

NITK NEWS LETTER

WAVES

Vol: 8

January - June 2022

Issue No.: 1



**National Institute of Technology, Karnataka, Surathkal
Mangaluru - 575 025, Karnataka, India**



Message from the Director



It makes me very happy to write this message for the latest edition of the Institute newsletter, *Waves*. At the outset, let me congratulate all the functionaries of the institute - students, teachers and non-teaching staff for the tenth position obtained in NIRF for the second consecutive year in 2022. It is exhilarating to note that we have made an improvement of five places from 32 to 27 in the overall ranking too. Though it may seem daunting to scale higher, hard work, perseverance, and sheer belief in our strength can take us to any heights. Our stakeholders would be happy to know that there has been a steady but conspicuous increase in the number of patents filed and obtained by our faculty. It gives us immense confidence in ourselves and indicates the greater heights we can attain. The Central Research Facility has been acquiring important cutting-edge equipment, gradually making it a key repository of research equipment in this part of the country. For the reporting period, the Facility has acquired 14 state-of-the-art pieces of equipment which allow the researchers to conduct experiments in niche areas. We have established formal liaisons with 11 entities in industry and academia by signing MoUs to cooperate in mutual areas of interest.

Our alumni have been immensely supportive of several of our activities. They have been with us in different ways by providing monetary and moral support in our ventures - the production of a series of e-bikes being the latest. We hope to find new avenues of mutual interest to help us achieve excellence. With the arrival of the first-year students for their second semester on campus - the last batch to arrive - our precincts started bubbling with a variety of students activities: the classrooms and labs fully occupied, the sports arena engaged, the cultural and the technical festivals back in their former splendour and the various student clubs noticeably back in action. The academic schedule that was helter-skelter due to the lockdown is gradually getting streamlined and gaining uniformity across courses and semesters. But we are aware of the challenges. Excellence is never stagnant - it calls for a continuous and sustained upgradation with a constant introspection of our shortcomings. In the coming time, we will face daunting challenges and contribute to the best possible extent as Team NITK!

Prasad Krishna

Prefatory Note

The current issue of *Waves* compiles the important activities and developments at NITK Surathkal during January-June 2022. In an era of information proliferation, news may be available on different platforms, including social media, in a variety of ways. But the newsletter needs to recapitulate and formally organize the prominent news items as a ready reference for the convenience of the stakeholders of the Institute. We hope the current issue serves this purpose. We are thankful to all the teaching and non-teaching staff, editorial team and administration for their constant cooperation in bringing out the newsletter. And finally, we cannot and do not claim to cover *all* happenings and *all* achievements accomplished by the students, teachers and other functionaries during the period.



Shashikantha Koudur and T.K. Shajahan
Coordinators – *Waves*

Editorial Team

Shashikantha Koudur

Coordinator

T.K. Shajahan

Co-Coordinator

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Co-Coordinator

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Dean (Students Welfare)

Vijay H. Desai

Dean (Alumni Affairs & Institutional Relations)

Satyabodh M. Kulkarni

Dean (Research and Consultancy)

S. Shrihari

Chairman, Career Development Centre

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Prof. Prasad Krishna Takes Additional Charge as Director, NITK



Prof. Prasad Krishna, Director, National Institute of Technology, Kozhikode, took additional charge as Director, NITK, Surathkal, on 25 August 2022. Prof. Krishna is an alumnus of NITK. He was a professor in the Department of Mechanical Engineering since 2009 and served as Dean (Alumni Affairs and International Relations) during the years 2016-2018 at the Institute. Subsequently, he was appointed as Director of NIT, Kozhikode, in October 2021.

He is a recipient of the Kirloskar Gold Medal and Sir M. Visvesvaraya Memorial Prize from the University of Mysore for securing first rank in B. Tech in Mechanical Engineering (1983) from the then Karnataka Regional Engineering College (KREC). He received his Master's degree from IIT Madras and obtained his Doctoral degree in Manufacturing from the University of Michigan, Ann Arbor, USA.

