

Connections

A quarterly newsletter for friends of IIT Gandhinagar



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January - March 2022

INSTITUTE HIGHLIGHTS



CHANGING OF THE GUARD

On Jan 3, 2022, IITGN bid adieu to its founding director **Prof Sudhir K Jain**, who has been appointed as the Vice-Chancellor of the Banaras Hindu University (BHU), Varanasi. **Prof Amit Prashant**, Professor of Civil Engineering and Dean, R&D, IITGN, was handed over the charge as officiating director of the institute from Jan 4, 2022.

COLLABORATIONS

IITGN has entered into a Memorandum of Understanding (MoU) with the **Climate Change Department, Government of Gujarat**, on Feb 21, 2022, to forge a strategic partnership for the development of climate change policy and a roadmap for net-zero by 2070 for Gujarat. Another agreement was signed with the **Directorate of Technical Education, Gujarat and the Government of Gujarat**, on Jan 05, 2022, to build a strategic partnership in the area of educational setup of external student exchange programmes at IITGN for students of Government Engineering Colleges in Gujarat. The Institute has also inked an MoU with the **Gujarat Council of Science City** on Feb 23, 2022, to promote STEM education and creativity.



NEW SPORTS COMPLEX

The much-anticipated new Sports Complex of the Institute for various indoor and outdoor sports/activities is now functional with several state-of-the-art facilities, including Badminton Courts, Squash Courts, Table Tennis, Volleyball Court, Basketball Court, Yoga Hall, Gym, Climbing Wall, Football Ground, Cricket Ground, Athletic Track, and so on. The world-class facility is already attracting enthusiastic participation from students and the community. IITGN has always encouraged its community to adopt an active and healthy lifestyle, and these facilities would help them practise and attain professionalism in the sports/activity of their choice while ensuring their fitness and wellness.



NATIONAL WATER AWARD

IITGN bagged the second position in the category of 'Best Institution / Resident Welfare Association / Religious Organisation for Campus Usage' during the 3rd National Water Awards ceremony organised by the Ministry of Jal Shakti at Vigyan Bhawan, New Delhi, on Mar 29, 2022. **Shri Gajendra Singh Shekhawat**, Union Cabinet Minister of Jal Shakti; **Shri Prahlad Singh Patel**, Minister of State for Food Processing Industries; and **Shri Bishweswar Tudu**, Minister of State for Tribal Affairs and Jal Shakti were present on the occasion and bestowed the award to IITGN in recognition of the Institute's efforts to promote water conservation and water management.

BTECH ADMISSION TO STUDENTS SELECTED FOR OLYMPIAD TRAINING CAMPS

IITGN has created supernumerary seats to provide BTech admission to students selected for training camps for the oldest four International Olympiads on Mathematics, Physics, Chemistry, and Informatics. The basic eligibility criteria remain the same as those coming through the JEE Advanced route; additionally, the Institute has set up a process for the selection and admission of students through this window.

ALUMNI ENGAGEMENT

At least 50% of IITGN alumni contributed to the "Annual Alumni Giving" for the third consecutive year, with almost equal participation by undergraduate and postgraduate alumni. These are among the highest alumni participation rates at higher education institutes in the world. It is also worth noting that despite being in their early or mid-career, IITGN Alumni have instituted 21 endowed scholarships during the last three years, which is testimony to their affection and commitment to their alma mater.

SUPPORT FOR THE INSTITUTE

SEVA SCHOLARSHIP

Yash Kotak, a BTech alumnus of 2014, has set up **Seva Scholarship** in honour of his parents **Nina Kotak** and **Prashant Kotak**. The scholarship of Rs 1 lakh per year will support students at IITGN. Yash graduated from IITGN in Electrical Engineering with Minors in Management and Computer Science. He



was the recipient of the Director's Gold Medal for Outstanding Overall Performance and the Medal for Outstanding Innovation. Currently, he is working as a Product Manager at Google India, Bangalore.

PROF B L JHA MEMORIAL SCHOLARSHIP

Mrs Seema Jha, a well-wisher of the Institute, has instituted **Prof B L Jha Memorial Scholarship** in memory of her late father. The scholarship of Rs 1 lakh per year will support the undergraduate students at the Institute. Mrs Seema Jha is a postgraduate in Physics and has been working as a teacher for the last ten years. She is also focusing on social work in the

field of education for underprivileged classes and is a Managing Trustee and Co-founder of Samridhdhi Trust, Bangalore. Her father, **Prof B L Jha** was a Professor in the Department of Applied Physics, IIT(ISM) Dhanbad. He was a popular teacher, an able administrator, and a very



compassionate human being, who left for his heavenly abode in Jan 2022.

