jagdish Patel	Well-wisher	California, USA
Rs 25,00,000 - Rs 99,99,999		
Radix Electrosystems Pvt Ltd	Well-wisher	Mumbai
Silicon Valley Community Foundation	Well-wisher	California, USA
Google Award Gift	Well-wisher	USA
Ron Mehta	Well-wisher	Watchung, USA
Vilas Mujumdar	Well-wisher	Reston, USA
Dinesh O Shah	Well-wisher	Tavares, USA
Rashmi Sharma and Manish Sharma	Well-wisher	Bangalore
Rs 5,00,000 - Rs 24,99,999		
Akash Bapat	BTech/EE/2014	Nagpur
Ankit Agarwal	BTech/ME/2017	New Delhi
WIN Foundation	Well-wisher	New Jersey, USA
Indira Foundation	Well-wisher	Greenwich, USA
Prabhu Goel	Well-wisher	Fremont, USA
Gujarat State Petronet Limited	Well-wisher	Gandhinagar
Gujarat Rural Industries Marketing Corporation Limited	Well-wisher	Gandhinagar
Vin Gupta	Well-wisher	USA
Hemant Kanakia	Well-wisher	Washington DC, USA
Parimal Karani	Well-wisher	Ahmedabad
Raj Mashruwala	Well-wisher	Palo Alto, USA
Tata Motors Limited	Well-wisher	Mumbai
Jignesh Patel	Well-wisher	USA
Allbrite Car Care Products, Inc	Well-wisher	California
Rs. 1,00,000 - Rs. 4,99,999		
Sarthak Jain	BTech/EE/2012	Salem
Bhavin Chauhan	BTech/ME/2013	Gujarat
Ravi Agarwal	BTech/ME/2013	Banswara
Raj Shah	BTech/EE/2015	California, USA
Rounak Mehta	BTech/ME/2015	San Fransisco, USA
Sai Chowdary Gullapally	BTech/EE/2016	Hyderabad
Saurabh Vaichal	BTech/ME/2016	Aurangabad
Shivani Rani	MTech/CE/2013	Ghaziabad
Ankita Arora	PhD/MSE/2019	New Delhi
Sudhir K Jain	Faculty	Gandhinagar
Achal Mehra	Faculty	Gandhinagar
D P Roy	Faculty	Gandhinagar
R Sharan	Faculty	Gandhinagar
Subhas Deodhar	Well-wisher	USA
Emil Pharmaceutical Industries	Well-wisher	Mumbai
Al Journal	Well-wisher	Gandhinagar
Himanshu Patel	Well-wisher	USA
Parasvil Patel	Well-wisher	USA
Karen Peterson	Well-wisher	Massachusetts, USA
Vegshakti Scholarship	Well-wisher	New Delhi
Bhupen & Shruti Shah Fund	Well-wisher	Bonney Lake, USA
Gagan Singh	Well-wisher	USA
Cumulus Systems Private Limited	Well-wisher	Pune
Nitish Thakor	Well-wisher	Clarksville, USA
Yuva Unstoppable	Well-wisher	Ahmedabad
Rs 25,000 - Rs. 99,999		
Abhishek Kandoi	BTech/ME/2012	Jodhpur
Avinash Tumkur	BTech/ME/2014	Mumbai
Nandan Vora	BTech/CL/2015	Ahmedabad
Akhilesh Gotmare	BTech/EE/2016	Nagpur
Sri Raghu Malireddi	BTech/EE/2016	Kakinada
Atul Bhargav	Faculty	Gandhinagar
Michel Danino	Faculty	Gandhinagar
Ragavan K	Faculty	Gandhinagar
Harish P M	Faculty	Gandhinagar
S P Mehrotra	Faculty	Gandhinagar
Neeldhara Misra	Faculty	Gandhinagar
Nirmal Kumar Jha	Staff	Gandhinagar
Viral Acharya	Well-wisher	USA

Harsh Bhargava	Well-wisher	New York, USA
Anonymous Donation	Well-wisher	USA
Arvind & Renu Jain	Well-wisher	Pleasanton, USA
Arvind Jain	Well-wisher	Pleasanton, USA
Vikas Khurana	Well-wisher	USA
Minesh Kinkhabwala	Well-wisher	New Jersey, USA
Krishen Mehta	Well-wisher	USA
Suresh Mehta	Well-wisher	USA
Uday Nadkarni	Well-wisher	USA
Sandeep Pandya	Well-wisher	USA
Vasan Raman	Well-wisher	USA
Sanjay Shyam	Well-wisher	USA
Prabjit Singh	Well-wisher	USA
Shyam Sunder	Well-wisher	USA
Atul Thakkar	Well-wisher	USA
Ashish Vora	Well-wisher	USA
Rs 5,000 - Rs 24,999		
Sahil Garg	BTech/CL/2012	Hisar
Gaurav Garg	BTech/CL/2012	Alwar
Pratyul Kapoor	BTech/CL/2012	Jaipur
Manu Bansal	BTech/EE/2012	Jaipur
Shaik Siddhikh Hussain	BTech/EE/2012	Suryapet
Prathmesh Juvatkar	BTech/EE/2012	Mumbai
Rahul Kawadkar	BTech/EE/2012	Maharashtra
Rajpal Kumar	BTech/EE/2012	Nalanda
Suguru Kundan	BTech/EE/2012	Hyderabad
Neel Nadkarni	BTech/EE/2012	Pune
Saurabh Gangwal	BTech/ME/2012	Ajmer
Adit Gupta	BTech/CL/2013	Navi Mumbai
Susmitha Purnima Kotu	BTech/CL/2013	Hyderabad
Shranchhla Narya	BTech/CL/2013	Indore
Chetas Joshi	BTech/EE/2013	Surat
Subhash Kunche	BTech/EE/2013	Mumbai
Parth M Shah	BTech/EE/2013	Thane
Tarkeshwar Singh	BTech/EE/2013	Kolkata
Kishan Suthar	BTech/EE/2013	Sirohi
Rajat Jain	BTech/ME/2013	Jaipur
Shyamal Kishore	BTech/ME/2013	Visakhapatnam
Mohak Patel	BTech/ME/2013	Bharuch
Prashant Patel	BTech/ME/2013	Barwani
Abhijith Rajiv	BTech/ME/2013	Kannur
Yash Shah	BTech/ME/2013	Ahmedabad
Smit Alkesh Shah	BTech/CL/2014	Vadodara
Kartik Saxena	BTech/EE/2014	Navi Mumbai
Shashank Tyagi	BTech/EE/2014	Meerut
Shubham Bhargav	BTech/ME/2014	Raigarh
Hariom Bhargava	BTech/ME/2014	Dhar
Spandan Das	BTech/ME/2014	Rehabari
Nihar Kotak	BTech/ME/2014	Mumbai
Prateek Nyati	BTech/ME/2014	Chittorgarh, Jaipur
Rakesh Pargi	BTech/ME/2014	Dungarpur
Ishan Upadhyaya	BTech/EE/2015	Mumbai
Aashrith Saraswathibhatla	BTech/ME/2015	Warangal
Saurabh Singhal	BTech/ME/2015	Bundi
Madan Janardan Taldevkar	BTech/ME/2015	Khapat
Abhishek Verma	BTech/CL/2016	Faizabad
Chinmay Ajnadkar	BTech/EE/2016	Jalgaon
Paturu Veerabadra Lokesh	BTech/EE/2016	Nellore
Chitnis Parag Jayant	BTech/ME/2016	Aurangabad
Jithin Prabha	BTech/ME/2016	Ernakulam
Rakesh Ranjan	BTech/ME/2016	Banka
Margaj Om Vijay	BTech/ME/2016	Aurangabad
Manu Chaudhary	BTech/CE/2017	Jaipur
Prerna Singh	BTech/CE/2017	Udaipur
Suman Kumari	BTech/CL/2017	Mahaboobnagar
Sourabh Soni	BTech/CL/2017	Bikaner
Ankit Bhangre	BTech/EE/2017	Navi Mumbai
Aatman Vora	BTech/EE/2017	Mumbai
Nikhil Aditya Kumar Roy	BTech/CL/2018	Mumbai
Vinod Ramakrishnan	BTech/ME/2018	Rajahmundry
Ahamed Naji Shaham	BTech/ME/2018	Malappuram
Ankita Joshi	BTech/MSE/2018	Ann Arbor, USA
Puneet Swami	BTech/CE/2019	Chandigarh
Harsh Madhyan	BTech/CL/2019	Mumbai
Tejas Mehta	BTech/EE/2019	Indore

Aparna Tumkur	BTech/EE/2019	Mumbai	Rajeev Deshpande	Well-wisher	Mumbai
Naveen Mathan Sundaram	BTech/ME/2019	Chennai	Kiran Deshpande	Well-wisher	Pune
Aagam Shah	BTech/MSE/2019	Mumbai	Anonymous Donation	Well-wisher	India
Dutta Ritik Dutta Ritik	BTech/CSE/2020	Thane	Kanti Jain	Well-wisher	USA
Kinley Kucera Mehra	MSc/CG/2015	Torrington, USA	Amrutur V Anil Kumar	Well-wisher	Nashville, USA
Ujjval Ashokkumar Pamnani	MSc/CG/2015	Ahmedabad	Rajan Kumar	Well-wisher	USA
Vipul Nair	MSc/CG/2016	Cheriyanaad, Kerala	Sunil Bhai Manjeri	Well-wisher	Ahmedabad
Mihir Vilas Deo	MSc/MA/2020	Mumbai	Aditya Pathak	Well-wisher	USA
Nidal Raj Bhuria	MTech/CE/2013	Bantalab, Jammu	G V Rao	Well-wisher	Hyderabad
Arun Gopalakrishnan Nair	MTech/CL/2019	Patna	Balkrishna B Soneji	Well-wisher	Ahmedabad
Chandresh Sharma	MTech/CS/2019	Kolkata	Chandra Srivastava	Well-wisher	New Jersey, USA
Mohit Dineshkumar Ganeriwala	MTech/EE/2014	Jaipur	Gurudutt Trasy	Well-wisher	USA
Priyanka Rawat	MTech/MSE/2018	Ahmedabad	M Venkataraman	Well-wisher	Gandhinagar
Ravi Anand Singh	MTech/EE/2015	Ahmedabad			
Ishita Doshi	MTech/MSE/2018	Ahmedabad	UPTO Rs 4,999		
Alpana Thorat	PhD/CL/2016	Nashik	Prakash G	BTech/CL/2012	Gadwal
Vikram Ashok Karde	PhD/CL/2017	Nagpur	Prakash Goulla	BTech/CL/2012	Ahmedabad
Siddharth Vijay Kulkarni	PhD/CL/2017	Mumbai	Yogesh Goyal	BTech/CL/2012	Udhampur
Manisha Chawla	PhD/CG/2018	Bhopal	Jeenam Jindal	BTech/CL/2012	Shokinganallur
Tony Thomas	PhD/CG/2019	Cochin	Puneeth paniyadi	BTech/CL/2012	Udupi
Apoorva Ojha	PhD/EE/2019	Ahmedabad	Kanchan Patel	BTech/CL/2012	Jabalpur
Pallavi Chilka	PhD/BE/2020	Cuttack	Abhishek Umrao	BTech/CL/2012	Ghaziabad
Mukta Gundi	PhD/HSS/2020	Pune	Amit Asher	BTech/EE/2012	Vadodara
Surabhi Torne	Student	Gandhinagar	Nitesh Gupta	BTech/EE/2012	Fridabad
Rwik Rana	Student	Gandhinagar	Arava Pavan Kishore	BTech/EE/2012	Hyderabad
Prasanth P Nair	Student	Gandhinagar	Prerit Terway	BTech/EE/2012	Koderma
Arpan Bhattacharyya	Faculty	Gandhinagar	Sushmitha Yalla	BTech/EE/2012	Mumbai
Arup Lal Chakroborty	Faculty	Gandhinagar	Tanmay Balwa	BTech/ME/2012	Bhuj
Nishaant Choksi	Faculty	Gandhinagar	Puneeth Chakravarthula	BTech/ME/2012	Bangalore
Anirban Dasgupta	Faculty	Gandhinagar	Anchit Gaurav	BTech/ME/2012	Patna
Ramesh Gaonkar	Faculty	Gandhinagar	AJinkya Mukund Kulkarni	BTech/ME/2012	Nashik
Uddipta Ghosh	Faculty	Gandhinagar	Abhik Patel	BTech/ME/2012	Surat
Vikrant Jain	Faculty	Gandhinagar	Swati Verma	BTech/CL/2013	Ujjain
Mohan Joshi	Faculty	Gandhinagar	Pooja Athawal	BTech/CL/2013	Bhopal
Gopinadhan Kalon	Faculty	Gandhinagar	Divya Bansal	BTech/CL/2013	Kota
Manasi Anand Kanetkar	Faculty	Gandhinagar	Shruti Jain	BTech/CL/2013	Delhi
Jooyoung Kim	Faculty	Gandhinagar	Garima Raghuwanshi	BTech/CL/2013	Madhya Pradesh
Manish Kumar	Faculty	Gandhinagar	Gaurav Rathore	BTech/CL/2013	Guna
Sharmistha Majumdar	Faculty	Gandhinagar	Divyank Singh	BTech/CL/2013	Bhopal
Jaison A Manjaly	Faculty	Gandhinagar	Hima Teja	BTech/CL/2013	Valachery
Karla Patricia Mercado	Faculty	Gandhinagar	Mohit Varma	BTech/CL/2013	Indore
Superb K Misra	Faculty	Gandhinagar	Dhruv Chokshi	BTech/EE/2013	Mumbai
Nihar Ranjan Mohaparta	Faculty	Gandhinagar	Aditi Dighe	BTech/EE/2013	Indore
Vinod Narayanan	Faculty	Gandhinagar	Pritish Jain	BTech/EE/2013	Jaipur
Emila Panda	Faculty	Gandhinagar	Mohit Malu	BTech/EE/2013	Nizamabad
Chhavi Pandey	Faculty	Gandhinagar	Shashank Naphade	BTech/EE/2013	Maharashtra
Amit Prashant	Faculty	Gandhinagar	Kislay Pankaj	BTech/EE/2013	Supaul
S Rajendran	Faculty	Gandhinagar	Ekta Prashnani	BTech/EE/2013	Jabalpur
Shanmuganathan Raman	Faculty	Gandhinagar	Suraj Sonker	BTech/EE/2013	Mirzapur
Raghavan Ranganathan	Faculty	Gandhinagar	Harikrishnan C B	BTech/ME/2013	Thrissur
Arnapurna Rath	Faculty	Gandhinagar	Rohit Chouksey	BTech/ME/2013	Vidisha
Sriharitha Rowthu	Faculty	Gandhinagar	Ajinkya Dahale	BTech/ME/2013	Mumbai
Bipul Saurabh	Faculty	Gandhinagar	Pratham Shah	BTech/ME/2013	Mumbai
Vishnu Dutt Sharma	Faculty	Gandhinagar	Kaustubh Tirpude	BTech/ME/2013	Nagpur
Sudhanshu Sharma	Faculty	Gandhinagar	Shreyas Vaidya	BTech/ME/2013	Indore
Himanshu Shekhar	Faculty	Gandhinagar	Bhaskarjyoti Das	BTech/CL/2014	Chirang
Gaurav S	Faculty	Gandhinagar	Dasari Yashwanth Kumar	BTech/CL/2014	Visakhapatnam
Meera Mary Sunny	Faculty	Gandhinagar	Karandikar Rutuparna Pramod	BTech/CL/2014	Pune
Jaichander Swaminathan	Faculty	Gandhinagar	Sanjay Saroj	BTech/CL/2014	Navi Mumbai
Akshaa Vatwani	Faculty	Gandhinagar	Sandesh Achari	BTech/EE/2014	Pune
B Prasanna Venkatesh	Faculty	Gandhinagar	Sanjay Kumar Gill	BTech/EE/2014	Jhujhunu
B Prasanna Venkatesh	Faculty	Gandhinagar	Vibhav Katre	BTech/EE/2014	Thane
Divyangi N Chaudhari	Staff	Gandhinagar	Yash Kotak	BTech/EE/2014	Vadodara
Prem Kumar Chopra	Staff	Gandhinagar	Ankur Meena	BTech/EE/2014	Sikar
Saptarshi Dey	Staff	Gandhinagar	Sushrut Pramod Meshram	BTech/EE/2014	Nagpur
Pramod Eyyunni	Staff	Gandhinagar	Balaji Modoor	BTech/EE/2014	Chennai
Soumya Harish	Staff	Gandhinagar	Hoosain Safdari	BTech/EE/2014	Indore
Yogesh Dattatraya Jade	Staff	Gandhinagar	Nisarg Nikhil Shah	BTech/EE/2014	Mumbai
Meena Joshi	Staff	Gandhinagar	Sumit Deshmukh	BTech/ME/2014	Thane
T S Kumber	Staff	Gandhinagar	Mangesh Gangarde	BTech/ME/2014	Ahmednagar
Pijush Majumdar	Staff	Gandhinagar	Navneet Meena	BTech/ME/2014	Kundana
Sunita Menon	Staff	Gandhinagar	Poonam Chand Meena	BTech/ME/2014	Udaipur
Jayakumar Nandagopal	Staff	Gandhinagar	Gavasane Ritu Milind	BTech/ME/2014	Pune
Sanjeev Kumar Pandey	Staff	Gandhinagar	Nakul Nuwal	BTech/ME/2014	Bhilwara
Santosh Raut	Staff	Gandhinagar	Suyash Subhash Patkar	BTech/ME/2014	Mumbai
Gaurav Kumar Singh	Staff	Gandhinagar	Dhwanil Shukla	BTech/ME/2014	Bodakdev
Deepak Bhagat	Well-wisher	Fremont, USA	Vikram Vishnoi	BTech/ME/2014	Jalore
Anil Bhandari	Well-wisher	USA	Anu Vivek	BTech/ME/2014	Kochi
Yermal Bhat	Well-wisher	USA	Dilip Kumar Badgurjar	BTech/CL/2015	Tonk
Tarunes Chakrabarti	Well-wisher	USA	Sukriti Gakhar	BTech/CL/2015	Hisar