Prof. Krishna has more than 37 years of professional experience in diverse sectors and has worked in organizations like TVS Sundaram Clayton Pvt. Ltd., Gas Turbine Research Establishment (DRDO) as Scientist-B, Vikram Sarabhai Space Centre (ISRO) as Scientist-SB, HMT Ltd as Design Engineer (1984-1991).

New Administrative Assignments

Deanship Assigned



Prof. G.C. Mohan Kumar took charge as Dean (Faculty Welfare) on 16 March 2022.

Heads of the Departments Appointed



Dr. Ravishankar K.S. took charge as Head of the Department of Metallurgical and Materials Engineering on 13 January 2022.



Dr. Udayashankar N.K. took charge as Head of the Department of Physics on 10 March 2022.



Dr. Dattatraya N. Gaonkar took charge as Head of the Department of Electrical and Electronics Engineering on 17 May 2022.

**Details of faculty members as “Faculty Advisors” for various clubs of the Institute
(January to June 2022)**

Sl. No.	Club Name	Faculty Advisor	Name of the Department	From
1	Flying & Robotics Club	Dr. Mohit P. Tahiliani	Computer Science and Engineering	07.01.2022
2	NITK Racing	Dr. Parthasarathy P.	Mechanical Engineering	07.01.2022
3	BAJA	Dr. P.S. Suvin	Mechanical Engineering	07.01.2022
4	SAE	Dr. Poornesh Kumar Koorata	Mechanical Engineering	07.01.2022
5	TEDEX	Dr. Prabu K.	Electronics and Communication Engineering	07.01.2022
6	ISTE NITK Club	Dr. Shashi Bhushan Arya	Metallurgical and Materials Engineering	11.05.2022
7	Artists’ Forum	Dr. Chinta Sankar Rao	Chemical Engineering	18.05.2022
8	Dance Dramatics and Fashion Club (DDFC)	Dr. Arun Kumar Shettigar	Mechanical Engineering	18.05.2022
9	Literary, Stage, and Debating Society	Dr. Shrutilipi Bhattacharjee	Information Technology	18.05.2022
10	Kannada Vedike, NITK	Dr. Raviraj H.M.	Civil Engineering	18.05.2022
11	Hindi Evam Sanskrit Club (HESC)	Dr. Sandeep Kumar	E&C Engineering	18.05.2022
12	Photography Club	Dr. Shashidhara Mecha Kotian	E&E Engineering	18.05.2022
13	Music Club	Dr. Suprabha K.R.	School of Humanities, Social Sciences and Management	18.05.2022

14	SMILE Club	Dr. Selvakumar Murugesan	Metallurgical & Materials Engineering	18.05.2022
15	IET NITK	Dr. Savita Bhat	School of Humanities, Social Sciences and Management	18.05.2022
16	Utkrishta Bharath	Dr. A.S.S. Balan	Mechanical Engineering	18.05.2022
17	Entrepreneurship Cell (E-Cell)	Dr. Mahendra Pratap Singh	Computer Science & Engineering	18.05.2022
18	NITK Toastmasters	Dr. Subrahmanya K.	Water Resources and Ocean Engineering	18.05.2022
19	Web Enthusiasts' Club	Dr. Saumya Hegde	Computer Science & Engineering	18.05.2022
20	Institution of Engineers, NITK Chapter (IE-NITK)	Dr. Raghavendra B.S.	E&C Engineering	18.05.2022

Details of Wardens (January to June, 2022)