OUTREACH

Prof Amit Prashant, Officiating Director, was invited as the Guest of Honour at the DRDO Townhall organised by the Defence Research & Development Organisation on Feb 27, 2022, as a part of the Ahmedabad Design Week by the Karnavati University. On Mar 07, 2022, he was also invited as a Chief Guest for the inauguration of the "Basic Bioinformatics" training programme organised by the Gujarat Biotechnology Research Centre (GBRC).

FACULTY NEWS

AWARDS AND RECOGNITIONS

- **Prof Amit Prashant**, Professor, Civil Engineering and Officiating Director, IITGN, has been conferred the prestigious Gopal Ranjan Technology Award 2021 by IIT Roorkee Director Prof Ajit Chaturvedi on Mar 14, 2022.
- **Prof Himanshu Shekhar**, Assistant Professor, Electrical Engineering, has been recognised as an Expertscape Expert in "Contrast Media". With this, he has been rated as within 1% of world experts in the field.
- **Prof Sivapriya Kirubakaran**, Kankuben Bakshirambhai Gelot Chair Associate Professor, Chemistry and Dean Student Affairs, has been awarded Dr R Gopalan Endowment Prize 2022 by Madras Christian College, Chennai, on Mar 28, 2022.

- **Prof Deepak Singhania**, Assistant Professor, HSS, along with his co-researchers **Anupam Sharma**, PhD student, IITGN and **Prof Soledad Prillaman** from Stanford University, have been selected for the 'Azim Premji Funding Programme 2021'.

PATENTS GRANTED

- Polymer Reinforced Metal Matrix Composites and a Process for Fabricating the Same: Inventors include **Prof Amit Arora**, **Prof Chandra Sekhar Tiwary**, **Arpan Rout**, **Anurag Krishnakedar Gumaste**, and **Mahesh V P**. The patent number is 389338.
- Method for the Asymmetric Synthesis of (S)-Paraconic Acid: Inventors include **Prof Chandrakumar Appayee** and **Dr Abhijeet Madhukar Sarkale**. The patent number is 391941.

PATENTS FILED

- Fluorophores and a Process for their Synthesis: Inventors include **Prof Sriram Kanvah Gundimeda**, **Deepmala Singh**, and **Dr Virupakshi Soppina**.
- A Computer-implemented End-to-end Work Optimization System to Streamline Meetings and a Method Thereof: Inventors include **Pranshu Kumar Gond**, **Dhruv Menon**, **Prankush Agarwal**, **Rwik Rana**, and **Prof Udit Bhatia**.

SPONSORED AND CONSULTANCY PROJECTS

Please follow this link to find the list of sponsored and consultancy projects: https://iitgn.ac.in/newsletter/projects/q1_2022 or scan the QR code.



NEW FACULTY

Name	Designation	Discipline	PhD	Date of Joining
Dr Rosa Maria Perez	Visiting Professor	Humanities and Social Sciences	ISCTE, Lisbon	21/03/2022
Prof Nuno M Guimaraes	Scholar-in-Residence	Humanities and Social Sciences	Instituto Superior Técnico / Universidade Técnica de Lisboa	21/03/2022

ACTIVITIES AT IITGN

CAMP COGSCI

IITGN's **Curiosity Lab** and **Centre for Cognitive and Brain Sciences** hosted 'Camp CogSci' from Jan 7 to 9, 2022, to introduce Cognitive Science, Artificial Intelligence and Neuroscience to students of classes 8th to 12th as well as teachers, parents, and scholars of education, to generate excitement, curiosity, and have fun during learning. Top academics from India and abroad addressed the workshop, which was coordinated by **Prof Jaison Manjaly**.

SCIENCE AWARENESS WEEK

Ahead of the National Science Day on Feb 28, IITGN organised Science Awareness Week for school students of classes 11th and 12th (Science stream). More than 800 school students and teachers from the Ahmedabad/Gandhinagar region participated in the programme, which

was packed with several exciting and hands-on activities aimed at popularising STEM learning among school students. The event was coordinated by **Profs Emila Panda**, **Sriram Kanvah**, and **Superb Misra**.