Rahul Khandait	BTech/CL/2015	Babdavan
Dhruv Pancholi	BTech/CL/2015	Udhna
Aditya Samant	BTech/CL/2015	Mumbai
Vaibhav Gandhi	BTech/EE/2015	Mumbai
Parth Gudhka	BTech/EE/2015	Gandhinagar
Vinit Sanjay Joshi	BTech/EE/2015	Borivali
Heda Shashank Kamlesh	BTech/EE/2015	Amritsar
Vaibhav Mathur	BTech/EE/2015	Jodhpur
Sanjay Kumar Meena	BTech/EE/2015	Dausa
Dave Ujash Rameshwar	BTech/EE/2015	Ahmedabad
Mukesh Singh Rawat	BTech/EE/2015	Ajmer
Parth Sane	BTech/EE/2015	Mumbai
Preet Shah	BTech/EE/2015	Mulund
Abhishek Soni	BTech/EE/2015	Patna
Himanshu Yadav	BTech/EE/2015	Mohindergarh
Abhay C A	BTech/ME/2015	Paravoor
Aryan	BTech/ME/2015	Muzaffarpur
Ayush Choudhary	BTech/ME/2015	Indore
Ajay Devedwal	BTech/ME/2015	Jaipur
Harsh Gupta	BTech/ME/2015	Surat
Anshul Gupta	BTech/ME/2015	Agra
Ronak Khandelwal	BTech/ME/2015	Indore
Mahesh Kumar	BTech/ME/2015	Bikaner
Ramesh Kumar	BTech/ME/2015	West Champaran
Bhavya Madasu	BTech/ME/2015	Hyderabad
Gaurav Mahamuni	BTech/ME/2015	Pune
Krishan Kumar Meena	BTech/ME/2015	Delhi
Shreyans Nahar	BTech/ME/2015	Raigad
Joy Narang	BTech/ME/2015	New Delhi
Abhishek Navarkar	BTech/ME/2015	Kalyan
Prasit Pal	BTech/ME/2015	Ahmedabad
Rajesh Patidar	BTech/ME/2015	Ratlam
Sachchit	BTech/ME/2015	Bangalore
Dhyey Shah	BTech/ME/2015	Ahmedabad
Akash Keshav Singh	BTech/ME/2015	Kushnagar
Milan Singh	BTech/ME/2015	Meerut
Eepsit Tiwari	BTech/ME/2015	Jabalpur
Vishal Yadav	BTech/ME/2015	Baran
Surendra Beniwal	BTech/CL/2016	Nagpur
Lavdeep Kaur	BTech/CL/2016	Sriganganagar
Abhishek Krovvidi	BTech/CL/2016	Hyderabad
Vivek Maida	BTech/CL/2016	Banswara
Vaibhav Palkar	BTech/CL/2016	Mumbai
Ankit Pandole	BTech/CL/2016	Bhopal
Virendra Singh Panwar	BTech/CL/2016	Jaipur
Chaudhary Kunal Ramkishun	BTech/CL/2016	Mumbai
Palak Sadani	BTech/CL/2016	Kundana
Sunil Sahra	BTech/CL/2016	Karauli
Chowhan Santhosh	BTech/CL/2016	Wesly Nagar
Prashant Shekhar	BTech/CL/2016	Sonebhadra
Manjot Singh	BTech/CL/2016	Rangarh
Vidyanand Wagh	BTech/CL/2016	Mumbai
Ashish Kumar Gupta	BTech/EE/2016	Ahmedabad
Ajinkya Tupkar Jain	BTech/EE/2016	Indore
Vamsidhar Kamanuru	BTech/EE/2016	Cuddapah
Chitranshu Kumar	BTech/EE/2016	Etawah
Prashant Kumar	BTech/EE/2016	Banka
Ravi Kumar	BTech/EE/2016	Kota
Animesh Singh Kumawat	BTech/EE/2016	Udaipur
Salecha Kushal	BTech/EE/2016	Ahmedabad
Yash Sanjay Mehta	BTech/EE/2016	Mumbai
Shubham Pachori	BTech/EE/2016	Bhopal
Abhishek Ranjan	BTech/EE/2016	Ranchi
Mudit Rathor	BTech/EE/2016	Balaghat
Medaramatla Sidhartha Reddy	BTech/EE/2016	Bangalore
Vijay Bharath Reddy	BTech/EE/2016	Kurnool
Kamanuru Vamsidhar Reddy	BTech/EE/2016	Kadapa
Raj Shekhar	BTech/EE/2016	Allahabad
Prince Kumar Singh	BTech/EE/2016	Haldharpar
Alok Singh	BTech/EE/2016	Allahabad
Dipen Somani	BTech/EE/2016	Himatnagar
P V S Anurag	BTech/ME/2016	Bareilly
Mihir Milind Bhalerao	BTech/ME/2016	Pune
Rocky Dongre	BTech/ME/2016	Durg
Rahul Garg	BTech/ME/2016	Sirohi
Hiralal	BTech/ME/2016	Jalore
Sanjit Jena	BTech/ME/2016	Pune
Naveen Kumar	BTech/ME/2016	Jhunjhunu
Penumaka Aruna Kumarudu	BTech/ME/2016	Krishna, Andhra Pradesh

Koushik Mani	BTech/ME/2016	Guwahati
Karan Palaskar	BTech/ME/2016	Aurangabad
Rahul Kumar Pandey	BTech/ME/2016	Etawah
Shashank Kishore Pareta	BTech/ME/2016	Indore
Radhika Patil	BTech/ME/2016	Aurangabad
Nikita Patta	BTech/ME/2016	Mandla
Anarse Ashish Pralhad	BTech/ME/2016	Aurangabad
Muzammil Rawoot	BTech/ME/2016	Thane
Pranshul Saini	BTech/ME/2016	Mandi
Vaijanapurkar Samarth Sanjiv	BTech/ME/2016	Surat
Gaurav Sharma	BTech/ME/2016	Avadi
Abhinav Singh	BTech/ME/2016	Jhiriya Rewa
Yash Pratap Singh	BTech/ME/2016	Agra
Hydarali M T	BTech/ME/2016	Malappuram
Konduru Venkata Naga Sai Ravi T	BTech/ME/2016	Guntur
Shah Sanket Viren	BTech/ME/2016	Mumbai
Srinivasan A	BTech/CE/2017	Chennai
Abhishek Anand	BTech/CE/2017	Patna
Sakkari Akash Goud	BTech/CE/2017	Telangana
Anurag Goyal	BTech/CE/2017	Hyderabad
Mayank Jain	BTech/CE/2017	Shivpuri
Mayank Khewaria	BTech/CE/2017	Jhansi
Shailendra Kumar	BTech/CE/2017	Alwar
Hemant Kumar	BTech/CE/2017	Gurugram
Sachin Kumar	BTech/CE/2017	Buhana
Pomraj Prajapat	BTech/CE/2017	Nagpur
Ashray Amarnath Adappa	BTech/CL/2017	Goa
Adappa Ashray Amarnath	BTech/CL/2017	Goa
Priyanka Trilok Bansal	BTech/CL/2017	New Delhi
Kushagra Bhargava	BTech/CL/2017	Kota
Lakh Chand	BTech/CL/2017	Mahoba
Maurya Jainidhi Chandraveer	BTech/CL/2017	Ahmedabad
Rajat Kumar Gupta	BTech/CL/2017	Jalaun
Sargam Jain	BTech/CL/2017	Jalore
Devanshu Manoj Jain	BTech/CL/2017	Vadodara
Kesani Kalyani	BTech/CL/2017	Malkagiri
Purushottam Kumar	BTech/CL/2017	Kaimur
Desadla Rushabh Pravin	BTech/CL/2017	Pune
Priyanka	BTech/CL/2017	New Delhi
Ramniwas	BTech/CL/2017	Jodhpur
Suman Kumar Singh	BTech/CL/2017	Bihar
Anurag Singhanian	BTech/CL/2017	Kolkata
Prince Verma	BTech/CL/2017	Kanpur
Akshay Kumar Verma	BTech/CL/2017	Ropar
Rishab Anand	BTech/EE/2017	Jharkhand
Aparna Arya	BTech/EE/2017	Karauli
Aditya Ganesh	BTech/EE/2017	Navi Mumbai
Patil Shubham Hanumant	BTech/EE/2017	Raigad
Pabbathi Akhil Kumar	BTech/EE/2017	Nalgonda
Sumit Kumar Meena	BTech/EE/2017	Alwar
Shashank Mehra	BTech/EE/2017	Kota
Kashyap Patel	BTech/EE/2017	Vadodara
Anjali Jayesh Pathak	BTech/EE/2017	India
Vipin Prajapati	BTech/EE/2017	Jaipur
Chenchala Sai Ramana Reddy	BTech/EE/2017	Hyderabad
Vootla Krishna Sai	BTech/EE/2017	Cuddapah
Vyas Samir	BTech/EE/2017	Rajkot
Goel Pratham Rajkumar Saroj	BTech/EE/2017	Mumbai
Namana Naga Sindhu	BTech/EE/2017	Krishna, Andhra Pradesh
Dinendra Pratap Singh Tomar	BTech/EE/2017	Gwalior
Kshitij Singh	BTech/EE/2017	Ghaziabad
Rajendra Singh	BTech/EE/2017	Jaipur
Shah Aditya Suresh	BTech/EE/2017	Mumbai
Sakshi Yadav	BTech/EE/2017	Alwar
Anurag Agrawal	BTech/ME/2017	Varanasi
Bhagat Rajan Balister	BTech/ME/2017	Pune
Bhargav Chauhan	BTech/ME/2017	Rajkot
Bhosale Surajkumar Dhananjay	BTech/ME/2017	Latur
Vaibhav Gupta	BTech/ME/2017	Bareilly
Tanay Kankane	BTech/ME/2017	Raipur
Amber Kothari	BTech/ME/2017	Sagar
Suryakumar Mane	BTech/ME/2017	Kolhapur
Devendra Meena	BTech/ME/2017	Baran
Ankit Mittal	BTech/ME/2017	Bharatpur
Nishanth Naik	BTech/ME/2017	Mangalore
Rohit Navavati	BTech/ME/2017	Surat
Pawan	BTech/ME/2017	Palwal
Bubna Rakesh Rishi	BTech/ME/2017	Mumbai
Shah Jugal Saurin	BTech/ME/2017	Ahmedabad

Kanak Sharma	BTech/ME/2017	Bhopal	Gopal Singh	BTech/CE/2019	New Delhi
Nilaysinh Thakor	BTech/ME/2017	Valsad	Pulkit Singhal	BTech/CE/2019	Karauli
Amit Yadav	BTech/ME/2017	Mathura	Honey Kumar Singla	BTech/CE/2019	Bhatinda
Borse Dinesh Anil	BTech/CE/2018	Navi Mumbai	Vishal Kumar Sinha	BTech/CE/2019	Ranchi
V Avinash	BTech/CE/2018	Nellore	Choudhary Saurabh Sunil	BTech/CE/2019	Bhandara
Garima Chaudhary	BTech/CE/2018	Chittorgarh	Bhoge Shashank Vilas	BTech/CE/2019	Amravati
Ram Pranav Agasthya Purhit C	BTech/CE/2018	Mumbai	Puroshotam Garg	BTech/CL/2019	Jaisalmer
Kamlesh Choudhary	BTech/CE/2018	Jaipur	Rajat Goel	BTech/CL/2019	Noida
Devanand	BTech/CE/2018	Champaran	Siddharth Sheshadri Krishnan	BTech/CL/2019	Chennai
Bulabai Sreedhar Gopikrishna	BTech/CE/2018	Nellore	Shiv Kumar	BTech/CL/2019	Banka
Anusha Gupta	BTech/CE/2018	Raipur	Kavish Kumar	BTech/CL/2019	Meerut
Pranav Kumar Gupta	BTech/CE/2018	Alwar	Suresh Kumar	BTech/CL/2019	Churu
Prakrut Kansara	BTech/CE/2018	Ahmedabad	Vijendra Maurya	BTech/CL/2019	Ranipur
R.Yashwanth Kumar	BTech/CE/2018	Hyderabad	Lakshmi Narayan Meena	BTech/CL/2019	New Delhi
Homit Singh Pal	BTech/CE/2018	Raisen	Yashasvi Modi	BTech/CL/2019	Bikaner
Heet Patel	BTech/CE/2018	Dhrangadhra	Akash Pallath	BTech/CL/2019	Pune
Anmol Kishore Raina	BTech/CE/2018	Jammu	Aditi Sharma	BTech/CL/2019	Ujjain
Ajay Singh Shekhawat	BTech/CE/2018	Jodhpur	Shah Atmin Shitalbhai	BTech/CL/2019	Ahmedabad
Pranavkumar Shivakumar	BTech/CE/2018	Navi Mumbai	Ankur Singh	BTech/CL/2019	Ranchi
Vikas Yadav	BTech/CE/2018	Patna	Navpreet Singh	BTech/CL/2019	Ludhiana
Roy Nikhil Aditya	BTech/CL/2018	Mumbai	Sri Savya Tanikella	BTech/CL/2019	Akkayyapalem
Parash Aggarwal	BTech/CL/2018	Tumk	Prateek Verma	BTech/CL/2019	Kanpur
Potturu Apurva	BTech/CL/2018	Krishna, Andhra Pradesh	Ankur Yadav	BTech/CL/2019	Khargone
Ashish Gehlot	BTech/CL/2018	Jaisalmer	Swathi S G	BTech/EE/2019	Kurnool
Purvil Jani	BTech/CL/2018	Vadodara	HARDEEP	BTech/EE/2019	Jind
Ayush Mathur	BTech/CL/2018	Jaipur	Ansh Joshi	BTech/EE/2019	Indore
Badri Vishal Meena	BTech/CL/2018	Kota	Shah Harshil Kalpeshkumar	BTech/EE/2019	Ahmedabad
Arul Mozhi Devan P	BTech/CL/2018	Alberta, Canada	Navin Kumar	BTech/EE/2019	Bihar
Mridul Pareek	BTech/CL/2018	Beawar	Koda Dinesh Kumar	BTech/EE/2019	Visakhapatnam
Abhinav Rana	BTech/CL/2018	Noida	L Madhulika	BTech/EE/2019	Hyderabad
Setti Satya Sai Venkata Ravi Teja	BTech/CL/2018	East Godavari	Mandlem Manikanta	BTech/EE/2019	Hyderabad
Mukul Tyagi	BTech/CL/2018	Bijnor	Aditi Singh	BTech/EE/2019	Durgapur
Varun Aggarwal	BTech/EE/2018	Dehradun	Veeramallu Giridhar Sai	BTech/EE/2019	Guntur, Andhra Pradesh
Patel Parva Apurva	BTech/EE/2018	Ahmedabad	Prathamesh Badve	BTech/ME/2019	Pune
Amit Bhongade	BTech/EE/2018	Chhindwara	Rishabh Bhattacharya	BTech/ME/2019	Vadodara
Anmol Gaur	BTech/EE/2018	Beawar	Jagmohan	BTech/ME/2019	Gurgaon
Aditya Goel	BTech/EE/2018	Vadodara	Rahul Kumar	BTech/ME/2019	Orai
Ashim Raj Konwar	BTech/EE/2018	Sivsagar	Ayaz Lakhani	BTech/ME/2019	Vadodara
Gottumukala Sai Rama Krishna	BTech/EE/2018	Amberpet	Vaibhav Mittal	BTech/ME/2019	Raipur
Vikas Kumar Meena	BTech/EE/2018	Jaipur	Saurav Nagar	BTech/ME/2019	Indore
Vaishnavi Patil	BTech/EE/2018	Navi Mumbai	Tushar Pareek	BTech/ME/2019	Ajmer
Duthade Sanket Rajesh	BTech/EE/2018	Beed	Yash Patel	BTech/ME/2019	Surat
Chinmay Shirpurkar	BTech/EE/2018	Mumbai	Rajat Ranjan	BTech/ME/2019	Bilaspur
Ayushman Tripathi	BTech/EE/2018	New Delhi	Lahane Yogesh Ratnakar	BTech/ME/2019	Jalna
Yashovardhan	BTech/EE/2018	Lucknow	Saksham Singal	BTech/ME/2019	Ahmedabad
Venu Gopal Agarwal	BTech/ME/2018	Dehradun	Chinmay Narendra Sonar	BTech/ME/2019	Jalgaon
Yash Bohre	BTech/ME/2018	Sagar	Sisara Pratikumar Dhirubhai	BTech/MSE/2019	Surat
Darshil Chauhan	BTech/ME/2018	Ahmedabad	Kunal Dudhat	BTech/MSE/2019	Ahmedabad
Vakharia Vismay Dilipkumar	BTech/ME/2018	Jamnagar	Jammu Tarun Kumar	BTech/MSE/2019	Vizianagaram
Solleti Goutham	BTech/ME/2018	Guntur	Abhiroop Mishra	BTech/MSE/2019	Bhopal
Modi Harsh Jashvantbhai	BTech/ME/2018	Mehsana	Priyang Priyadarshi	BTech/MSE/2019	Ahmedabad
Vivek Kumar	BTech/ME/2018	Buxar	Aman Singh	BTech/MSE/2019	USA
Pragadeesh R R	BTech/ME/2018	Salem	Tulasi Narendra Das Tripurana	BTech/MSE/2019	Visakhapatnam
Nithin Ramesh	BTech/ME/2018	California, USA	Amar Baroliya	BTech/CE/2020	Jaipur
Prasanna Sanjay Raut	BTech/ME/2018	Pune	Ajay Bhardwaj	BTech/CE/2020	Karauli
Udit Surendra Relan	BTech/ME/2018	Dhule	Hansraj Bijarnia	BTech/CE/2020	Tonk
Singampalli Sai Rohit	BTech/ME/2018	Visakhapatnam	Piyush Chandra	BTech/CE/2020	Varanasi
Trivedi Jaldhir Sanjay	BTech/ME/2018	Vadodara	Kaushal Chhimpia	BTech/CE/2020	Churu
Kapil Sharma	BTech/ME/2018	Gurgaon	Mohit Gadhwal	BTech/CE/2020	Rajsamand
Krishna Kumar Soni	BTech/ME/2018	Jhansi	Sahil Jain	BTech/CE/2020	Bhopal
Deepak Dhariwal	BTech/MSE/2018	Jodhpur	Rishabh Jain	BTech/CE/2020	Ajmer
Sushil Kumar	BTech/MSE/2018	Muzaffarpur	Muhammed Sinan R K	BTech/CE/2020	Calicut
Bhupendra Kumar	BTech/MSE/2018	Jalore	Kishan Khichi	BTech/CE/2020	Rajsamand
Aditya Kumar	BTech/MSE/2018	East Champaran	Chinmay Girish Kulkarni	BTech/CE/2020	Panvel
Kaustubh Panse	BTech/MSE/2018	Pune	Krishan Kumar	BTech/CE/2020	Churu
Dileep Singh	BTech/MSE/2018	Jalore	Mayank Kumar	BTech/CE/2020	Ajmer
Lavalesh Kumar Bajpayee	BTech/CE/2019	Sitapur	Mukesh Kumar	BTech/CE/2020	Patna
Sai Kiran Bojja	BTech/CE/2019	Visakhapatnam	Danish Mansoor	BTech/CE/2020	Ananthnag
Anurag Dhebana	BTech/CE/2019	Jhunjhunu	Anubhav Meena	BTech/CE/2020	Karauli
Siddhant Gulechha	BTech/CE/2019	Pali	Utkarsh Meena	BTech/CE/2020	Jaipur
Anurag Kumar Gupta	BTech/CE/2019	Ballia	Akshay Mittal	BTech/CE/2020	Dehradun
Chaudhari Divya Jeevraj	BTech/CE/2019	Aurangabad	Jitesh Mittal	BTech/CE/2020	Jaipur
Pushpender Kumar Kuntal	BTech/CE/2019	Mathura	Praveen Pandey	BTech/CE/2020	Bhopal
Rohan Nyayadhish	BTech/CE/2019	Shirdi	Pranav Peepre	BTech/CE/2020	Bhopal
Aishwary Omarkar	BTech/CE/2019	Bhopal	Kokkonda Prashanth	BTech/CE/2020	Warangal
Satya Prakash	BTech/CE/2019	Sarai	Akhil Anil Rajput	BTech/CE/2020	Navi Mumbai
Sareem Sandeed	BTech/CE/2019	Asansol	Animesh Rastogi	BTech/CE/2020	Fatehpur
Khushdeep Singh	BTech/CE/2019	Patiala	Wani Tejas Sakhahari	BTech/CE/2020	Aurangabad