Sl. No.	Name, Designation, and Department	Responsibilities	From
1	Dr. P. S. Suvin, Assistant Professor Grade-II, Department of Mechanical Engineering	Nilgiri (V Block)	With effect from 09-02-2022
2	Dr. (Mrs.) Anupama Surenjan, Assistant Professor Grade-II, Department of Civil Engineering	Yamuna (GH-III)	With effect from 06-05-2022
3	Dr. Pavan G.S., Assistant Professor Grade-II, Department of Civil Engineering	Trishul (VIII Block)	With effect from 09-02-2022
4	Dr. Vinoth S., Assistant Professor Grade-II, Department of Civil Engineering	New PG Block	With effect from 09-02-2022
5	Dr. Kiran M., Assistant Professor Grade-II, Department of Information Technology	Himalaya (MT-II) along with the additional charge of handling the Students' Welfare, NITK Hostel Blocks	With effect from 17-02-2022

LIST OF COORDINATORS (January to June 2022)

Sl. No.	NAME	NAME OF THE POSITION	W.e.from	Remarks
1	Dr. U. Shripathi Acharya, Professor-HAG, Department of Electronics and Communication Engineering	Professor In-charge of Industry supported CoEs, initiating Skill Development programs, facilitating the conduction of Certification programs and Industry supported PG programs in the Institute	17.01.2022	---
2	Dr. Jothi Ramalingam, Assistant Professor Grade-I, Department of Mathematical and Computational Sciences	Faculty In-charge of Public Relations Officer (PRO) in the Institute	17.01.2022	Relieved on 23.03.2022
3	Dr. B. Venkatesa Perumal, Professor, Electrical and Electronics Engineering	Professor In-charge - Center for Research in Electric Vehicles (EV) and Photovoltaic (PV) Systems	25.01.2022	---
4	Dr. Shyam Lal, Assistant Professor Grade-I Dept. of E&C Engg.	Hindi Officer	07.02.2022	---
5	Dr. Mahendra Pratap Singh, Assistant Professor Grade-II Dept. of Computer Science and Engineering	Assistant Hindi Officer	07.02.2022	---
6	Dr. T. Palanisamy, Assistant Professor Grade-I, Department of Civil Engineering	Faculty In-charge - Estate & Works and Institute Guest Houses	14.02.2022	Relieved on 21.04.2022
7	Dr. Prashanth M.H., Assistant Professor Grade-I, Department of Civil Engineering	Resident Engineer i/c	18.02.2022	Relieved on 16.05.2022

8	Dr. Basavaraju Manu, Associate Professor, Department of Civil Engineering	Faculty In-charge - Green and Smart Campus Awards (GSCA) in the Institute	25.02.2022	---
9	Dr. N. Gnanasekaran, Assistant Professor Grade-I, Department of Mechanical Engineering	Principal Coordinator for the Dakshina Kannada Bioenergy Research, Information, and Demonstration Centre (BRIDC)	14.03.2022	---
10	Mrs. Sandhya, Assistant Registrar In-charge (Academic)	Nodal Officer of National Institute of Technology Karnataka, Surathkal for uploading the data on the AIU Portal (https://university.aiu.ac.in)	14.03.2022	---
11	Dr. A. Kandasamy, Department of Mathematical and Computational Sciences	Professor In-charge, Legal Affairs	06.04.2022	---
12	Dr. Jagannatha Nayak, Department of Metallurgical and Materials Engineering	Part-time Chief Vigilance Officer	11.04.2022	---
13	Dr. Shreekant R. Lamani, Assistant Registrar In-charge (Administration)	Officer In-charge - Institute Guest Houses	21.04.2022	---
14	Dr. Gangadhar Mahesh, Associate Professor, Department of Civil Engineering	Faculty In-charge - Estate & Works	21.04.2022	---
15	Dr. Raviraj H. Mulangi, Assistant Professor Grade-I, Department of Civil Engineering	Transparency Officer under RTI Act, 2005	22.04.2022	---
16	Dr. Mohit P. Tahiliani, Assistant Professor Grade-I, Department of Computer Science and Engineering	Faculty In-charge – Alumni Affairs and Institutional Relations (AA&IR)	11.05.2022	---

Achievements and Awards

NIRF Ranking

NITK Surathkal bagged the 10th position for the second consecutive year in the category of Engineering School Rankings in the Union Government's National Institute Ranking Framework (NIRF) rankings for 2022. In the Overall University/Institute ranking, the Institute jumped from 32nd place in 2021 to 27th in 2022. The Institute has been adjudged as the second-best National Institute of Technology (NIT) among 31 NITs in the country.