IKS 2022

IITGN conducted the sixth edition of its unique elective course, Introduction to Indian Knowledge Systems (IKS), in hybrid mode, from Jan to Apr 2022. About 12 distinguished scholars from India and abroad delivered lectures during this season which was themed on 'Precolonial India's Treasure House of Literatures'. The programme is being coordinated by **Prof Michel Danino** and **Ms Mana Shah**.

PHASE 2022

IITGN, in collaboration with the University of Strathclyde, UK, organised the third edition of PHASE (Photonics for Health, Atmosphere,

Safety and Education), during Jan 6-7, 2022. PHASE 2022 was a hybrid-mode Indo-UK workshop on Optical Sensing and Imaging with a wide range of expert talks, lab tours, and hands-on practical sessions. The event was coordinated by **Prof Arup Lal Chakraborty** (IITGN) and **Dr Ralf Bauer** (University of Strathclyde).

NMRS 2022

The discipline of Chemistry hosted the 27th meeting of the National Magnetic Resonance Society (NMRS 2022) along with an International Conference on Nuclear Magnetic Resonance (NMR): Chemistry, Biology and Drug Discovery from Mar 6 to 9, 2022. The annual symposium had nine plenary talks and 40 invited talks, 6 award lectures, in addition to a number of short talks and students' oral and poster presentations. **Prof Sriram Kanvah Gundimeda** and **Prof Sivapriya Kirubakaran** were conveners of the conference.

CONFERENCE ON GENERAL RELATIVITY

The discipline of Physics at IITGN, jointly with IIT Allahabad and the University of Lethbridge, Canada, organised a virtual conference on 'Testing Aspects of General Relativity' from Mar 11-14, 2022. The conference brought together some of the leading global experts to discuss recent developments and challenges that lie ahead in this context. The programme was attended by more than 100 participants. **Profs Arpan Bhattacharyya** (IITGN), **Srijit Bhattacharjee** (IIITA), and **Saurya Das** (ULeth) co-organised the conference.

SYMPOSIUM ON APPLIED MECHANICS AND DYNAMICS

The discipline of Mechanical Engineering at IITGN, with support from SPARC, organised a two-day online Symposium on Applied Mechanics and Dynamics during Mar 3-4, 2022. About 30 graduate and senior undergraduate students and faculty from academic and research institutions participated in the event that acted as a forum to interact with eminent speakers from different parts of the world. The symposium was coordinated by **Prof Jayaprakash K R.**

INDUSTRY CONNECTIONS

IITGN conducted an Industry Connection meeting with the members of the Gujarat Chamber of Commerce and Industry (GCCCI) on Mar 03, 2022. GCCCI's Chemical Task Force Chairman, **Mr Shrenik Merchant**, and Vice-Chairman, **Mr Prashant Patel**, along with several other industry members attended the event. The meeting acted as a forum for understanding industry needs and knowing the expertise of various faculty at IITGN as well as the state-of-the-art facilities available at the campus. The event was coordinated by **Prof Chinmay Ghoroi.**

2ND EDITION OF HISTORY OF IDEAS

On Jan 29, 2022, the Institute organised the second edition of the series 'History of Ideas', which brought two interesting talks titled - 'Towards Relativity: Einstein and His Compass' and 'A History of Algorithms: The Worst-case and Beyond' by IITGN faculty **Prof Sudipta Sarkar** and **Prof Neeldhara Misra**, respectively.

SEMINAR SERIES ON INDIAN SCIENTISTS

The fifth edition of 'Seminar Series on Indian Scientists' was organised on Feb 19, 2022, with two online talks on the life and works of renowned Indian scientists - **Dr Bibha Chowdhuri** and **Prof Asima Chatterjee**. The first session titled 'Dr Bibha Chowdhuri: A Star from Another Sky' was delivered by **Prof Srubabati Goswami**, Theoretical Physics Faculty, PRL, Ahmedabad. In the second session, **Prof Sivapriya Kirubakaran**, Associate Professor, Chemistry, IITGN, gave a talk on 'A Nature-loving Natural Product Chemist: Prof Asima Chatterjee'. **Prof Sudipta Sarkar** coordinated the seminar.