Ayush Singh	BTech/CE/2020	Bijnor
Ishank Singh	BTech/CE/2020	Allahabad
Chekkala Sai Srishal	BTech/CE/2020	Ponakal
Arra Sriya	BTech/CE/2020	Miryalaguda
B Pranav Chakra Varthy	BTech/CE/2020	Hyderabad
Lakhan Agrawal	BTech/CL/2020	Khair Aligarh
Patel Milanbhai Bhagubhai	BTech/CL/2020	Navsari
Abhishek Dubey	BTech/CL/2020	Vadodara
Anish Dubey	BTech/CL/2020	Pune
Rohan Gupta	BTech/CL/2020	Kanpur
Ritik Jain	BTech/CL/2020	Ujjain
Sparsh Jain	BTech/CL/2020	Hisar
Khili Khamesra	BTech/CL/2020	Kanpur
Rajeev Kumar Mahto	BTech/CL/2020	Darbhanga
Yash Makwana	BTech/CL/2020	Udaipur
Spand Bharat Mehta	BTech/CL/2020	Pune
Gameti Nirav	BTech/CL/2020	Nadiad
Buditi Prudhvi	BTech/CL/2020	Vizianagaram
Gameti Nirav Rajeshbhai	BTech/CL/2020	Nadiad
Singh Shivam Rajkesar	BTech/CL/2020	Surat
Raman	BTech/CL/2020	Kurukshetra
Sourabh Saini	BTech/CL/2020	Jaipur
Kamle Mayank Shrikant	BTech/CL/2020	Nagpur
Varsha Singh	BTech/CL/2020	Chandigarh
Rendla Aditya	BTech/CSE/2020	Karimnagar
Apoorv Agnihotri	BTech/CSE/2020	Jabalpur
Heer Ambavi	BTech/CSE/2020	Ahmedabad
Shivji Bhagat	BTech/CSE/2020	Sahebganj
Rahul Challa	BTech/CSE/2020	Srikakulam
Gohil Varun Chandrashekhar	BTech/CSE/2020	Ahmedabad
Monika Chouhan	BTech/CSE/2020	Dhar
Ayush Garg	BTech/CSE/2020	Kota
Atishay Jain	BTech/CSE/2020	,Bengaluru
Pranjali Jain	BTech/CSE/2020	Indore
Pratik Kayal	BTech/CSE/2020	Guwahati
Pachpande Soham Kishor	BTech/CSE/2020	Nashik
S Deepak Narayanan	BTech/CSE/2020	Chennai
Debanuj Nayak	BTech/CSE/2020	Kolkata
Nitiksha	BTech/CSE/2020	Barnala
Meet Panchal	BTech/CSE/2020	Ahmedabad
Pathlavath Prashanth	BTech/CSE/2020	Nalgonda
Kukunuri Sai Venkata Ratna Ritwik	BTech/CSE/2020	Vijaywada
Dutta Ritik	BTech/CSE/2020	Thane
P Jayakrishna Sahit	BTech/CSE/2020	Hyderabad
S Vinu Sankar	BTech/CSE/2020	Kollam
Mridul Sharma	BTech/CSE/2020	Fatehabad
Rohit Sharma	BTech/CSE/2020	Sonbhadra
Davinder Singh	BTech/CSE/2020	Patiala
Shreyas Singh	BTech/CSE/2020	Gandhinagar
Kunal Verma	BTech/CSE/2020	Udaipur
Smeeth Vora	BTech/CSE/2020	Ahmedabad
More Rishikesh Babu	BTech/EE/2020	Aurangabad
Kratika Bhagtani	BTech/EE/2020	Kota
Chavali Bharath Chandra	BTech/EE/2020	Krishna, Andhra Pradesh
Pranjal Darda	BTech/EE/2020	Ahmedabad
Jatin Ashish Dholakia	BTech/EE/2020	Jamnagar
Garish Chandar G	BTech/EE/2020	Coimbatore
Pratik Puri Goswami	BTech/EE/2020	Jaipur
Abhinav Narayan Harish	BTech/EE/2020	Pune
Ravi Jangir	BTech/EE/2020	Sikar
Shubham Ashok Kalgunde	BTech/EE/2020	Pune
Penumaka Gopi Kishore	BTech/EE/2020	Krishna, Andhra Pradesh
Siddharth Krishnan	BTech/EE/2020	Mumbai
K S Santhosh Kumar	BTech/EE/2020	Chittoor
Sai Praneeth Maddi	BTech/EE/2020	Srikakulam
Balani Mohit Manoj	BTech/EE/2020	Ahmedabad
Suraj Kumar Meena	BTech/EE/2020	Jaipur
Pankaj Kumar Nainawat	BTech/EE/2020	Alwar
Jai Parmar	BTech/EE/2020	Udaipur
Chitta Sai Pavan	BTech/EE/2020	Hyderabad
Gupta Sagar Rajeev	BTech/EE/2020	Navi Mumbai
Bedmutha Manas Satish	BTech/EE/2020	Nashik
Priolkar Neha Satyendra	BTech/EE/2020	Mumbai
Shubhranshu Singh	BTech/EE/2020	Bhilai
Chakka Sneeth	BTech/EE/2020	East Godavari
Deshpande Ajit Umesh	BTech/EE/2020	Nagpur
Pankaj Vatwani	BTech/EE/2020	Jaipur

Sumit Walia	BTech/EE/2020	Panchkula
Amit Kumar Singh Yadav	BTech/EE/2020	Kanpur
Rahul Yadav	BTech/EE/2020	Jhansi
Putsala Anirudh	BTech/ME/2020	Visakhapatnam
Akshat Bansal	BTech/ME/2020	Kishangarh
Shrinidhi Dilip Bhide	BTech/ME/2020	Mumbai
Rajat Biluniya	BTech/ME/2020	Alwar
Manvendra Singh Chauhan	BTech/ME/2020	Jaipur
Kadam Omkar Devidas	BTech/ME/2020	Nanded
Vedant Rajendra Gote	BTech/ME/2020	Pune
Chitipolu Gowtham	BTech/ME/2020	Vizianagaram
Ukey Vishal Hemraj	BTech/ME/2020	Bhandara
Amit Jangir	BTech/ME/2020	Jaipur
Kathroth Pavan Kalyan	BTech/ME/2020	Sangareddy
Karthik Subramanya Karvaje	BTech/ME/2020	Dubasipalya
Upendra Kumar	BTech/ME/2020	Nalanda
Dabhi Parth Lalitkumar	BTech/ME/2020	Ahmedabad
Mukul Lawas	BTech/ME/2020	Ajmer
Tandale Atharva Madhukar	BTech/ME/2020	Vashi
Rathi Aditya Manish	BTech/ME/2020	Pune
Anilraj Meena	BTech/ME/2020	Bundi
Yogesh Meena	BTech/ME/2020	Jaipur
Bharg Mehta	BTech/ME/2020	Surat
Ashar Akhil Parag	BTech/ME/2020	Mumbai
Kevin Patel	BTech/ME/2020	Ahmedabad
Suyash Patidar	BTech/ME/2020	Ujjain
G Ramanan	BTech/ME/2020	Chennai
Panna Lal Saini	BTech/ME/2020	Dausa
Rahil Sanwla	BTech/ME/2020	Chittorgarh
Kshitij Sendre	BTech/ME/2020	Vadodara
Sakhalikar Pushpakraj Shyamappa	BTech/ME/2020	Buldana
Surve Sushrut Sudarshan	BTech/ME/2020	Mumbai
Tanisha Aggrawal	BTech/MSE/2020	Delhi
V V S Akhil V V S Akhil	BTech/MSE/2020	Visakhapatnam
Anushikha	BTech/MSE/2020	Karnal
Bidyan Basumatary	BTech/MSE/2020	Ghoramari
Ratul Chakraborty	BTech/MSE/2020	Burdwan
Shubham Gond	BTech/MSE/2020	Deoria
C R Greeshma	BTech/MSE/2020	Palakkad
Ingle Varad Jitendrakumar	BTech/MSE/2020	Aurangabad
Anjali Kumari	BTech/MSE/2020	Kangra
Sujeet Singh Mathur	BTech/MSE/2020	Kanpur
Antima Meena	BTech/MSE/2020	Baran
Neha Meena	BTech/MSE/2020	Bikaner
Kunwar Shivam Pratap	BTech/MSE/2020	Varanasi
Rahul Rajeev	BTech/MSE/2020	Thrissur
Ayan Rakshit	BTech/MSE/2020	Mumbai
Dharmendra Sablaniya	BTech/MSE/2020	Sikar
Pankaj Kumar Saini	BTech/MSE/2020	Guwahati
Joshi Kavan Sanjaybhai	BTech/MSE/2020	Adajan
Jayshankar Sharma	BTech/MSE/2020	Ahmedabad
Shreyas Sreeram	BTech/MSE/2020	Chennai
Sriram Sriharsha Sriram Sriharsha	BTech/MSE/2020	Mahaboobnagar
Himani Verma	BTech/MSE/2020	Indore
Bukya Vinay	BTech/MSE/2020	Adilabad
Aditya Singh	MSc/CG/2015	Bangalore
Goldy Yadav	MSc/CG/2015	New Delhi
Kishore Kumar Jagini	MSc/CG/2016	Warangal
Karthikeyan Palanisamy	MSc/CG/2016	Tiruppur
Rakhi	MSc/CG/2016	Bokaro
Bharatesh Rayappa Shiraguppi	MSc/CG/2017	Belgaum
Kulkarni Pranjali Shrikant	MSc/CG/2017	Satara
Sreekanth C	MSc/CG/2019	Kozhikode
Luke Nihal Dasari	MSc/CG/2019	Guntur
Meghana Gautam	MSc/CG/2019	Navi Mumbai
Sanika Gupta	MSc/CG/2019	Lucknow
Joel V Joseph	MSc/CG/2019	Delhi
Dighbijoy Samaddar	MSc/CG/2019	Kolkata
Prankur Saxena	MSc/CG/2019	Bhopal
Azba Shaikh	MSc/CG/2019	Bilimora
Ishita Arun	MSc/CG/2020	Delhi
Ruhi Bhanap	MSc/CG/2020	Thane
Samruddhi Damle	MSc/CG/2020	Powai
Ihsan K	MSc/CG/2020	Malappuram
EKTA KHEMCHANDANI	MSc/CG/2020	Delhi
Anadi Mehta	MSc/CG/2020	NA
Greeshma Mohan	MSc/CG/2020	Kollam
Anushka Oza	MSc/CG/2020	Ahmedabad
R Pooja	MSc/CG/2020	Bengaluru
Esha Sharma	MSc/CG/2020	Mumbai