Award for Central Library

The library has received "Certificate of Excellence" award from Knimbus Online Pvt. Ltd. New Delhi as one of the Top Ten libraries for the highest usage of the Knimbus Remote Access portal. The award ceremony was held online on 27 May 2022. The library team along with the Chairman, Central Library, attended the virtual ceremony.



Centre for Innovation, IPR and Industrial Consultancy (CIC)

The Industry Institute Partnership Cell (IIP Cell) was renamed as the Centre for Innovation, IPR and Industrial Consultancy (CIC). The aim of the Centre is to facilitate students and faculty members to file their patents. NITK provides financial support through the Centre to file patents for its faculty members. The Centre files only express patents for faculty and student members. It also provides administrative support to the faculty members of the institute to carry out consultancy and testing activities.

1. Technology Transfer:

NITK transferred a technology to produce and preserve ready-to-cook, non-acrid edible aroids to nGV Naturals Industry Pvt. Ltd., Bangalore. The technology transfer agreement was signed by Prof. Ananthanarayana, (then Deputy Director, NITK) and Mr. Naveen GV, Founder of nGV Naturals. The inventor of the technology, Dr. Prasanna BD, Prof. Shripathi Acharya (former Dean-R&C), Dr. Subray Hegde (former Faculty in-charge IIP cell), Registrar, Joint Registrar, and Deans were present on the occasion.



2. Patents:

The number of patents filed and published has increased significantly in the past two years (2021 and 2022), compared to the previous years (2018-2020).

Table 1: Year-wise patents filed, published and granted for five years during 2018-2022

Calendar Year	2022 (Jan-June)	2021	2020	2019	2018
No. of patents filed	19	23	9	9	12
No. of patents published	4	15	11	9	12
No. Patents Granted	3	7	8	3	3

The details of patents granted are available at the following institute web links:

<https://idr.nitk.ac.in/jspui/handle/123456789/16764>

<https://idr.nitk.ac.in/jspui/handle/123456789/16930>

3. IPR Performance at NIRF-2022

The performance of IPR and patents at NIRF-2022 has improved compared to earlier years and the Institute secured 6 out of 15 marks. NITK's Intellectual Property Rights (IPR) performance is eighth among the top ten institutions. Excluding the five IITs in the top ten institutions, the IPR performance of NITK is as follows:

Table 2 Comparison of various institutions of NIRF ranking below and above NITK

NITT	IITG	NITK	IITR	IITH
3/15	5/15	6/15	7/15	7/15

4. Testing and Consultancy works

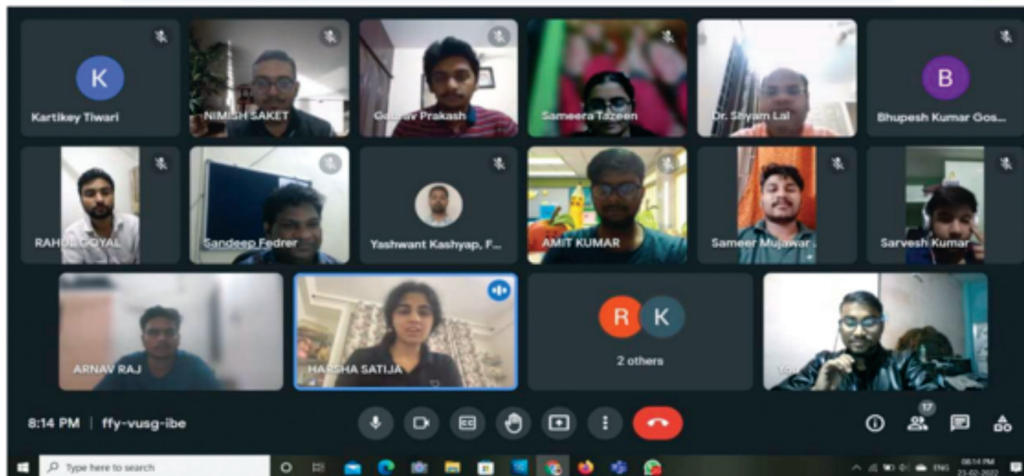
Table 3: Testing and consultancy work revenue for the past three financial years