PROGRAMMES BY CCL

The **Centre for Creative Learning (CCL)**, IITGN and the American India Foundation joined hands to start 'Sparkle Series'; an online interactive education programme for about 10,000 Vigyan Jyoti scholars of class 11 from 200 Jawahar Navodaya Vidyalayas across the country. The Series covered Science and Mathematics curriculum topics with various hands-on activities and experiential learning. **CCL**, in collaboration with Sarva Shiksha Abhiyan, Uttar Pradesh, also started 'Curiosity' programme to improve science education for around 74,600 girl students in 746 Kasturba Gandhi Balika Vidyalayas of UP. CCL has also developed 100 modules for teaching middle school science in an experiential manner. The Centre, with support from Sarva Shiksha Abhiyan, Gujarat, has provided STEM boxes in around 3500 schools in Gujarat as well.

SKILL COURSES BY NEEV

NEEV, IITGN conducted four training courses namely Ladies Tailor Training Course, Training Of Trainers in Sewing, Beautician Skills Training Course, and Desktop Publishing Training Course during Jan-Mar 2022. A total of 58 rural women and youth from nearby villages took benefit of these courses. Additionally, NEEV organised a sale of handcrafted products made by village women on the occasion of International Women's Day and also during the Spring Carnations event at IITGN.

GRATITUDE FOR CONTRACTUAL WORKERS

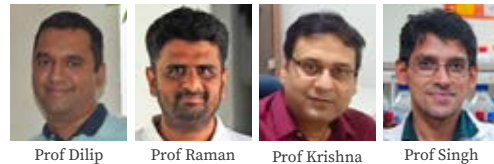
The **Shramik Kalyan Samiti** (Labour Welfare Committee), in collaboration with **Nyasa**, IITGN, distributed a total of 594 hoodies among the construction workers and 463 T-shirts to all the contractual staff between Jan to Mar 2022. The distribution drives were conducted as a gratitude gesture to recognise their unceasing efforts toward institution-building and for providing relentless essential services during the pandemic. The volunteers also conducted a sweets and fruits distribution drive at the construction workers' colony.

PRESENTATION OF AWARDS ON REPUBLIC DAY 2022

IITGN celebrated Republic Day 2022 with a 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 various awards to its community members, including faculty, staff, and many of its essential services workers, who have shown exemplary dedication to the institute community over the years and especially during the pandemic.

The Institute conferred Faculty Excellence Awards to the following four faculty members: **Prof Dilip Srinivas Sundaram** for Excellence in Teaching, **Prof Shanmuganathan Raman** for Excellence in Research, **Prof Krishna Kanti Dey** for Excellence in Institution Building, and

Prof Umashankar Singh for Excellence in Outreach Activities.



Prof Dilip

Prof Raman

Prof Krishna

Prof Singh

The following staff members received the Staff Excellence Awards: **Ms Saswati Roy**, **Ms Shivangi Bhatt**, **Dr Namrata Saxena**, **Ms Kamini Patel**, **Ms Anita Vaghela**, and **Mr Jayeshbhai Vaghela**.



Ms Saswati

Ms Shivangi

Dr Namrata



Ms Kamini

Ms Anita

Mr Jayeshbhai

The Institute presented the Campus Development Awards to the following community members: **Mr Anukesh Krishnankutty Ambika**, **Mr Amrutbhai Somabhai Rathod**, **Mr Takhtsinh Madansinh Solanki**, **Mr Yogesh Kapoor**, **Mr Jitendra Sharma**, **Ms Sunitaba Chavda**, and **Mr Bansi Baldevbhai Bhangi**.

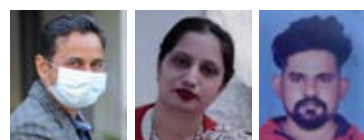


Mr Anukesh

Mr Amrutbhai

Mr Takhtsinh

Mr Yogesh



Mr Jitendra

Ms Sunitaba

Mr Bansi

CELEBRATION OF 175 YEARS BY IIT ROORKEE AT IITGN

As a part of the year-long celebration to mark 175 years (1847-2022) of establishment, IIT Roorkee organised their west zone alumni outreach event at IITGN on Mar 27, 2022. Many dignitaries and senior alumni of IIT Roorkee attended the event. **Prof Ajit Kumar Chaturvedi**, Director, IIT Roorkee, handed mementos to senior alumni of the institute in Gujarat who had completed 50 years of graduation.