Raunak Swarnkar	MSc/CG/2020	Godhra	Babita	MSc/MA/2017	Faridabad
Palash Jana	MSc/CH/2015	Medini	Raj Kumar Dadrawal	MSc/MA/2017	Udaipur
Amarjyoti Das Mahapatra	MSc/CH/2015	Purba Medinipur	Charu Gupta	MSc/MA/2017	Delhi
Aman Panwar	MSc/CH/2015	Dehradun	Parveen Kumar	MSc/MA/2017	Noida
Payal Arora	MSc/CH/2016	Rewari	Bharat Lal Meena	MSc/MA/2017	Dausa
Pavneesh Kumar	MSc/CH/2016	Amroha	Priyanka Rana	MSc/MA/2017	Delhi
Deepika Sharma	MSc/CH/2016	Ghaziabad	Sudhansu Sekhar Ray	MSc/MA/2017	Jaipur
Mohammad Hassan	MSc/CH/2017	Uttar Pradesh	Aritra Kumar Bhaduri	MSc/MA/2018	Hooghly
Umesh Kumar	MSc/CH/2017	New Delhi	Harshitha C	MSc/MA/2018	Durgapur
Sachin	MSc/CH/2017	Jind	Siyaram Gurjar	MSc/MA/2018	Tonk
Jyotsna Saini	MSc/CH/2017	Gurugram	Rahul Hudda	MSc/MA/2018	Bhiwani
Himanshu Kumar Singh	MSc/CH/2017	Aligarh	Shivani Huvor	MSc/MA/2018	Purba Medinipur
Mridupavan Sonowal	MSc/CH/2017	Tinsukia	Sajal Kumar	MSc/MA/2018	Jalaun
Kotha Srinu	MSc/CH/2017	Srikakulam	Akshay Kumar	MSc/MA/2018	Dehradun
Ayushi Tyagi	MSc/CH/2017	Gurgaon	Monu	MSc/MA/2018	Jind
Vamakshi Yadav	MSc/CH/2017	Ghaziabad	Arvind Kumar Nath	MSc/MA/2018	Kota
Komal Bajaj	MSc/CH/2018	Jhajjar	Sudip Pandit	MSc/MA/2018	Birbhum
Sachin Dev	MSc/CH/2018	Kota	Deepika Parmar	MSc/MA/2018	Farrukhabad
Sachin Giri	MSc/CH/2018	Bhusawal	Parul Punia	MSc/MA/2018	NA
Ankit Panwar	MSc/CH/2018	Gandhinagar	Mahajan Samiksha Satish	MSc/MA/2018	Dombivali
Govind Kumar Sharma	MSc/CH/2018	New Delhi	Priyanka Shoorra	MSc/MA/2018	Gurgaon
Surya Pratap Singh	MSc/CH/2018	Bikaner	Tikam Chand Soyal	MSc/MA/2018	Tonk
Rajvir Singh	MSc/CH/2018	Sirsa	Shadab Ali	MSc/MA/2019	Bulandshahr
Naveen Tak	MSc/CH/2018	Jaipur	Surjeet Singh Choudhary	MSc/MA/2019	Sikar
Sarla Yadav	MSc/CH/2018	Rewari	Meghali Garg	MSc/MA/2019	Barnala
Rakesh Yadav	MSc/CH/2018	Bhiwani	Dasharath Meena	MSc/MA/2019	Sikar
Afridi Zamader	MSc/CH/2018	South 24 Parganas	Amogh Parab	MSc/MA/2019	Mumbai
Shriya Arora	MSc/CH/2019	Meerut	Pulkit	MSc/MA/2019	Amroha
Kriti Kapil	MSc/CH/2019	Lucknow	Aditi Sethia	MSc/MA/2019	Chhitorgarh
Ajay Kumar	MSc/CH/2019	Dhanbad	Shrikant Shekhar	MSc/MA/2019	Shamli
Divyansh Prakash	MSc/CH/2019	Allahabad	Taru Taniya	MSc/MA/2019	Fatehgarh
Abhinav Gautam	MSc/CH/2020	Kanpur	Alka Baliyan	MSc/MA/2020	Gandhinagar
Marsh Kumar	MSc/CH/2020	Mahendragarh	Kuntal Banerjee	MSc/MA/2020	Kolkata
Pankaj Kumar	MSc/CH/2020	Karnal	Yogesh Kumar Gupta	MSc/MA/2020	Alwar
Shivam Kumar	MSc/CH/2020	Ghaziabad	Vikash Jangid	MSc/MA/2020	Jaipur
Nilesh Mathur	MSc/CH/2020	Hisar	Shubham Kumar	MSc/MA/2020	Meerut
Mansi Porwal	MSc/CH/2020	Rajkot	Vineet Kumar	MSc/MA/2020	Mahendergarh
Shaiborlang Rapsang	MSc/CH/2020	Meghalaya	TANNU KUMARI	MSc/MA/2020	Rewari
Rimjhim	MSc/CH/2020	Shahdara	Ravi Mahala	MSc/MA/2020	Sikar
Parul Sahrawat	MSc/CH/2020	Rohtak	Kamaraj P	MSc/MA/2020	Dharampuri
Anjali Sharma	MSc/CH/2020	Sonipat	Lakhani Devanshi Rameshbhai	MSc/MA/2020	Amreli
Tannu	MSc/CH/2020	Hisar	Joshi Bhavin Rasikbhai	MSc/MA/2020	Rajkot
Tarun	MSc/CH/2020	Bhiwani	Rakesh Kumar Rath	MSc/MA/2020	Puri
Priyavrat Vashisth	MSc/CH/2020	Palwal	Rahul Rohilla	MSc/MA/2020	Chandigarh
Ojasvi Verma	MSc/CH/2020	Hansi	Bhawani Shankar	MSc/MA/2020	Barmer
B Ratna Bharti	MA/HSS/2016	Secunderabad	Lokesh Sharma	MSc/MA/2020	Alwar
Aakrati Vinod Gupta	MA/HSS/2016	Ahmedabad	Vaibhava Srivastava	MSc/MA/2020	Lucknow
Oza Bhargav Hiren	MA/HSS/2016	Rajkot	Deo Mihir Vilas	MSc/MA/2020	Dombivali(East)
Sini Susan Varghese	MA/HSS/2016	Pongummoodu	Surbhi Warkade	MSc/MA/2020	Bhopal
Arundhathy B	MA/HSS/2018	Kollam	Akash Kumar Mishra	MSc/PH/2016	Sonepur
Riddhi Garg	MA/HSS/2018	New Delhi	Pritam Nanda	MSc/PH/2016	Medinipur
Swara Joshi	MA/HSS/2018	Ahmedabad	Shastri Rahul Kishorbhai	MSc/PH/2017	Valsad
S Paragnee	MA/HSS/2018	Bhubaneswar	Anirban Mandal	MSc/PH/2017	Hooghly
Nitya Pawar	MA/HSS/2018	Indore	Leema Saikia	MSc/PH/2017	Dibrugarh
Neha Tetali	MA/HSS/2018	Powai	Akash Arya	MSc/PH/2018	Kheri
Arya Puliyedath Adityan	MA/HSS/2019	Palakkad	Shivam Awasthi	MSc/PH/2018	NA
Kadeeja Nourah B H	MA/HSS/2019	Calicut	Samten Bhutia	MSc/PH/2018	Gangtok
Tanvi Jain	MA/HSS/2019	Delhi	Prashant Chouhan	MSc/PH/2018	Mirzapur
Suhair K K	MA/HSS/2019	Vadakara	Sanu Kumar Gangwar	MSc/PH/2018	Bareilly
Dalia N	MA/HSS/2019	Chennai	Shubham Garg	MSc/PH/2018	Kernal
Janaki R Nair	MA/HSS/2019	NA	Gourav Kumar	MSc/PH/2018	Aligarh
Suyash Dhanvir Pasi	MA/HSS/2019	Ahmedabad	Kousik Loho	MSc/PH/2018	North Dinajpur
Anupam Sharma	MA/HSS/2019	Jorhat	Daphisha Mary Nonghuloo	MSc/PH/2018	Shilong
Anuracti Sharma	MA/HSS/2019	Mumbai	Sandeep Kumar Singh	MSc/PH/2018	Bihar
Swaroop Bhatkar	MA/HSS/2020	Navi Mumbai	Anoop Singh	MSc/PH/2018	Agra
Devdutta Chakraborty	MA/HSS/2020	Ranchi	Pankaj Borah	MSc/PH/2019	Biswanath
Noyonika Das	MA/HSS/2020	Anandapur	Kapil Dev	MSc/PH/2019	Haryana
Sevgi Demiroglu	MA/HSS/2020	Istanbul, Turkey	Mohit Dubey	MSc/PH/2019	Gandhinagar
Debasmita Ghosh	MA/HSS/2020	Thakurpukur	Abdul Ghaffar	MSc/PH/2019	Siddharthnagar
Simrith Hundal	MA/HSS/2020	Visakhapatanam	Ankit Phogat	MSc/PH/2019	Charkhi Dadri
Devika Jayssell	MA/HSS/2020	Alappuzha	Rachana Choudhary	MSc/PH/2020	Sikar
Zaphya Jena	MA/HSS/2020	Pune	Anil Kumar	MSc/PH/2020	Churu
Vasundhara Krishnan	MA/HSS/2020	Kozhikode	Nitin Kumari	MSc/PH/2020	Churu
Devika Menon	MA/HSS/2020	Kochi	Siyaram Mina	MSc/PH/2020	Alwar
Rujuta Naik	MA/HSS/2020	Mumbai	Nividha	MSc/PH/2020	Lucknow
Sayantani Saraswati	MA/HSS/2020	Kolkata	Aparna Rathi	MSc/PH/2020	Uttar Pradesh
Gnana Selvam	MA/HSS/2020	Virudhunagar	Sarvdeep Sangwan	MSc/PH/2020	Charkhi Dadri
Punya Suri	MA/HSS/2020	Vashi	Aritra Sen	MSc/PH/2020	Birbhum
Shivam Dhama	MSc/MA/2015	Baghpat	Aman Pratap Singh	MSc/PH/2020	Uttar Pradesh
Vipin Kumar	MSc/MA/2016	Ghaziabad	Sneha Yadav	MSc/PH/2020	Rewari

Saroj Yadav	MSc/PH/2020	Chandauli
Hemant Gite	MTech/CL/2013	Mumbai
Pavni Pandya	MTech/CE/2014	Ahmedabad
Amita Bedar	MTech/CL/2014	Shivpuri
Aparna Menon	MTech/CL/2014	Hyderabad
Upendra Kumar Shukla	MTech/CL/2014	Gonda
Banerjee Hritwick	MTech/EE/2014	Jalpaiguri
Rahul Anand Kaushik	MTech/EE/2014	Chattisgarh
Satyajit Mohapatra	MTech/EE/2014	Gandhinagar
Sreejith Raveendran	MTech/EE/2014	Palakkad
Neelesh Bhandari	MTech/ME/2014	Vadodara
Manish Pillai	MTech/ME/2014	Alappuzha
Gourav Kumar Mishra	MTech/MSE/2014	Purnea
Silky Agrawal	MTech/CE/2015	Khargone
Amar Mandhyan	MTech/CE/2015	Vadadora
S Smitha	MTech/CE/2015	Kozikhode
Gundeep Kaur Sudan	MTech/CE/2015	Gandhinagar
Kaustubh Jayant Udas	MTech/CE/2015	Pune
Gunda Harini	MTech/CL/2015	Guntur
Preeti Rathi	MTech/CL/2015	Ujjain
Mohit Chand	MTech/EE/2015	Varanasi
Solanki Dhaval Shashikantbhai	MTech/EE/2015	Ahmedabad
Bhoir Mandar Suresh Smita	MTech/EE/2015	Raigad
Pratik Suryakant Shirbhate	MTech/ME/2015	Yavatmal
Pragya Nandan Banjare	MTech/MSE/2015	Chattisgarh
Abhishek Sarmah	MTech/MSE/2015	Dibrugarh
Krishna Kumar Saxena	MTech/MSE/2015	Agra
Keerthi Priya Kasturi	MTech/CE/2016	Hyderabad
Kiran Rangwani	MTech/CE/2016	Ahmedabad
Ravi Verma	MTech/CE/2016	Dhar
Chatte Amruta Bharat	MTech/CL/2016	Parbhani
Mohd Umair Iqbal	MTech/CL/2016	Alyalpura Shopian
Mankad Jaivik Kartik	MTech/CL/2016	Vadodara
Swasti Medha	MTech/CL/2016	Dhanbad
Rahul Patsariya	MTech/CL/2016	Jhansi
Mallavarapu Deepika Rani	MTech/CL/2016	Guntur
Ekta Sharma	MTech/CL/2016	Jaipur
Nikhil Sharma	MTech/CL/2016	Neemuch
Kumari Sushmita	MTech/CL/2016	Bihar
Dheeraj Tyagi	MTech/CL/2016	Meerut
Ankita Verma	MTech/CL/2016	Raipur
Rachita Agrawal	MTech/EE/2016	Rachenahalli
Kumar Gaurav	MTech/EE/2016	Bihar
Rathod Milanbhai Jayantibhai	MTech/EE/2016	Ahmedabad
Nikhil Cherian Kurian	MTech/EE/2016	Kottayam
Rahul Sadhwani	MTech/EE/2016	Bhilwara
Bhoomika Sonane	MTech/EE/2016	Ujjain
Patel Megh Vasantkumar	MTech/EE/2016	V V Nagar
Sunny Verma	MTech/EE/2016	Bilaspur
Parikh Darshak Anantkumar	MTech/ME/2016	Panchamal
Rajanikant Atul Ghate	MTech/ME/2016	Pune
Vishnu Kumar Gupta	MTech/ME/2016	Rewari
Ayush Jain	MTech/ME/2016	Gwalior
Jhaveri Anshal Jayeshbhai	MTech/ME/2016	Surat
Abhishek Joshi	MTech/ME/2016	Deharadun
Vikas Sharma	MTech/ME/2016	Delhi
Tibin M Thomas	MTech/ME/2016	Kottayam
Gurnani Sagarkumar V	MTech/ME/2016	Surat
Sawadiawala Chirag Y	MTech/ME/2016	Udhna
Sarkar Aditya Anjan	MTech/MSE/2016	Pune
Amit Kumar	MTech/MSE/2016	Allahabad
Seema Negi	MTech/MSE/2016	Garhwal
Kolli Mohan Krishna	MTech/CE/2017	Krishna, Andhra Pradesh
Rojan Mathew	MTech/CE/2017	Calicut
Harshit Nema	MTech/CE/2017	Jabalpur
Shubham Soni	MTech/CE/2017	Dalanda
Anubha Agrawal	MTech/CL/2017	Khurai
Arable Reshma Mallinath	MTech/CL/2017	Osmanabad
Bhawna Panjwani	MTech/CL/2017	Chattisgarh
Kushwaha Amarkumar A	MTech/EE/2017	Vadodara
Shah Hemal Gautamkumar	MTech/EE/2017	Ahmedabad
Gupta Akash Nandlal	MTech/EE/2017	India
Vora Aditya Narendrabhai	MTech/EE/2017	Ahmedabad
Sompura Jay Nileshbhai	MTech/EE/2017	Jamnagar
Neetesh Kumar Sharma	MTech/EE/2017	Tikamgarh
Ashish Soni	MTech/EE/2017	Jhansi
Anurag Soni	MTech/EE/2017	Tikamgarh
Siddharth Behere	MTech/ME/2017	Vadodara
Ronit Dey	MTech/ME/2017	Hyderabad

Brijesh Kumar	MTech/ME/2017	Varanasi
Baishali Panda	MTech/ME/2017	Bhubaneshwar
Akhil Patnaik	MTech/ME/2017	Kolkata
Nakka Suryasatyasanjeevi	MTech/ME/2017	Srikulam
Kamal Tewari	MTech/ME/2017	Nanital
Preetika Ghawri	MTech/BE/2018	Banaskatha
Neha Gupta	MTech/BE/2018	Agra
Sitesh Kumar	MTech/BE/2018	Bihar
Gaurav Panthi	MTech/BE/2018	Ujjain
Aditi Singhal	MTech/BE/2018	Tonk
Aishwarya Vijayakumar	MTech/BE/2018	Sonebhadra
Kaustubh Deshpande	MTech/CE/2018	Indore
Abhijith T K	MTech/CE/2018	Kozhikode
Rimpy Khokhar	MTech/CE/2018	Jodhpur
Sujit Vasant Matala	MTech/CE/2018	Jind
Rakesh Meghwal	MTech/CE/2018	Gadwal
Akshay Nandurkar	MTech/CE/2018	Amravati
Ashutosh Sonpal	MTech/CE/2018	Anantapur
Lambhate Harshal Sandesh Sushama	MTech/CE/2018	Kalyan
Ramchandra Gawas	MTech/CL/2018	Pennsylvania, USA
Charu Oberoi	MTech/CL/2018	Jaipur
Kusum Panwar	MTech/CL/2018	Dehradun
Rohit Saraswat	MTech/CL/2018	Agra
Sachin Verma	MTech/CL/2018	NA
Sujata Sinha	MTech/CS/2018	Agartala
Ishant Anand	MTech/EE/2018	Rohtak
Geetika Chalia	MTech/EE/2018	Nagpur
Rohit Dawar	MTech/EE/2018	New Delhi
Sohini Dhar	MTech/EE/2018	Siliguri
Shubhanshu Gupta	MTech/EE/2018	North 24 Parganas
Smriti Gupta	MTech/EE/2018	Jhansi
Vishwanath Hiremath	MTech/EE/2018	Haveri
Ashutosh Jindal	MTech/EE/2018	Noida
Chakka Yaswanth Sai Kiran	MTech/EE/2018	Prakasam
Mohit Lamba	MTech/EE/2018	Jaipur
Shiv Prakash	MTech/EE/2018	Jodhpur
Dhanapala Prudhviraaj	MTech/EE/2018	Mydukur
Chandra Sekhar Ravuri	MTech/EE/2018	Bangalore
Kumar Saurav	MTech/EE/2018	Varanasi
Harsha Vardhan Tetali	MTech/EE/2018	Visakhapatnam
Tanya Shukla	MTech/ESS/2018	Uttarakhand
Shivangi Singh	MTech/ESS/2018	Delhi
Ravinder Kumar Daroch	MTech/ME/2018	Hamirpur
Priyank Mehta	MTech/ME/2018	Dungarpur
Nevilkumar Panchal	MTech/ME/2018	Surat
Giridhari Pattnaik	MTech/ME/2018	Sirohi
Anashusen Rafikhusen Saiyad	MTech/ME/2018	Vadodara
Atul Sharma	MTech/ME/2018	Jaipur
Sourabh Singh	MTech/ME/2018	Mumbai
Mani Valleti	MTech/ME/2018	Khammam
Rishi Dhawan	MTech/MSE/2018	Faridabad
Bhoopendra Kumar	MTech/MSE/2018	Pathanamthitta
Vivek Chaitanya Peddiraju	MTech/MSE/2018	Guntur
Shashank Naik B S	MTech/MSE/2018	Bangalore
Param Singh	MTech/MSE/2018	Ahmedabad
Rananjay Pratap Singh	MTech/MSE/2018	Gosaiganj
Kaushik Bhowmik	MTech/BE/2019	Sepahijala
Vaishali C	MTech/BE/2019	Pondicherry
Rahul Gupta	MTech/BE/2019	Faridabad
Priyanka Srivastava	MTech/BE/2019	Lucknow
Apeksha Srivastava	MTech/BE/2019	Lucknow
Shailesh Garg	MTech/CE/2019	Karauli
Kimti Manawa	MTech/CE/2019	Jammu
Bhagwana Ram	MTech/CE/2019	Lodhpur
Bhumika Sadhwani	MTech/CE/2019	Mughalsarai
Rahul Upadhyay	MTech/CE/2019	Mathura
Khushwant Fatnani	MTech/CL/2019	Raipur
Aaqib Khan	MTech/CL/2019	Vapi
Surbhi Khewle	MTech/CL/2019	Shamgarh
Nidhi Pandey	MTech/CL/2019	U S Nagar
Sairam S	MTech/CL/2019	Chennai
Vaibhav Trivedi	MTech/CL/2019	Farrukhabad
Ashish Dwivedi	MTech/CS/2019	Bengaluru
Rahul Jain	MTech/CS/2019	Ahmedabad
Chamanvir Kaur	MTech/CS/2019	Jalavdhara
Shubam Singh	MTech/CS/2019	Allahabad
Barma Abhishek	MTech/EE/2019	Hyderabad
Vineetha Bodempudi	MTech/EE/2019	Hyderabad
Trisrota Deb	MTech/EE/2019	Chowmuhan