Financial year	2021-2022	2020-2021	2019-2020
Total outlay of work carried out	290 lakhs	244 Lakhs	181 Lakhs

Centrally Organized Events

International Mother Language Day is celebrated every year on 21 February. In the Institute, many programmes were organized by the Department of Official Language and Hindi and Sanskrit Club for the promotion of Hindi and other Indian languages during February 23-24, 2022. As per the protocol of the time, all programmes were conducted online. The following competitions were held for students and prizes were given away:

1. Open Mic Contest
2. Essay Writing Competition
3. Poster Making Competition
4. Quiz Competition



Pariksha Pe Charcha with the Prime Minister: Real-time watching of *Pariksha Pe Charcha* (a unique conversation of the Prime Minister with students facing exams) was arranged on 1 April 2022 in the Digital Learning Centre of the Central Library to facilitate viewing by students and faculty. The programme was watched by the Director, Deans, HoDs, faculty members and several students including international students.



World Blood Donor Day 2022 was observed at NITK, Surathkal on 14 June 2022. A Blood Donation Camp was organized and publicity was given about the importance of Blood donation. Director, Deans, Joint Registrar, Faculty, Staff and Students assembled at the Institute's Main Building. Prof. Udayakumar R. Yaragatti, then



Director (i/c) addressed the gathering and highlighted the importance of blood donation. A pledge was administered by Prof. Narendranath S., Dean (Students' Welfare). The Institute organized the event jointly with NCC. The intra-campus blood donation was held at Trishul Hostel Mess (Block 2). The event was scheduled from 9:30 AM to 1:00 PM. Hence, the organizers and the NCC cadets were present well in advance to ensure the smooth run of the events. The medical team from Red Cross and Wenlock Hospitals arrived at 9:00 AM. They were helped by NCC cadets in organizing the event.

The 8th International Day of Yoga was celebrated on 21 June 2022. The live streaming of the Hon'ble Prime Minister's address was arranged at the Digital Learning Centre of the Central Library. The officials of the Institute along with faculty, staff and students attended the program. It was followed by a mass demonstration of the Common Yoga Protocol in the Yoga Hall of the New Sports Complex. Around



350 participants including faculty, staff members and students participated in the programme. The programme was coordinated by the office of the Dean (Students' Welfare). All participants were given a specially designed T-shirt. Prof. Vidya Shetty, Dean (Academic) delivered the welcome address. Prof. Udayakumar R. Yaragatti, then Director in-charge, delivered the introductory speech and enlightened the gathering about the benefits of Yoga.