IIEC AND START-UPS

HAVI AT THE STANFORD SEED PROGRAMME
Havi, a consumer electronics and robotics toys start-up from IIT Gandhinagar Research Park, is one of the 90 start-ups selected from across the globe for the prestigious Stanford Seed programme 2022 by the Stanford Graduate School of Business. Havi designs sustainable and fun technology products that help learn and create robotics, IoT, electronics, and other STEAM projects.

MENTORSHIP PROGRAMMES BY IIEC

During the quarter, **Shri Kamalesh Dwivedi**, highly-regarded business leader, investor and mentor-in-residence at IIT Gandhinagar

Innovation and Entrepreneurship Center, conducted the following programmes for the Institute community: Critical Success Factors for Early-stage Start-ups on Jan 06, 2022,

Fundraising Masterclass on Jan 10, 2022, and Business Communication for Start-ups on Jan 12, 2022.

ONLINE WORKSHOPS

- Computation of Multiphase Flows by **Prof Surya Pratap Vanka**, University of Illinois Urbana-Champaign and **Prof Vinod Narayanan**, IITGN, every Saturday from Jan 29 to Mar 27, 2022.
- Your Key to Unlocking R&D Productivity Using 'CAS SciFinder-n' by **Mr Vinit Kunte**, Expert Trainer, ACS India, Feb 02, 2022.
- Improving Academic Writing & Research Using Grammarly by **Mr Ratish Iyer**, Expert Trainer, Bridge People Technology Solutions Pvt Ltd, Feb 07, 2022.
- Inspiring Research and Innovation Using IEEE Publications by **Mr Dhanukumar Pattanashetti**, Senior IEEE Client Services Manager, IEEE India, Feb 09, 2022.
- Getting Started with & Using PressReader: an E-Newspaper and Magazine Collection by **Mr Joshua Doctolero**, Account Manager, Library Team (Philippines), PressReader, Feb 15, 2022.
- 'Web of Science' & EndNote: Taking your Research to a Next Level by **Dr Subhasree Nag**, Solution consultant, Scientific Research Division, Clarivate Analytics, Feb 18, 2022.
- Visualizing through Illustrations by **Mr Niravkumar Patel**, Designer, DIC, IITGN, Feb 19, 2022.
- Power of your Research with Scopus & Mendeley by **Dr Shubhra Dutta**, Customer Consultant (Core Content), South Asia A&G Team, ELSEVIER Publisher, Mar 15, 2022.

- Revisiting the "Captive Mind": Intellectual Imperialism in the Contemporary Asian Academy (second edition) by **Cypri Jehan Paju Dale** and **Kisho Tsuchiya**, Kyoto University; **Prashant Ingole**, IITGN; and **Syed Farid Alatas**, National University Singapore, Mar 19, 2022.
- The Art of Making Things by **Dr Guruprasad Rao**, Director & Mentor, Imaginarium India Pvt Ltd, Mar 21, 2022.
- Workshop on Photography Composition by **16 Pixels club**, Mar 27, 2022.
- Managing your References Using Zotero- a Reference Management Software by the **IITGN Library team & Debasmitha Ghosh** (Research Student), Mar 24, 2022.
- Creating and Managing Your Scholarly Identity by **Ms Panna Chaudhary**, Assistant Librarian, IITGN, Mar 30, 2022.

- Regulatory Economics & Rate Making by **Prof Anand Kumar**, Professor of Practice, Electrical Engineering, IITGN, every Tuesday & Friday from Jan 28 to Feb 28, 2022.
- Analysis of Chemotaxis Systems by **Prof Michael Winkler**, Professor, Institut für Mathematik, Universität Paderborn, Germany, Jan 28-29, Feb 4-5, & 11-12, 2022.
- Management of Domestic Wastewater - Conveyance, Treatment and Reuse by **Prof Sudhir K Arora**, Professor of Practice, Civil Engineering, IITGN, Jan 31-Feb 04, 07-11, 2022.
- 3D Scanning and Printing by **Mr Lakshmikantha Sharma**, Application Consultant, Altem Technologies Pvt Ltd, Feb 21-25, 2022.
- Renewable Energy Future beyond 2030 by **Prof Anand Kumar**, Professor of Practice, Electrical Engineering, IITGN, every Tuesday & Friday from Mar 22 to Apr 22, 2022.
- Writing for Engineering, **Mr Nivid Desai**, Teaching Associate, Writing Studio, IITGN, Mar 28 & 30, and Apr 2, 4 & 6.