Joydeep Kumar Devnath	MTech/EE/2019	Guwahati	Shubham Jain	MTech/EE/2020	New Delhi
Sarathchandran Gm	MTech/EE/2019	Salem	Ashish Kumar	MTech/EE/2020	Godda
Athira Haridas	MTech/EE/2019	Ernakulam	Krishna Kumar	MTech/EE/2020	Arwal
Priyanka Kajla	MTech/EE/2019	Sikar	Ankita Nandi	MTech/EE/2020	Shillong
Yadukrishnan M	MTech/EE/2019	Kannur	Biplob Nath	MTech/EE/2020	Tirap
Prakhar Pradhan	MTech/EE/2019	Gwalior	Priyanjana Pal	MTech/EE/2020	Agartala
S Preethi	MTech/EE/2019	Ahmedabad	Rakesh Kumar Pothal	MTech/EE/2020	Dhenkanal
Vaidyanathan Peruvemba R	MTech/EE/2019	Chembur	Vishal Prasad	MTech/EE/2020	Mungar
Sachinkumar B Suthar	MTech/EE/2019	Ahmedabad	Jitesh Sah	MTech/EE/2020	Nainital
Arun Singh Tomar	MTech/EE/2019	Satna	Gyanendra K Tiwari	MTech/EE/2020	Satna
Arun Cherkkil	MTech/ME/2019	Palakkad	Alok Kumar Thakur	MTech/ESS/2020	Najafgarh
Ashu Gupta	MTech/ME/2019	Ghaziabad	Indra Mani Tripathi	MTech/ESS/2020	Basti
Shubhankar Gurav	MTech/ME/2019	Satara	Abhimanyu	MTech/ME/2020	Khalilabad
Prasanna Kulkarni	MTech/ME/2019	Gadag	Aqbal Ahmad	MTech/ME/2020	Sant Kabir Nagar
Pragya Mishra	MTech/ME/2019	Lucknow	Dinesh Bauskar	MTech/ME/2020	Bhilai
Pratik Prajapati	MTech/ME/2019	Sabarkantha	Sai Ajay Challa	MTech/ME/2020	Kakinada
Dhanurdhar Ramswamy	MTech/ME/2019	Aizawal	Arunav Choudhury	MTech/ME/2020	Guwahati
Ankit Sharma	MTech/ME/2019	Dewas	Harvansh Dandelia	MTech/ME/2020	Gwalior
Satbir Singh	MTech/ME/2019	Ahmedabad	Deepam Dubey	MTech/ME/2020	Etawah
John Sherjy Syriac	MTech/ME/2019	Kollam	Sayali Jadhav	MTech/ME/2020	Satara
Akash Unnikrishnan	MTech/ME/2019	Kannur	Sanjeev Kumar	MTech/ME/2020	Banka
Pinki Yadav	MTech/ME/2019	Delhi	Saurabh Lanje	MTech/ME/2020	Chinnapannahali
Arushi Dev	MTech/MSE/2019	Bareilly	Rishabh Mathur	MTech/ME/2020	Sikar
Dhurutiman Dey	MTech/MSE/2019	Sambalpur	Challa Sai Ajay Narendra	MTech/ME/2020	Kakinada
Anurag Gumaste	MTech/MSE/2019	Sangli	Hemanth R	MTech/ME/2020	Palakkad
Chandan Sahoo	MTech/MSE/2019	Puri	Dewansh Shrivastava	MTech/ME/2020	Bhopal
Mittireddi Teja 17210054	MTech/MSE/2019	Srikakulam	Ruchi Thosare	MTech/ME/2020	Aurangabad
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Rupsha Mukherjee	MTech/BE/2020	Durg	Ranga Teja Pidathala	MTech/MSE/2020	Hyderabad
Dibyadarsi Nepal	MTech/BE/2020	Ilam	Sidharth Sarmah	MTech/MSE/2020	Tezpur
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Kuldeep Sharma	MTech/BE/2020	Jaipur	Akshay Srivastava	MTech/MSE/2020	Lakhimpur Kheri
Kunal Bhardwaj	MTech/CE/2020	Shimla	Nishkarsh Srivastava	MTech/MSE/2020	Gandhinagar
Yash Goyal	MTech/CE/2020	Indore	Priya Tiwari	MTech/MSE/2020	Fatehpur
Sheetal Gujrati	MTech/CE/2020	Ajmer	Pranav Trivedi	MTech/MSE/2020	Gandhinagar
Gaurav Khandelwal	MTech/CE/2020	Jaipur	Priodyuti Pradhan	PGDIIT/CS/2017	East Midnapore
Deepak Kumar	MTech/CE/2020	Jehanabad	Neeraj Dhull	PGDIIT/EE/2017	Haryana
Mohit Lakhani	MTech/CE/2020	Ahmedabad	Pooja Rajoria	PGDIIT/CE/2019	NA
Satish Masoori	MTech/CE/2020	Nizamabad	Bhaskar Shukla	PGDIIT/ME/2019	Bhopal
Tanaya Mukati	MTech/CE/2020	Bhopal	Uday Kumar	PGDIIT/MSE/2019	NA
Tanaya Mukti	MTech/CE/2020	Bhopal	Rohitashva Kumar Singh	PGDIIT/CE/2020	Ghaziabad
Nikhil O	MTech/CE/2020	Malappuram	Vishal Ghanshyambhai Vaghela	PGDIIT/CE/2020	Ahmedabad
Prajwal Patidar	MTech/CE/2020	Khandwa	Jitendra Prasad Agrawal	PGDIIT/EE/2020	Karauli
Nivedita Pradhan	MTech/CE/2020	Bilaspur	Prashant Jha	PGDIIT/EE/2020	Madhubani
Avisina Charitej Reddy	MTech/CE/2020	Kadapa	Piyush Kumar	PGDIIT/EE/2020	Delhi
Purna Sarkar	MTech/CE/2020	Bilaspur	Sumitava Mukherjee	PhD/HSS/2014	Hooghly
Ravi Shankar	MTech/CE/2020	Bakhtiyarpur	Chandrasekaran S.	PhD/EE/2015	Rajapalayam
Sukrit Sharma	MTech/CE/2020	Gurugram	J Ram Prabhakar	PhD/EE/2016	Dharmapuri
Bala Harsha Srusti	MTech/CE/2020	Mahaboobnagar	Payel C Mukherjee	PhD/HSS/2016	Hooghly
Adarsh Thakur	MTech/CE/2020	Sagar	Gaurav Dwivedi	PhD/MA/2017	Uttar Pradesh
Md Zafar Ahmed	MTech/CL/2020	Ballia	Saloni Prashant Pandya	PhD/CE/2018	Ahmedabad
Md Nasre Alam	MTech/CL/2020	Samastipur	Awaneesh Upadhyay	PhD/CL/2018	Mirzapur
Samyabrata Chatterjee	MTech/CL/2020	Kolkata	Murali Krishna Enduri	PhD/CS/2018	Guntur
Mahindra Choudhary	MTech/CL/2020	Pune	Deepesh Kumar	PhD/EE/2018	Durg
Ahteshamul Haq	MTech/CL/2020	Ambedkar Nagar	Rameshkumar M. Bhoraniya	PhD/ME/2018	Rajkot
Ayush Nema	MTech/CL/2020	Chennai	Yogesh Shantaram Fulpagare	PhD/ME/2018	Dhule
Vishesh Sharma	MTech/CL/2020	Jammu	Pankaj	PhD/MSE/2018	Ghaziadbad
Swarupkumar Surwase	MTech/CL/2020	Beed	Prajakta Ramesh Jadhav	PhD/CE/2019	Raigad
Akash Varma	MTech/CL/2020	Yavatmal	Seethalakshmi P	PhD/CE/2019	Perundurai
Rajat Zope	MTech/CL/2020	NA	Patnayakuni Ravi Prakash	PhD/CE/2019	Kakinada
Roop Choudhuri	MTech/CSE/2020	Murshidabad	Harsh Lovekumar Shah	PhD/CE/2019	Ahmedabad
Sayak Chowdhury	MTech/CSE/2020	Brahmapur	Praseetha E K	PhD/CH/2019	Kannur
Darshita Jain	MTech/CSE/2020	Raipur	Krupa Shah	PhD/HSS/2019	Pondicherry
Chandan Kumar	MTech/CSE/2020	Darbhanga	Singh Chetan Chandan	PhD/MSE/2019	Mumbai
Karan Kumar	MTech/CSE/2020	Bulandshahr	Sanjay Kumar	PhD/BE/2020	Jhunjhunu
Soumita Kundu	MTech/CSE/2020	Durg	Abhijeet Ojha	PhD/BE/2020	Bhilwara
Souvik Roy	MTech/CSE/2020	Baguihati	Gayathri P	PhD/BE/2020	Thanjavur
Dhananjay Sonawane	MTech/CSE/2020	Jalgaon	Krittika Ralhan	PhD/BE/2020	Trichy
Vivek Srivastava	MTech/CSE/2020	Kanpur	Shruti Goyal	PhD/CG/2020	Ahmedabad
Prathamesh Upadhyay	MTech/CSE/2020	Faridabad	Pradeep Raj K B	PhD/CG/2020	Krishnagiri
Prathmesh Upadhyay	MTech/CSE/2020	Faridabad	Abhishek Sahai	PhD/CG/2020	Prayagraj
Neelay Upadhyaya	MTech/CSE/2020	Mumbai	Mehta Krishnesh Shantilal	PhD/CG/2020	Ahmedabad
Deepesh Agarwal	MTech/EE/2020	Surat	Shaik Althaf	PhD/CH/2020	Nellore
Roshni Agrawal	MTech/EE/2020	Surat	Deekshi Angira	PhD/CH/2020	Bengaluru
Anandsingh Chauhan	MTech/EE/2020	Ahmedabad	Anuj Bisht	PhD/CH/2020	Delhi
Kaushal Dadsena	MTech/EE/2020	Dhamtari	Bhanu Pratap Singh Gangwar	PhD/CH/2020	Uttar Pradesh
Diptesh Datta	MTech/EE/2020	Kolkata	Katla Jagdish Kumar	PhD/CH/2020	Mancherial
Piyush Dewangan	MTech/EE/2020	Durg	Beena Kumari	PhD/CH/2020	Saran

Mahesh Kutwal	PhD/CH/2020	Pune
Althaf Shaik	PhD/CH/2020	Nellore
Deepa Dixit	PhD/CL/2020	Delhi
Asha Liza James	PhD/CL/2020	Kottayam
Sophia Varghese	PhD/CL/2020	Vadodara
Choudhari Jayesh Tulsidas	PhD/CSE/2020	Thakurli East
Adyasha Dash	PhD/EE/2020	Cuttack
V Naveen Deepak	PhD/EE/2020	Karimnagar
Diptiben Patel	PhD/EE/2020	Surat
Dwaipayan Ray	PhD/EE/2020	Agartala
Anirban Roy	PhD/EE/2020	Rampurhat
Batchu Raja Sekhar	PhD/EE/2020	YSR Kadapa
Sneha Ved	PhD/EE/2020	Auckland, New Zealand
Akarsh A	PhD/EH/2020	Pathanamthitta
Ramendra Sahoo	PhD/EH/2020	Sagar
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Dharmendra Kumar	PhD/MA/2020	Nawadah
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Aman Abhishek	PhD/PH/2020	Delhi
Soumik Bandyopadhyay	PhD/PH/2020	Birbhum
Bharti	PhD/PH/2020	Haryana
Fairoos C	PhD/PH/2020	Kozhikode
Upendra Kumar Singh Kushwaha	PhD (PRL)/PH/2016	Ghazipur
Gaurav Kumar Tomar	PhD (PRL)/PH/2016	Bijnor
Anukesh K A	Student	Gandhinagar
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Anup Aglawe	Student	Gandhinagar
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Nakrani Dharmit Ashwin	Student	Gandhinagar
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Satadru Chakrabarty	Student	Gandhinagar
Swasti Chakrabarty	Student	Gandhinagar
Pritha Chakravarti	Student	Gandhinagar
Jaydeepsinh Chavda	Student	Gandhinagar
Rachit Chhaya	Student	Gandhinagar
Unnat Nikhil Dave	Student	Gandhinagar
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Banoth Dinesh	Student	Gandhinagar
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Deependra Dwivedi	Student	Gandhinagar
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S GANESH	Student	Gandhinagar
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Sakshi Gupta	Student	Gandhinagar
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Mrityunjay Jha	Student	Gandhinagar
Shruti Katpara	Student	Gandhinagar
Neeraj Kaushal	Student	Gandhinagar
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Prabhat Kumar	Student	Gandhinagar
Prajwal Kumar	Student	Gandhinagar
Rohtash Kumar	Student	Gandhinagar
Suvil Mahagaonkar	Student	Gandhinagar
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Sriranjani Manivasagam	Student	Gandhinagar
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Sumedha Shah	Student	Gandhinagar
Shashank Shekhar	Student	Gandhinagar
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Vivek Kumar Singh	Student	Gandhinagar
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Anu Suman	Student	Gandhinagar
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Shekhar Kumar Yadav	Student	Gandhinagar
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Suganya Arumugam	Staff	Gandhinagar
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DISTINGUISHED HONORARY PROFESSOR

PROF SURENDRA PRASAD



Prof Surendra Prasad served IIT Delhi for over four decades in several academic and administrative capacities including the post of the director. He received the Vikram Sarabhai Research Award in Electronics and Telecommunications (1987), the Shanti Swarup Bhatnagar Prize for Engineering Sciences (1988), the Om Prakash Bhasin Prize for Research in Electronics and Communications (1994), the VASVIK Award for Information Technology (2006), the Lifetime Achievement Award of the Systems Society of India (2011), the

Distinguished Alumnus Award of IIT Kharagpur. He was also honored with an honorary doctorate by Loughborough University, UK in 2007. He is a Fellow of the Indian National Academy of Engineering, the Indian National Science Academy, the Indian Academy of Sciences and the National Academy of Science and has been a member of the governing body of CSIR and CSIR Society, Government of India and boards of many IITs, NITs and other engineering institutes.

PROF NITISH THAKOR



Prof Nitish Thakor is a professor of biomedical engineering, electrical and computer engineering, and neurology at Johns Hopkins University, and leads the Laboratory for Neuroengineering. He is also the director of the Singapore Institute for Neurotechnology at the National University of Singapore. He earned his undergraduate degree from IIT Bombay in 1974 and a PhD from the University of Wisconsin, Madison in 1981. Prof Thakor is the recipient of the Centennial Medal from the School of Engineering, University of Wisconsin (2008),

Honorary Membership from Alpha Eta Mu Beta Biomedical Engineering student Honor Society. He received the award of Technical Excellence in Neuroengineering from IEEE Engineering in Medicine and Biology Society and the Distinguished Alumnus Award in 2012 from IIT Bombay and the Centennial Medal from the University of Wisconsin, Madison School of Engineering in 2012.

SCHOLARS-IN-RESIDENCE

PROF JYOTIKA RAMAPRASAD



Prof Jyotika Ramaprasad is a professor in the department of journalism and media management at the University of Miami, USA. Previously, she has held positions of administrative responsibility as Associate and Interim Dean in Southern Illinois University, Carbondale. She received her BA and MA from MS University, Baroda and PhD from Southern Illinois University, Carbondale. Prof Ramaprasad's earlier research focused on newsflow, media representation, and advertising; and her recent interests are in journalism studies and social and

behavioral change communication. Almost all of her past and current work is international in orientation spanning Africa, Asia, and Europe. She has been a Fulbright Scholar at the Indian Institute of Communication and a Fulbright Specialist in Germany and South Africa. She has also provided consulting help to a group of journalism/communication educators from five East African countries for their environmental journalism/social change curriculum and has advised several educational institutions in Africa and Asia.

PROF RAGHUBIR SHARAN

Prof Raghbir Sharan served at IIT Kanpur for more than 35 years in the discipline of electrical engineering before joining LNM Institute of Information Technology Jaipur as a distinguished professor in 2004. He completed his BE in telecommunication engineering from Bihar Institute of Technology, Sindri and MASC & PhD in electrical engineering from University of Waterloo, Ontario, Canada. He has also served as the dean of Academic Affairs at IIT Kanpur from 1981 to 1984. From 1999 to 2004, he was involved in setting up Samtel Centre of Display Technologies (SCDT) at IIT



Kanpur. Prof Sharan moved to IITGN in 2012 as a visiting professor in the discipline of electrical engineering and served here till May 2019. Post retirement, Prof Sharan has received two awards from IIT Kanpur: Distinguished Teacher Award (2013) and Institute Fellow award (2016). His research interests include technological progress and human values, semiconductor devices, transducers and instrumentation, noise, engineering education.

DR VASCO MATOS TRIGO



Dr Vasco Matos Trigo is a journalist with more than 30 years of experience in electronic news media. Dr Trigo started his career as a political reporter at a private national radio station (Rádio Renascença). In 1988, he joined RTP (Portuguese public TV network) covering the Parliament and the Presidency of the Republic and as host of main news services. Between 1993 and 1995, he also served as the Parliament speaker's press officer. Between Oct 1996 and Dec 2012, he was the editor and host of weekly TV magazines focusing on science, technology and innovation issues. Since 2000, he has also been teaching TV journalism and science communication to students, researchers and PhD scholars at several higher education institutions in Portugal and abroad. Between 2014 and Feb 2019, he was the head of the Communication and Multimedia Office at ISCTE-University Institute of Lisbon. He holds a graduate degree in Statistics and Information Management from Universidade NOVA, Lisbon (Portugal) and an MBA in Audiovisual and Multimedia from Saint-Louis University Bruxelles (Belgium).

GUEST PROFESSORS

PROF A V ANILKUMAR



Prof Anilkumar Amurtur is an aerospace engineer on the faculty at Vanderbilt University. He has been a NASA investigator of microgravity fluid flow phenomena on space shuttle flights and on the International Space

Station. His research focus includes experimental fluid dynamics, rocket propulsion, drop and bubble dynamics, bio-encapsulation; energy conversion, wind, thermoelectrics, biodiesel; materials processing: float-zones, directional solidification.

Mr V ASHOK



Mr V Ashok is presently a guest professor at IIT Gandhinagar, adjunct professor at IIT Bombay, and a guest professor at National Institute of Advanced Studies (NIAS) Bangalore. He received a BTech in civil engineering from IIT Delhi in 1981. After

serving in the Indian Foreign Service for more than 34 years at various positions, he retired in October 2018 as the Consul General of India, San Francisco, with the rank of Secretary to the Government of India. He has held diplomatic assignments in Indian Missions in Hong Kong, Malaysia, China, Austria, and Sri Lanka apart from postings at the Ministry of External Affairs in New Delhi. He was accredited as India's Ambassador to the Republic of Zimbabwe in 2007 and to the Czech Republic in 2011.

DR NIKHIL BALRAM



Dr Nikhil Balram is the CEO of EyeWay Vision Inc (EVI), a San Jose based company in California, USA, that works in the area of advanced immersive AR technology. Prior to joining EyeWay, Dr Balram was leading display R&D for all Google

hardware products (including AR/VR). An experienced technology executive, Dr Balram's previous positions include CEO at Ricoh Innovations, VP & GM at Marvell, and CTO of National Semiconductor's Display Group. He has won numerous awards including a 2012 Gold Stevie Award for Executive of the Year in the electronics category in the 9th Annual International Business Awards, a 2012 Fellow Award by the Society for Information Display (SID) and the 2011 Alumni Achievement Award by Carnegie Mellon University. Dr Balram is a visiting professor of vision science at the University of California, Berkeley, and serves on the Industry Advisory Board (IAB) at the School of Engineering at Santa Clara University.

PROF RAVI BANAVAR



Prof Ravi Banavar is a professor in the Systems and Control Engineering group at IIT Bombay, a unique interdisciplinary group in the country exclusively offering graduate education (masters and doctoral program) in the field. His research interests

are in the area of geometric mechanics, nonlinear and optimal control, locomotion with applications in aerospace, mechanical and microrobotics. He received his BTech from IIT Madras, MS from Clemson University and a PhD from the University of Texas, Austin. After a short stint as an instructor at the University of California, Los Angeles, he joined the Systems and Control group in IIT Bombay in 1993. He

was the Pratt and Whitney Visiting Chair Professor in the Department of Aerospace Engineering at IISc from Jul-Dec 2015.

MR HARSH BHARGAVA



Mr Harsh Bhargava is currently the president of Bankworld Inc, a prominent Washington DC based management consulting company, with experience in over 75 countries including leadership of projects on competitiveness

strengthening in the emerging markets, entrepreneurship development programs for micro, small and medium enterprises (MSMEs). He received an MBA from the Harvard Business School in 1977. As the Vice President of a US Corporation, he set up businesses in over 60 countries and was awarded the US President's E Award for excellence in international business. Mr Bhargava is also the Founder and the President of I Create Inc, a nonprofit corporation, with centers in India and Kenya. He has written extensively on entrepreneurship as a career option for youth, and created training manuals and books on financial literacy and entrepreneurship. He is Chief Mentor and Director of a nationwide study on competitiveness mindset in India under the aegis of IITGN. He is also the Chief Mentor of Competitiveness Mindset Initiative, an entity set up at IITGN.

DR ACHINTYA K BHOWMIK



Dr Achintya K Bhowmik is the chief technology officer and executive vice president of engineering at Starkey Hearing Technologies, a privately-held medical devices business with operations in more than 100 countries worldwide. In this

role, he is responsible for the company's technology strategy, global research, product development and engineering departments, and leading the drive to transform hearing aids into multifunctional wearable health devices with advanced sensors and artificial intelligence technologies. Prior to joining Starkey, Dr Bhowmik was vice president and general manager of the Perceptual Computing Group at Intel Corporation. Dr Bhowmik is an adjunct professor at Stanford University. He has received numerous awards and honors including TIME's Best Inventions, Artificial Intelligence Breakthrough Award, Red Dot Design Award, among others.

DR R S BISHT



Dr R S Bisht, joint director general (retired), Archaeological Survey of India; has more than 35 years of experience in archaeological research, conservation and environmental development of national monuments and administration. He

has also been associated with the Department of Archaeology and Museum, Haryana; and Department of Archaeology and Museum, Punjab. Dr Bisht is currently the president of the Society for Marine Archaeology and chairman of the National Screening and Evolution Committee, nominated by the Government of India in the Ministry of Culture. He is the recipient of the Padma Shri and Acharya Narendra Dev Alankar in 2013.

PROF RAJENDRA BORDIA



Prof Rajendra Bordia is currently George J Bishop, III endowed chair professor of ceramics and materials engineering at Clemson University, USA. Earlier he has also served as the professor and chair of the Materials Science And Engineering

Department at Clemson University. He has received prestigious awards including Humboldt Senior Scientist Research Award from the Alexander von Humboldt Foundation, Germany (2007); International Expert Award from Technical University Hamburg, Germany (1996, 2001 and 2002). He was the sole recipient of the Marsha Landolt Distinguished Graduate Mentor Award from the University of Washington (2007) and was the sole recipient of the Outstanding Educator of the Year by the Ceramic Education Council of the American Ceramic Society (2012).

PROF R P CHHABRA



Prof R P Chhabra completed his BE in chemical engineering from the University of Roorkee, ME from IISc Bangalore and PhD from Monash University, Australia. He has been associated with IIT Kanpur; University of

New South Wales, Sydney; University College of Swansea; Monash University, Clayton; and University of Sydney. He is a Fellow of the Indian National Science Academy, the Indian Academy of Sciences, Bangalore, the National Academy of Sciences, India and the Indian National Academy of Engineering. Prof Chhabra was the recipient of the Herdillia Award of the Indian Institute of Chemical Engineers for Excellence in Basic Research in Chemical Engineering and the Amar Dye-Chem Award of the Indian Institute of Chemical Engineers for Excellence in Research and Development.

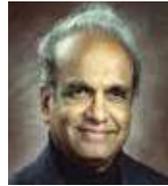
DR PRAVINRAY D GANDHI



Dr Pravinray D Gandhi is currently corporate fellow, Retail and Industry R&D at the Underwriter's Laboratory (UL), USA. He received his BTech from IIT Delhi and PhD from the University of Notre Dame. His focus is on quantifying fire risks and

hazards and has been involved in developing new test methods and standards. He is currently working with the fire safety community and universities to improve fire science education.

PROF RAMESH GAONKAR



Prof Ramesh Gaonkar is a guest professor of electrical engineering at IITGN. He obtained an interdisciplinary PhD degree in instructional technology & electrical engineering from Syracuse University, Syracuse, New York. He

has received numerous awards for his teaching and scholarly activities, including the American Society for Engineering Education (ASEE) Outstanding Teacher Award, St Lawrence Section (1984) the SUNY Chancellor's Award for Creative and Scholarly Activities (2003), the CNY Technology - Outstanding Teacher Award (2003), and the OCC Board of Trustees Award for Outstanding Contributions (1982, 1989 and 2007).

DR WALTER NILS HAKALA

Dr Walter Hakala is currently director of Asian Studies Program and Associate Professor at the Department of English at the University at Buffalo, USA. He did his BA from the University of Virginia; MA from Jawaharlal Nehru University, and PhD

from the University of Pennsylvania. His research interests include Literature and languages of North India and Central Asia; lexicography; Mughal and early colonial South Asian history; and South Asian Islam, Sufism and epigraphy.

DR RAJEN JASWA

Dr Rajen Jaswa is an accomplished serial technology entrepreneur. His most recent role was that of CEO and chairman of Ddyno from 2009- 2012. From 2003-2008, he volunteered full-time for TIE Silicon Valley, serving as president from

2005-2008 and as a director from 2003-2004. Dr Jaswa was the co-founder, chairman and CEO of Selectica from 1996-2002.

PROF ASHOK JOSHI

Prof Ashok Joshi is a professor in the Department of Aerospace Engineering at IIT Bombay. He has more than thirty five years of experience in teaching, research & development and continuing education. He specialises in dynamics

and control of flexible flight vehicles, modelling and simulation of multi-agent swarming behaviour, navigation and guidance, system architectures. He did his BTech and MTech (Aerospace Engineering) and PhD (Aerospace Engineering) from IIT Bombay. He is also a member of the Aeronautical Society of India (AeSI) and American Institute of Aeronautics & Astronautics (AIAA), USA.

PROF LILAVATI KRISHNAN

Prof Lilavati Krishnan retired from IIT Kanpur in 2014 from the Department of Humanities and Social Sciences. Prof Krishnan completed her PhD in June 1978 from McMaster University, Hamilton, Ontario, Canada. Her

area of specialisation includes psychology (social psychology, personality; cross cultural psychology). She received the Distinguished Teacher Award, IIT Kanpur on Sep 5, 2003. She was the president, National Academy of Psychology (1998-99).

DR JORDAN LITMAN

Dr Jordan Litman is an associate professor at the University of Maine, Machias, USA; a visiting research scientist at the Institute for Human and Machine Cognition, Florida, USA; and a research fellow of the Center For Curiosity, New York,

USA. He did BA from Arcadia University, Glenside, Pennsylvania, and MA and PhD from the University of South Florida, Tampa. His research focuses on the study of curiosity and its relationship to knowledge seeking and self-directed learning.

DR V N PRABHAKAR*

Dr V N Prabhakar served as the director (excavations and explorations) at the Archaeological Survey of India before joining IITGN as associate professor in the discipline of Humanities and Social Sciences in

Sept 2020. Dr Prabhakar received his PhD from Kurukshetra University and joined the Archaeological Survey of India in 1997. He served at various field offices of the ASI in Agra and Aurangabad, and later as superintending archaeologist at Aurangabad Circle and Excavation Branch, Delhi. Dr Prabhakar directed excavations at the Harappan sites of Rupnagar (2011-12) and Karanpura (2012-13 and 2013-14), and the medieval site of Daulatabad (2010), besides participating in excavations at Mehtab Bagh, Madarpur, Fatehpur Sikri, Sanauli (all four in Uttar Pradesh), Ellora (Maharashtra) and Kashipur (Uttarakhand).

PROF DURGESH C RAI

Prof Durgesh C Rai is a professor in the Department of Civil Engineering at IIT Kanpur. He received the 2000 Shah Family Innovation Prize from the Earthquake Engineering Research Institute (USA) and the Young Engineer Award

from the Indian National Academy of Engineering (1999). He was elected as Fellow of Indian National Academy of Engineering in 2010. He is coordinator of National Information Centre of Earthquake Engineering (NICEE at IIT Kanpur and serves on the Board of World Seismic Safety Initiative (WSSI) of the International Association of Earthquake Engineering (IAEE).

PROF T R RAMACHANDRAN

Prof T R Ramachandran was the founder director of the Jawaharlal Nehru Aluminium Research Development and Design Centre (JNARDDC) during

1989-99. He has been a visiting professor at the Nonferrous Materials Technology Development Centre, Hyderabad. He has served as part-time director of the National Aluminium Company (1991-93), Bharat Aluminium Company (1994-97), Paradeep Carbons (2002-2006) and presently Alufluoride. He was awarded the Hindustan Zinc Gold Medal in 1994 and the NALCO Gold Medal in 2006 by the Indian Institute of Metals.

PROF MYTHILY RAMASWAMY

Prof Mythily Ramaswamy is a professor in the TIFR Centre for Applicable Mathematics, Bengaluru. She received the Fulbright Nehru Academic and Professional Excellence Fellowship, 2016-17. She was awarded the Kalpana Chawla Award for women scientists

in 2004. She is a Fellow of the Indian Academy of Sciences, Bangalore, the National Academy of Sciences, Allahabad, and serves on the Editorial Board of the Journal of Ramanujan Mathematical Society, Proceedings of Indian Academy of Sciences Mathematical Sciences and Boundary Value Problems. Currently she serves as a board member of IIT Gandhinagar and NIT Calicut Board of Governors and is a member of the ISERS standing committee.

**PROF PRAMOD RASTOGI**

Prof Pramod Rastogi is a guest professor at the École polytechnique fédérale de Lausanne, Switzerland. He received his MTech degree from IIT Delhi, and PhD from the University of Franche

Comté, France. He has edited/authored nine books in the fields of holography, DSP, optical metrology & digital optical signal analysis with internationally reputed publishers. Prof Rastogi is the 2014 recipient of the SPIE Dennis Gabor Award. He is also a member of the Swiss Academy of Engineering Sciences. He is also a recipient of the Hetényi Award for the most significant research paper published in Experimental Mechanics in the year 1982.

DR SRINIVAS REDDY

Dr Srinivas Reddy did BA in south asian studies from Brown University. He holds an MA and a PhD in south and southeast asian studies from the University of California, Berkeley. Currently he is working as a teaching associate for

Applied Music Program – Sitar at Brown University. He has published two books titled “Giver of the Worn Garland: Sri Krishnadevaraya’s Amuktamalyada” and “Raya”. He has advanced language training in reading and translation in Sanskrit, Pali, Telugu, Tamil. He is founder and artistic director of Sadhana Foundation, a non-profit organisation dedicated to preserving and promoting the classical music of South Asia throughout the world.

PROF DHEERAJ SANGHI

Prof Dheeraj Sanghi is the director of Punjab Engineering College, Chandigarh. Earlier he was professor of computer science and engineering at IIT Kanpur. He has also been a visiting faculty of computer science and

engineering (2015-2017) at IIIT Delhi where he also served as the dean of academic affairs and the dean of external relations. From 2008 - 2010, he was the Director, LNM Institute of Information Technology (LNMIIT), a public-private partnership University in Jaipur. He was the Dean of Academic Affairs at IIT Kanpur from 2011 to 2014. Prof Sanghi has a BTech from IIT Kanpur, and MS and PhD from the University of Maryland. His research interests lie in computer networks and network security.

PROF SHYAM SUNDER

Prof Shyam Sunder is the James L Frank professor of accounting, economics, and finance at the Yale School of Management; professor in the Department of Economics; and fellow of the Whitney Humanities Center.

He is a world-renowned accounting theorist and experimental economist. His research contributions include financial reporting, information in security markets, statistical theory of valuation, and design of electronic markets. He is a pioneer in the fields of experimental finance and experimental macroeconomics. Prof Sunder has won many awards for his research that includes six books and more than 200 articles in the leading journals of accounting, economics and finance, as well as in popular media.

* For part of the year

DR MAHESH TANDON



Dr Mahesh Tandon is an international expert in structural engineering and is the Managing Director of Tandon Consultants Pvt Ltd. He has served as the president, Indian Association of Structural Engineers (2015-16) and president, Indian

Society of Wind Engineering (2015-16). He is a Fellow of Indian National Academy of Engineering (INAE), the past chairman of the National Information Center for Earthquake Engineering at IIT Kanpur and the past president of Indian Concrete Institute.

MR M VENKATARAMAN



Mr M Venkataraman is the immediate past president of the Indian Chapter of International Geosynthetics Society. He obtained a BTech in civil engineering and MTech in soil mechanics and foundation from IIT Madras in 1971. From 1971-1980, he

worked in quasi-government organisations to design, execute infrastructure projects. From 1980-1985, he worked as project manager for Swedish consultants for Middle East projects. In 1985, he joined Netlon India and started geosynthetics marketing in India and was involved in geosynthetics projects in roads, railways, ground improvement with Netlon and Tensar products. He retired as AVP from Garware in 2005. He has been working as a freelance geotechnical and geosynthetics consultant from 2013 onwards. Mr Venkataraman has written and published more than 50 technical papers in various geotechnical journals.