ONLINE SHORT COURSES

- Introduction to Historical Maps and their Studies in Archaeology and Geomorphology by **Dr Ekta Gupta**, Early Career Fellow, ASC, IITGN, every Tuesday, Thursday, Saturday and Sunday from Jan 11-27, 2022.
- Thermodynamics of Near-subsurface Earth, **Prof R N Singh**, Visiting Professor, Earth Sciences, IITGN; and **Dr Ravi K Prasad**, Postdoctoral Fellow, ASC, IITGN; 10 sessions were conducted between Jan to Apr 2022.
- Space-based Systems for Positioning and Navigation by **Prof Pradeep Srivastava**; 12 sessions were conducted between Jan 22 to Mar 07, 2022.

ONLINE LECTURES & COLLOQUIA

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



STUDENTS AND STAFF

AWARDS AND RECOGNITIONS

- **Camellia Biswas**, a PhD scholar of Humanities and Social Sciences, has been selected for the 'Platinum Jubilee Women's Leader Project' by the British Council.
- PhD students **Jyotishraj Thoudam** and **Krishna T** have individually won the 'AWSAR Award for Best Story'.

ICE CREAM SOCIAL

As the Covid-19 situation started to improve, the **Student Affairs** team at IITGN hosted "Ice Cream Social", an informal social gathering over ice cream for the entire IITGN community on Mar 4, 2022. With this event, the institution extended a heartfelt thanks to all its members who worked tirelessly at different levels and showed an unparalleled amount of strength and commitment during the pandemic.



BLITHCHRON 2022

The students of IITGN organised Blithchron'22, the annual cultural festival of the Institute, in hybrid mode with a variety of online and offline events on Mar 19 and 20, 2022, respectively. The event received 1500+ registrations and students from IITs, NITs, and many private institutions from all over India visited the IITGN campus. The two-day hybrid fest ended with an exciting EDM and DJ night by **Vice and Virtue** and DJ and producer **TEJAS**.

SPRING CARNATIONS

The **Cultural Council** organised 'Spring

Carnations', a reincarnation of the much-celebrated 'Winter Carnations', on Mar 26, 2022. This year's event was themed around 'Nostalgia: Live those days again' and gave the campus community a sense of celebration with lip-smacking dishes, refreshing drinks, fun games, and live music performances by the **Sargam club**.

CULTURAL COUNCIL

In an eclectic line-up of events, the **Cultural Council** organised an online Republic Day quiz on Jan 26; a virtual dance reel-making competition by the **Step Up Club** from Feb 5 to 16; a photo composition workshop and exhibition by **16 pixels Club** on Feb 27 and 28; a talk on the journey of India's first transman pilot Adam Harry by **Orenda Club** on Mar 12; a Jamming night by **Sargam Club** on Mar 19 during Blithchron'22, which also included a wide range of singing, dancing, beatboxing performances by students.

SPORTS

6TH EDITION OF DISHA CUP

The **Physical Education Section** of the Institute organised the sixth edition of the Disha Cup, the annual cricket tournament for its outsourced workforce, from Mar 11 to 13, 2022. This time, the Institute also introduced a volleyball tournament to the event. A total of 220 support staff of the Institute, including security guards, maintenance staff, mess workers, office boys, housekeeping staff, drivers, horticulture

staff, groundsmen, hostel facility staff, shop employees, and laundry staff, participated in the tournaments.

BEAT THE WARDEN CHALLENGE

On the occasion of Republic Day, the **Physical Education Section** organised a running event called 'Beat the Warden Challenge'. The IITGN community participated enthusiastically to complete a 5 km run in less than the time taken by the Hostel Warden, **Prof Chandan Kumar Mishra**.

INTRA COLLEGE SPORTS LEAGUES

Continuing the tradition of organising several leagues for the IITGN community members, the **Sports Council** organised a series of sporting events such as Cricket Combat League, League of Football Players, Badminton Super League, Srima Memorial League, ATHE League, Intra Institute Table Tennis League, and IITGN Basketball League, from Mar 14 to Apr 03, 2022.