PROF FREDERICK COOLIDGE

Prof Frederick Coolidge is the professor & co-director of Undergraduate Education in Psychology at the University of Colorado, Colorado Springs, USA. He received his BA, MA, and PhD from the University of Florida and completed a two-year Postdoctoral Fellowship in Clinical Neuropsychology at Shands



Teaching Hospital, University of Florida. His research interests lie in the area of behavior genetics, personality disorders, paleopsychology, cognitive archaeology and personality assessment. In the past, Prof Coolidge has also served as a Senior

Visiting Scholar (2015) at Oxford University, Keble College, UK and as a Scholar-in-Residence at IITGN. Prof Coolidge is a three-time Fulbright Fellowship Award recipient (India, 1987, 1992, 2005). He has authored/co-authored numerous books and journal articles. Dr Coolidge is a member of the Association of Psychological Science, the European Society for Human Evolution, the Society for American Archaeology, and International Union of Prehistoric and Protohistoric Sciences.

PROF KOSHY THARAKAN



Prof Koshy Tharakan obtained his Masters as well as Doctoral degree in Philosophy from the University of Hyderabad and began his career as a lecturer in 1996 at the Department of Philosophy, Goa University. He joined IITGN as an

associate professor in 2009 where he also served as the Dean of Student Affairs. He returned to Goa University after a two-year stint at IITGN and is currently a professor and head of the Department of Philosophy, Goa University. Prof Tharakan's areas of specialisation lies in philosophy of social science and continental philosophy. His research interests include meta-ethics, philosophy of social science, and phenomenology.

PROF P P JOGLEKAR

A former professor at the Department of AIHC and Archaeology at Deccan College, Pune, Prof Pramod Prabhakar Joglekar is currently a guest professor in the discipline of Humanities and Social Sciences at IITGN. Prof Joglekar has over 25 years of experience of teaching. He is the recipient of several awards and honours, including Professor H D Sankalia Young



Archaeologist Award (1993), Visiting Fellowship of Ford Foundation (1990) (US and Holland), Post-Doctoral Fellowship of Government of Italy (1993), Charles Wallace Fellow at the Cambridge University (1998), Maharashtra State Literary Award for a

book on biotechnology (2002), Ranjit Desai Literary Award (2004) for 'Timeline' (a book in Marathi), among others. He holds BSc and MSc in Zoology, MPhil in Statistics, MA in Indology; and PhD in Archaeology. His research interests revolve around: history of science and technology, archaeological science, humans, plants and animal interactions in the past, biomolecular archaeology, and science and society.

PROF ROSA MARIA PEREZ



Prof Rosa Maria Perez is an anthropologist and senior researcher at the Centre for Research in Anthropology (CRIA), Portugal. Until August 2020, she was a professor of the Department of Anthropology of ISCTE-University Institute

of Lisbon. She has been a visiting professor at different universities in the USA (particularly Brown University), Europe, Mozambique, Brazil and India. Since 2012, Prof Perez has been a visiting professor at IITGN. Her core research is on Indian society and social segregation (with a particular focus on Dalit and women), women studies, colonialism and post-colonialism in India, fieldwork methodology, public anthropology and human rights. Prof Perez is a consultant to the UN Commission for Gender Equality and Women's Empowerment and European Councils on Asia. Her latest book in English is "Transdisciplinary Ethnography in India: Women in the Field", co-edited with Lina M Fruzzetti (Routledge, London and NY, 2021).



FACULTY

DISCIPLINE	DESIGNATION	PHD/LAST DEGREE	SPECIALISATION
ARCHAEOLOGICAL SCIENCES			
Sharada V Channarayapatna	Assistant Professor	Deccan College, 2014; University of Ferrara, 2018	Archaeozoology and taphonomy and bioarchaeology
Michel Danino	Visiting Professor	École Supérieure d'Électricité (Gif-surYvette, France), 1977	Archaeology, history and culture of ancient India
Alok Kumar Kanungo	Assistant Research Professor	Deccan College, 2003	History and origin of glass
BIOLOGICAL ENGINEERING			
Dhiraj D Bhatia	Assistant Professor	Tata Institute of Fundamental Research, 2013	DNA nanotechnology and chemical biology
Sharad Gupta	Associate Professor	University of Pittsburgh, 2009	Protein misfolding in Alzheimer's and Huntington's diseases
Sharmistha Majumdar	Assistant Professor	Cornell University, 2006	Genomic and proteomic analysis of transposases and transposase homologs
Karla Patricia Mercado-Shekhar	Assistant Professor	University of Rochester, 2015	Tissue elasticity imaging and ultrasound techniques
Pratik Mutha	Associate Professor	Pennsylvania State University, 2009	Sensorimotor control and learning
Umashankar Singh	Assistant Professor	Uppsala University, Sweden, 2006	Cytoprotection
Virupakshi Soppina*	Assistant Professor	Gulbarga University, Gulbarga, 2006	Kinesins and intracellular transport
Ashutosh Srivastava**	Assistant Professor	CSIR Centre for Cellular and Molecular Biology, Hyderabad, 2015	Integrative modeling of macromolecular complexes
Vijay Thiruvakatam	Assistant Research Professor	Jiwaji University, 2009	Small molecules x-ray crystallography
CHEMICAL ENGINEERING			
Sameer V Dalvi	Professor	IIT Bombay, 2007	Supercritical fluid processing
Pratyush Dayal	Assistant Professor	University of Akron, 2007	Self-oscillating polymer gels
Hari Sai Ganesh**	Assistant Professor	The University of Texas at Austin, 2018	Modeling and simulation
Chinmay Ghorai	Professor	IIT Bombay, 2007	Particle engineering and powder processing
Kabeer Jasuja	Associate Professor	Kansas State University, 2011	Synthesis of two-dimensional nanomaterials
Nitin U Padhiyar	Assistant Professor	IIT Bombay, 2008	Process optimization and control
Mithun Radhakrishna	Assistant Professor	Columbia University, 2014	Study of soft matter systems through theory and molecular simulations
Kaustubh S Rane	Assistant Professor	University at Buffalo, 2014	Thermodynamics and statistical mechanics of the interfacial systems
Babji Srinivasan*	Assistant Professor	Texas Tech University, 2011	Design, control and monitoring of complex systems with human-in-the-Loop
Prachi Thareja	Associate Professor	University of Pittsburgh, 2008	In-situ rheology of crystallizing fatty acid pastes
CHEMISTRY			
Chandrakumar Appayee	Associate Professor	IISc, Bangalore 2008	Asymmetric catalysis
Sudipta Basu	Associate Professor	Max-Planck Institute for Molecular Physiology, Germany, 2006	Chemical biology of mitochondria and endoplasmic reticulum
Bhaskar Datta	Associate Professor (Jointly with Biological Engg.)	Carnegie Mellon University, 2004	Nucleic acid based chemical biology
Arnab Dutta*	Assistant Professor	Arizona State University, 2012	Bio-inorganic chemistry
Sriram V Gundimeda	Associate Professor	IIT Bombay, 2001	Bio-organic chemistry
Iti Gupta	Associate Professor	IIT Bombay, 2005	Macrocyclic receptors & expanded porphyrinoids
Saumyakanti Khatua	Associate Professor	Rice University, 2011	Plasmonics
Sivapriya Kirubakaran	Associate Professor	IISc Bangalore, 2007	Drug discovery and cancer chemical biology
Sairam Swaroop Mallajosyula	Assistant Professor	JNCASR, Bangalore, 2009	Carbohydrate-protein interactions
Sudhansu Sharma	Assistant Professor	IISc Bangalore, 2009	Materials, electrochemistry
CIVIL ENGINEERING			
Dhiman Basu	Associate Professor	SUNY, Buffalo, 2012	Rotational seismology, complex structures
Udit Bhatia	Assistant Professor	Northeastern University, 2018	Critical infrastructure resilience and network science
Sudhir K Jain	Director & Professor	Caltech, 1983	Earthquake engineering, structural dynamics
Ashwini Kumar	Visiting Professor	University of Waterloo, 1974	Stability and large deformation of structures
Manish Kumar	Assistant Professor	State University of New York at Buffalo, 2015	Performance-based earthquake engineering

DISCIPLINE	DESIGNATION	PHD/LAST DEGREE	SPECIALISATION
Vimal Mishra	Associate Professor (Jointly with Earth Science)	Purdue University, 2010	Surface water hydrology
Pranab Kumar Mohapatra	Professor	IIT Kanpur, 1999	Hydraulics and water resources engineering
C N Pandey	Visiting Professor (Jointly with Earth Science)	North Gujarat University, 2011	Forestry, wildlife, environment
Sameer Patel**	Assistant Professor	Washington University, Saint Louis, USA, 2017	Aerosol and air quality
Amit Prashant	Professor	University of Tennessee, 2004	Constitutive modeling for granular materials
G V Rao	Visiting Professor	IISc Bangalore, 1973	Geotechnical testing and evaluation
Ajanta Sachan	Associate Professor	University of Tennessee, 2005	Material characterization
Gaurav S	Associate Professor	University of Minnesota, 2011	Uncertainty quantification
COMPUTER SCIENCE AND ENGINEERING			
Nipun Batra	Assistant Professor	IIIT Delhi, 2017	Sensor networks, machine learning and computational sustainability
Abhishek Bichhawat**	Assistant Professor	Universität des Saarlandes, Germany, 2018	Language-based security
Bireswar Das	Associate Professor	Institute of Mathematical Sciences, Chennai, 2010	Computational complexity theory and algorithms
Anirban Dasgupta	Professor	Cornell University, 2005	Algorithms for large scale data
Manoj D Gupta	Assistant Professor	IIT Delhi, 2013	Dynamic graph algorithms
Balagopal Komarath**	Assistant Professor	IIT Madras, 2016	Circuit complexity and other low-level computational models
Sameer G Kulkarni**	Assistant Professor	Washington University, Saint Louis, USA, 2018	Network function virtualization
Neeldhara Misra	Assistant Professor	Institute of Mathematical Sciences, Chennai, 2012	Design and analysis of algorithms
Mayank Singh	Assistant Professor	IIT Kharagpur, 2019	Text mining natural language & processing and machine learning
CREATIVE LEARNING			
Manish Jain	Associate Teaching Professor	IIT Kanpur, 1993 (BTech)	3D geometry, polyhedra, geodesics, machines & mechanisms, and recreational math
DESIGN			
Manasi A Kanetkar	Assistant Teaching Professor	IIT Bombay, 2006 (MDes)	Pedagogy in design education and semiotics & design
EARTH SCIENCES			
Sanjay Singh Bora	Assistant Professor	University of Potsdam, 2016	Spectral analysis of source, path and site effects
Vikrant Jain	Professor	IIT Kanpur, 2001	Earth surface processes
Manish Kumar	Assistant Professor	The University of Tokyo, 2009	Pathways of contamination in freshwater system
R N Singh	Visiting Professor	Banaras Hindu University, Varanasi, 1969	Modeling of near-surface geophysical and environmental processes
Pradeep Srivastava	Adjunct Professor	Peoples' Friendship University, Moscow, Russia, 1983	Theoretical mechanics & control systems
ELECTRICAL ENGINEERING			
Arup Lal Chakraborty	Associate Professor	University of Strathclyde, UK, 2010	Tunable diode laser spectroscopy for gas parameter measurement
Nithin V George	Associate Professor	IIT Bhubaneswar, 2012	Active noise control, adaptive signal processing
Ravi S Hegde	Assistant Professor	University of Michigan, Ann Arbor, 2008	Optical properties of nanostructures
Ragavan K	Associate Professor	IISc Bangalore, 2006	Transformer diagnostics
Nitin Khanna	Assistant Professor	Purdue University, USA, 2009	Multimedia security- sensor forensics
Uttama Lahiri	Associate Professor	Vanderbilt University, 2011	Virtual reality based human computer interaction used in affective computing
Joycee Mekie	Assistant Professor	IIT Bombay, 2009	VLSI design
Nihar Ranjan Mohapatra	Professor	IIT Bombay, 2003	Semiconductor devices and technology
Naran M Pindoriya	Associate Professor	IIT Kanpur, 2009	Restructuring power systems- technical and economical issues
S Rajendran	Associate Teaching Professor	IIT Madras (MTech), 1988	High speed packaging machines-VFFS and HFFS technologies
Shanmuganathan Raman	Associate Professor (Jointly with CSE)	IIT Bombay, 2011	Computational photography
Himanshu Shekhar	Assistant Professor	University of Rochester, 2014	Therapeutic ultrasound and nonlinear imaging

DISCIPLINE	DESIGNATION	PHD/LAST DEGREE	SPECIALISATION
HUMANITIES AND SOCIAL SCIENCES			
Mohd Mubashshir Ahsan	Lecturer	Jawaharlal Nehru University, 2016	Arabic and Islamic studies in India
Ambika Aiyadurai	Assistant Professor	National University of Singapore, 2015	Anthropology of nature conservation and the role of local communities
Dyotana Banerjee**	Lecturer	IIT Gandhinagar, 2020	Politics of urban transformations
Arka Chattopadhyay	Assistant Professor	Western Sydney University, 2016	20th century literature: modernism and postmodernism, modern theatre, European avant garde fiction
Nishaant Choksi	Assistant Professor	University of Michigan, Ann Arbor, 2014	Semiotics; linguistic ethnography; script and writing systems
Jooyung Kim	Assistant Teaching Professor	University of Delaware, 2018	Linguistics syntax and semantics
Sharmita Lahiri	Assistant Professor	University of Houston, 2008	Postcolonial literature and composition
Leslee Lazar	Assistant Teaching Professor	National Brain Research Centre, India, 2013	Neuroscience of design, science communication, cultural cognition, behavioral change
Jaison A Manjaly	Professor	IIT Kharagpur, 2008	Experience, consciousness, rationality
Angus McBlane	Visiting Assistant Professor	Cardiff University, 2014	Cultural theory, embodiment, environmental humanities
Achal Mehra	Visiting Professor	Southern Illinois University, Carbondale, 1985	Online media, media management, investigative reporting, media law, media ethics
Mona G Mehta*	Assistant Professor	University of Chicago, 2010	Democracy, ethnic conflict, civil society, nationalism and identity politics in India
Krishna Prasad Miyapuram	Associate Professor (Jointly with CSE)	University of Cambridge, 2008	Brain imaging (fMRI) and cognitive science
Vivek V Narayan*	Assistant Professor	Stanford University, 2019	Performance studies and dalit studies
V N Prabhakar**	Associate Professor	Kurukshetra University, 2013	Archaeology of protohistorical India
A Ramanathan*	Visiting Professor	Bombay University, 1981	Managerial economics, cost benefit analysis, applied econometrics and monetary economics
Arnapurna Rath	Assistant Professor	IIT Bombay, 2010	South-Asian literature, critical theories, Bakhtin studies, creative writing
Tannistha Samanta*	Assistant Professor	University of Maryland, 2012	Social demography, aging in developing countries
Madhumita Sengupta	Assistant Professor	University of Calcutta, 2009	Colonial India and the socio - political history of Assam
Mana A Shah	Lecturer	Gujarat University, 2012 (MA)	Sanskrit and Prakrit grammar, Jain kavya and Stotra literature, manuscriptology
Atul Singh*	Visiting Professor	The Wharton School, University of Pennsylvania, 2010	Global economy, world affairs, geopolitics, political systems and sustainability
Malavika Subramanyam	Assistant Professor	Harvard University, 2009	Socioeconomic context and neighbourhoods on nutrition and diabetes
Meera Mary Sunny	Associate Professor	University of Warwick, 2011	Visual attention, attention capture
MATERIALS ENGINEERING			
Amit Arora	Assistant Professor	The Pennsylvania State University, 2011	Friction stir welding, heat transfer and visco-plastic flow
Abhay Raj Singh Gautam	Assistant Professor	University of Virginia, 2009	Interface structure and dynamics
Pradipta Ghosh	Assistant Professor	IISc Bangalore, 2014	Synthesis of nanocrystalline metals alloys and composites, microstructure characterization of nanocrystalline materials
S P Mehrotra	Visiting Professor	IIT Kanpur, 1973	Mineral processing and process metallurgy
Abhijit Mishra	Associate Professor	University of Illinois, Urbana-Champaign, 2010	X-Ray diffraction, membrane properties
Superb Kumar Misra	Assistant Professor (Jointly with Mechanical Engg.)	Imperial College London, 2007	Biomaterials and tissue engineering
Jyoti Mukhopadhyay	Visiting Professor	IIT Bombay, 1982	Structure – property correlation
Emila Panda	Associate Professor	Max Planck Institute, Germany, 2009	Investigations of thin films and nanostructured materials
Raghavan Ranganathan	Assistant Professor	Rensselaer Polytechnic Institute, 2016	Atomistic/Molecular simulations of structure-property relations and dynamics of soft matter
Sriharitha Rowthu	Assistant Professor	École Polytechnique Fédérale de Lausanne, 2016	Wetting and dewetting phenomena
MATHEMATICS			
Sanjaykumar Amrutiya	Assistant Professor	Harish-Chandra Research Institute, Allahabad, 2012	Tannakian group schemes, moduli spaces, vector bundles
Fatma Cicek**	Assistant Research Professor	University of Rochester, NY, USA, 2020	Analytic number theory
Atul Abhay Dixit	Assistant Professor	University of Illinois at Urbana-Champaign, 2012	Analytic number theory
Mohan Joshi	Visiting Professor	Purdue University, 1973	Nonlinear analysis

DISCIPLINE	DESIGNATION	PHD/LAST DEGREE	SPECIALISATION
N Ladhawala*	Adjunct Professor	Purdue University, 1976	Harmonic analysis
Chetan Pahlajani	Assistant Professor	University of Illinois, Urbana-Champaign, 2007	Probability theory and stochastic processes
Satyajit Pramanik**	Assistant Professor	IIT Ropar, 2016	Mathematical modeling and scientific computing
Arnab Saha	Assistant Professor	University of New Mexico, 2012	Arithmetic jet spaces
Bipul Saurabh	Assistant Professor	Indian Statistical Institute, Delhi, 2016	Operator algebras, noncommutative geometry and quantum groups
Indranath Sengupta	Associate Professor	IISc Bangalore, 2001	Commutative algebra, algebraic geometry
V D Sharma	Visiting Professor	Banaras Hindu University, 1972	Quasilinear systems of partial differential equations
Jagmohan Tyagi	Associate Professor	IIT Kanpur, 2008	Ordinary differential equations, elliptic partial differential equations
Akshaa Vatwani	Assistant Professor	Queen's University, 2016	Analytic number theory, sieve methods and algebraic number theory

MECHANICAL ENGINEERING

Ravi Sastri Ayyagari	Assistant Professor	Illinois Institute of Technology, 2013	Solid mechanics, constitutive modeling, computational mechanics
Atul Bhargav	Associate Professor	University of Maryland, College Park, 2010	Fuel cell systems design and simulation
Uddipta Ghosh	Assistant Professor	IIT Kharagpur, 2016	Low-reynolds number hydrodynamics, with special focus on electrokinetics of complex systems
K R Jayaprakash	Assistant Professor	University of Illinois at Urbana Champaign, 2013	Wave propagation in one and two-dimensional granular media
Vinod Narayanan	Associate Professor	JNCASR, Bangalore, 2006	Fluid mechanics
Harish J Palanhandalam-Madapusi	Associate Professor	University of Michigan, Ann Arbor, 2007	Systems and control theory, system identification (data-based modeling)
N Ramakrishnan	Visiting Professor	IIT Bombay, 1980	Manufacturing, automation and composite materials
D P Roy	Visiting Professor	Tech University Aachen, 1976	Fluid dynamics and fluid machinery
G K Sharma	Visiting Professor	Moscow Power Engineering Institute, 1974	Thermal engineering
Dilip S Sundaram	Assistant Professor	Georgia Institute of Technology, 2013	Thermofluid sciences, combustion, and energetic materials
Jaichander Swaminathan	Assistant Professor	Massachusetts Institute of Technology, 2017	Thermal sciences, water-energy systems, industrial reuse and recycling
Venkata Madhukanth Vadali	Assistant Professor (Jointly with Electrical Engg.)	University of Wisconsin, Madison, 2013	Dynamic systems, control systems, manufacturing, mechatronics, robotics
Vineet Vashista	Assistant Professor	Columbia University, 2015	Design and control of mechanical systems

PHYSICS

Prasanna Venkatesh Balasubramanian	Assistant Professor	McMaster University, 2013	Theoretical research in quantum optics and nanophysics, ultracold atomic physics
Rupak Banerjee	Assistant Professor	University of Calcutta (Saha Institute of Nuclear Physics), 2012	Surface physics and materials science
Arpan Bhattacharyya	Assistant Professor	IISc Bangalore, 2015	Quantum entanglement in many-body systems
Vinod Chandra	Associate Professor	IIT Kanpur, 2009	Quark-gluon-plasma and relativistic heavy ion collisions
Baradhvaj Coleppa	Assistant Professor	Michigan State University, 2009	Beyond the standard model – model building and LHC, phenomenology of new states
Krishna Kanti Dey	Assistant Professor	IIT Guwahati, 2011	Active matter, colloidal dynamics, nanotechnology
Chandan Kumar Mishra**	Assistant Professor	Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, 2017	Experimental soft condensed matter physics
R R Puri	Visiting Professor	Bombay University, 1981	Theoretical quantum optics, quantum mechanics, random matrix theory of quantum chaos
Sutapa Roy**	Assistant Professor	Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, 2013	Theoretical physics, statistical mechanics, soft matter
Sudipta Sarkar	Associate Professor	University of Pune, IUCAA, 2009	General relativity and black hole thermodynamics
Anand Sengupta	Associate Professor	IUCAA Pune, 2005	Detection of gravitational waves, aspects of CMB data analysis



NON-TEACHING STAFF

AGAINST REGULAR POSITIONS

EMPLOYEE NAME	DESIGNATION
Akshay	Junior Accountant
M Armugam	Junior Laboratory Attendant
Suganya Arumugam	Junior Technical Superintendent
Babloo	Junior Laboratory Attendant
Vinod Kumar Singh Baghel	Supeintending Engineer
Palak R Bagiya	Junior Laboratory Assistant
Sudeep Narayan Banerjee	System Analyst
Suvakanta Barik	Junior Technical Superintendent
Raju Beerasant	Junior Laboratory Assistant
Timir Yakunj Berawala	Junior Assistant
Ram Babu Bhagat	Deputy Registrar
Rahulendra Bhaskar	Junior Technical Superintendent
Nirav Madanbhai Bhatt	Junior Laboratory Assistant
Shri Krishan Birhman*	Assistant Registrar
Tushar H Brahmhatt	Laboratory Attendant
Biresh Chaubey	Assistant Registrar
Divyangi N Chaudhari	Junior Laboratory Assistant
Hareshkumar Chaudhari**	Assistant Staff Nurse
Pannaben Chaudhari	Assistant Library Information Officer
Rohit Chaudhary	Technical Superintendent
Krupesh Chauhan	Junior Accountant
Pratikumar K Chavda	Junior Laboratory Assistant
Prem Kumar Chopra	Registrar
Tapas Kumar Das	Senior Library Information Assistant
Dinesh B Desai	Junior Laboratory Attendant
Varaprasad Dhanikela	Junior Laboratory Assistant
Bhavna V Dharani	Junior Accountant
Supin Gopi	Junior Technical Superintendent
Hemant Kumar Gupta	Junior Assistant
Tej Bahadur Gurung	Assistant
Laxmi P Hirani	Laboratory Assistant
Yogesh Dattatraya Jade	Junior Superintendent
N Jayakumar	Assistant Engineer
Meena Joshi	Assisant Registrar
Vishnu Deth J J	Assistant Engineer
Jithesh V K	Superintendent
Payal Kabariya	Junior Assistant
Dharmeshkumar V Kapadiya	Laboratory Attendant
Hani M Khamar	Junior Assistant
Chirag D Khuha**	Junior Accounts Assistant
T S Kumbar	Librarian
Dipakkumar K Lalpura	Junior Assistant
Pijush Majumdar	Assisant Registrar
Prashant G Makwana	Junior Assistant
Saumya Malavia*	Junior Assistant
Vijay Meena	Junior Accountant
Jay Mehta	Junior Accountant
Parth R Mehta	Junior Assistant
Shreejit Menon*	Superintendent
Laxmi Kant Mishra	Assistant Engineer
Rupali S Mohite	Junior Assistant
Navdiwala Ankur K	Laboratory Assistant
Pradipbhai K Ninama	Junior Laboratory Attendant
Dharmendra S Panchal	Junior Engineer

EMPLOYEE NAME	DESIGNATION
Ashish Kumar Pandey	Junior Laboratory Attendant
Sanjeev Kumar Pandey	Accounts Officer
Pragnesh Parekh	Technical Superintendent
Dinesh H Parmar	Physical Training Instructor
Switi R Parmar*	Junior Assistant
Shaileshkumar J Patani	Junior Assistant
Akash Mahendrakumar Patel	Junior Superintendent
Arika Patel	Senior Accountant
Bhikhabhai R Patel	Junior Laboratory Attendant
Darshan C Patel	Assistant
Harshad Patel	Junior Account Officer
Jignesh S Patel	Laboratory Assistant
Kamini Patel	Assistant
Sachin Maganlal Patel	Senior System Analyst
Sanjay T Patel	Junior Laboratory Assistant
Sanket Patel	Junior Technical Superintendent
Twinkle Patel	Junior Account Officer
Jitendra Pukhraj Pawar	Junior Accountant
Jayesh Prajapati	Junior Laboratory Attendant
Prajapati Ramanand L	Junior Laboratory Assistant
Narendra J Rabadiya	Junior Assistant
Vaibhavi Raulji	Junior Assistant
Santosh Raut	Superintendent
Ishan Raval*	Junior Laboratory Assistant
Pranav Rohit	Assisant Registrar
Pavitra Kumar Rout	Junior Accountant
Saswati Roy	Assistant Registrar
Kumar Ankit Saha**	Junior Accounts Assistant
Shibaram Sahoo	Junior Laboratory Attendant
Jay Hitesh Sampat**	Junior Accounts Assistant
Komal Sangtani	Assistant
Sujit Kumar Shah	Assistant
Viral Y Shah	Superintendent
Deepak Sharma	Junior Laboratory Assistant
H K Sharma	Deputy Registrar
Mukesh Sharma	Staff Nurse
Gaurav Shukla	Superintendent
Nitin Shukla	Technical Superintendent
Gaurav Kumar Singh	Junior Assistant
Harish Singh	Junior Assistant
Ratnesh Kumar Singh**	Assistant Physical Training Instructor
Mrugesh R Solanki	Junior Superintendent
Tenils Solanki	Superintendent
Nilesh Soni	Junior Engineer
Ravi Subhash Soni	Assistant Engineer
Hiral Suchak	Junior Accountant
Raviraj V Sukhadiya	Junior Laboratory Assistant
Nisha Tahiliani	Junior Accountant
Sachin S Tawde	Technical Superintendent
Prabhujii Thakor	Junior Laboratory Attendant
Supresh Thaleshari	Laboratory Attendant
Sunny Thomas*	Junior Laboratory Assistant
Rajendra Vaishnav	Junior Account Officer
Lakshmpriya G Valappil	Junior Accountant
Piyushbhai P Vankar	Assistant
Anjanaba R Zala	Junior Accountant
Devendrasinh D Zala	Driver

* For part of the year
** Joined during the year



Alumni Relations

ALUMNI GIVING

The Alumni Relations team had an eventful year in alumni giving and alumni endowed scholarships. The percentage of alumni donations crossed 50% for the second consecutive year. A record 55% of our alumni contributed financially to the Institute in the FY 2020-2021, making IITGN one of the very few institutions in the world to have achieved this milestone. Over 68% of the graduating students of the Class of 2020 pledged their batch gift. Till date, a total of 16 alumni endowed scholarships have been set up, out of which seven have been set up in the FY 2020-2021.

50%

The percentage of alumni donations crossed 50% for the second consecutive year

55%

A record 55% of our alumni contributed financially to the Institute in the FY 2020-2021

68%

Over 68% of the graduating students of the Class of 2020 pledged their batch gift

TML-FAP: DONATIONS BY BENEFICIARY ALUMNI

The Tata Motors Limited - Financial Aid Program (TML-FAP) for undergraduate students started at IITGN in 2016. The main objective of the program is to provide financial support to students. The beneficiary students donate the money back to IITGN after their graduation. This donation is used to support other enrolled undergraduate students, thus creating a cycle of financial support.

We highly appreciate the following donations being made by the beneficiary alumni:

Roll No	Name of the Alumni	Programme
14110128	Vidhi Solanki	BTech/CE/2018
14110079	Mukul Tyagi	BTech/CL/2018
15110015	Anand Yadav	BTech/EE/2019
15110053	Hardeep	BTech/EE/2019
16110105	Soham Panchpade	BTech/CSE/2020
16110040	Chavali Bharath Chandra	BTech/EE/2020
16110128	Rahul Yadav	BTech/EE/2020
16110124	Rahil Sanwla	BTech/ME/2020
16110135	Ratul Chakraborty	BTech/MSE/2020

EVENTS

ALUMNI MASTERCLASS SERIES

The Alumni Relations team initiated the Alumni Masterclass series that invited IITGN alumni to present online sessions on their areas of expertise. So far, four virtual masterclass sessions have been hosted by the Institute, these are as follows:



Deepti

Dr Aishwarya

Yash

Dr Yogesh

- How to Build a Profile That Can't be Refused by **Deepti Chopra**, Co-founder, Adaface, April 29, 2020
- My journey with Artificial Intelligence So Far by **Dr Aishwarya Agrawal**, Research Scientist at Deepmind, London, July 11, 2020
- How to Build Products That Users Love by **Yash Kotak**, Senior Product Manager, Swiggy, July 25, 2020
- Emerging Paradigms in Biological Research and Career by **Dr Yogesh Goyal**, Postdoctoral Researcher, University of Pennsylvania, August 22, 2020



DIRECTOR'S UPDATE FOR THE ALUMNI

The Alumni Relations office hosted an online session titled 'Director's Update for the Alumni' by **Prof Sudhir K Jain**, Director, on Oct 31, 2020. The session was aimed at updating the IITGN alumni about the recent practices at the Institute, how IITGN has responded to the COVID-19 situation and adapted to the new circumstances.

FUNDRAISING CAMPAIGNS

- Power of 5 campaign to establish 50 alumni endowed scholarships in the coming years
- Empathy Fund campaign launched during the pandemic to provide financial support, livelihood support, and medical care to numerous individuals attached to IITGN, who have been adversely affected by the pandemic
- Annual Giving Campaign set up to raise the number of alumni donors during the FY 2020-2021

ALUMNI ACHIEVEMENTS

1. Recko, a FinTech startup co-founded by two IITGN alumni - **Saurya Prakash Sinha** (BTech/EE/2013) and **Prashant Borde** (BTech/EE/2012) - raised **\$6 million** in Series A of venture-capital funding led by Vertex Ventures. Founded in 2017, Recko is a Software-as-a-Service-based reconciliation product that keeps track of the complete transaction lifecycle and commercial contracts for organisations.
2. **Mihir Bhalerao** (BTech/ME/2016) has filed a **patent** with Indian Patent Office on battery waste heat recovery in electric vehicles. Mihir and his team at Mahindra, working on electric vehicles, came up with the idea regarding battery waste heat recovery and its usage in other vehicle systems. During his 3.5 years at Mahindra, Mihir has filed 5 patents on electric vehicle technology.
3. **Udit Relan** (BTech/ME/2018) was selected for the **Presidential Service Award 2020** at the University of Florida for his exceptional leadership in leading the SKY Club. The club at the University of Florida promotes stress-free living on the campus by means of meditation practices.
4. **Purna Subramanian** (MA/HSS/2018) won the **2020 Henry Mandelbaum Fellowship** for the PhD level of study. The Fellowship is awarded to graduate students who demonstrate academic excellence, show exceptional academic prowess, and provide significant service to their community during their university years. Purna has been awarded this fellowship for her scholarship, activism, and work as a community leader.
5. **Dr Yogesh Goyal** (BTech/CL/2012) has been awarded the **2020 Burroughs Wellcome Fund's (BWF) Career Awards** at the Scientific Interface (CASI). He is one of the eight recipients who received this award. This award worth USD 500,000 can be utilised over five years from advanced postdoctoral training through the first three years of a faculty position.
6. **Dr Ankita Arora** (PhD/MSE/2019) has been awarded the **Prof Sabu Thomas Best Doctoral Thesis Award 2020** for her impactful doctoral research in the field of Polymer Science & Technology. Currently, she is working as Head, R&D (Innovation & IP) in a Healthcare start-up Clensta International at Delhi.

7. **Dr Deepa Dixit** (PhD scholar, Chemical Engineering) received the **SITARE-Gandhian Young Technological Innovation (GYTI) Award 2020**. She received the award for the development of non-electric and affordable surface engineered particle-based point-of-use water disinfection.
8. **Jitesh Mittal** (BTech/CE/2020) scored **100 percentile** in the Common Admission Test (CAT) 2020. He is among the nine candidates to have scored a centum.
9. **Jammu Tarun Kumar** (BTech/MSE/2019) has been selected to join the Indian Air Force as a **Commissioned Officer**. He is one of the IITGN's first alumni to join the Indian Defence Services.
10. GrowFix, an alternative debt platform set up in January 2020 by two of our alumni - **Ajinkya Kulkarni** (BTech/ME/2012) and **Abhik Patel** (BTech/ME/2012) - along with other members Shashank Chimaladari and Anshul Gupta, has raised **\$2 million** in seed capital. GrowFix allows retail investors to invest in asset-backed fixed income products that give 2-3% higher returns than FD (fixed deposit) and are less volatile than equities.
11. **Dr Rajendra Nagar** (PhD/EE/2019) joined IIT Jodhpur as **Assistant Professor** in Electrical Engineering. His research area is focused on Computer Vision and 3D Shape Analysis.
12. **Dr Dhwanil Shukla** (BTech/ME/2014) joined IIT Bombay as **Assistant Professor** in Aerospace Engineering. After graduating from IITGN, Dhwanil completed his MS and PhD from the Georgia Institute of Technology in Aerospace Engineering with a research focus on UAV and Multi-rotor aerodynamics.
13. **Dr Ravi Prakash** (PhD/CE/2019) joined IIT Jodhpur as an **Assistant Professor** in Civil Engineering. Ravi completed his PhD in Structural Engineering from IITGN and joined the University of Minho - Campus de Gualtar, Portugal as a Postdoctoral Researcher. After his post-doc, he worked as Assistant Professor at NIT Warangal.
14. **Dr Majid Hussain** (PhD/CE/2020) joined NIT Srinagar as an **Assistant Professor** in Civil Engineering. Majid completed his PhD in Civil Engineering from IITGN and worked as a Postdoctoral Researcher at University College Cork (UCC), Ireland.







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