Conferences and Workshops Organised

Department of Computer Science & Engineering

Sl No.	Title of the Event	Coordinator/ Co-Coordinator (as in the Event brochure)	Held during	Name of the chief guest/s, Keynote speaker, etc with affiliation
1	High-End Workshop on AI/ML for cyber security	Dr. Alwyn R. Pais	14 to 20 March 2022	Prof Bimal K Roy, ISI-Kolkatta, Dr. Alok Kumar, SVNIT- Surat, Dr. Asoke Talukder, SRIT-Bangalore, Dr. Ashok K Das, IIIT-Hyderabad, Dr. Kannan Srinathan, IIIT- Hyderabad, Dr. Sandeep Narayanan, CISCO-USA, Dr. Hemang S., Florida International University, Dr. Roland Hass, IIITB, Dr. Sobhan Babu, IIT-Hyderabad
2	5G Core: Challenges and Opportunities	Dr. Saumya Hegde, Dr. Mohit P. Tahiliani	19 March 2022	Mr. Subodh Gajare, Lead Solutions Architect, Cisco R&D, Bangalore
3	Online Distinguished Lecture on "Computer Systems Research in the Era of Machine Learning"	Dr. Basavaraj Talawar	22 March 2022	Prof. R. Govindarajan, SERC, IISc, Bangalore

Department of Electronics and Communication Engineering

1	Machine Learning And Deep Learning For Remote Sensing Applications" (MLDLRSA2022)	Dr. Shyam Lal	17-01-2022 to 21-02-2022	Ujjawal Gupta (SAC, ISRO, Ahmedabad)
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2	Workshop on "OpenLANE EDA tool for RTL to GDSII flow"	Dr. Ramesh Kini	21-02-2022 to 23-02-2022	M. Sudarshan Shenoy
3	Applications of Radiomics in Healthcare	Dr. Sumam David S. and Dr. Deepu Vijayasanen	April 9-29, 2022	Prof. Mandava Pitchaiah (Baylor College of Medicine, Houston, TX)
4	Machine Learning and Deep Learning For Remote Sensing Applications	Dr. Shyam Lal	21-04-2022 to 25-05-2022	Ujjawal Gupta (SAC, ISRO, Ahmedabad)
5	2 nd International Conference (Virtual Mode through Google Meet) on Computational Electronics for Wireless Communication (ICCWC-2022)	Dr. Sandeep Kumar, Dr. Prabu K.	09-06-2022 to 10-06-2022	Dr. Aloknath De, Corporate Vice President of Samsung Electronics & Chief Technology Officer of Samsung R&D Institute India-Bangalore (Chief-Guest), Dr. Anupam Sharma, Outstanding Scientist & Associate Director, Directorate of Special Projects (DSP) DRDO, Ministry of Defence, Hyderabad (Guest of Honour)
Department of Information Technology				
1	NITK National level Hackathon "HackVerse 3.0"	Dr. Sowmya Kamath S, Dr. Suprabha K.R. and Dr. Anand Kumar M.	26-27 February 2022	Mr. Ashish Banerjee, Technology Evangelist, QZip.in
2	DravidianLang Tech-2022@ACL: The Second Workshop on Speech and	Co-Organizer: Dr. Anand Kumar M.	24 May 2022	Prof. Shashirekha HL, Mangalore University

	Language Technologies for Dravidian Languages @ ACL, DUBLIN			
3	7-Day Sponsored Workshop on “Advanced Topics in Network Security and Cryptography”	Dr. Bhawana Rudra (Coordinator)	30 May to 5 June 2022	Dr. Harish (DRDO) Dr. Debasis Das (IIT-Jodhpur) Dr. Rajesh Krishnan (QuNu Labs) Dr. Pravati (NIT-Goa) Dr. Purushothama (NIT-Goa) Dr. Damodar Reddy (NIT-Goa) Dr. Gaurav (IIT-Jammu)
4	5-Day Online Workshop on Frontiers in Computing and its Applications	Dr. Bhawana Rudra (Coordinator)	20 - 24 June 2022	Dr. Sumit Soman (CISCO) Dr. Debasis Das (IIT-Jodhpur) Mr. Ravi Raj Bhat (GOOGLE-USA) Dr. Damodar Reddy (NIT Goa)
Department of Mechanical Engineering				
1	DST-SERB Sponsored Five-Day Online Workshop on Recent Advances in Manufacturing Processes for Industrial Applications	Dr. Sudhakar C. Jambagi; Dr. Srikanth Bontha, Dr. N Gnanasekaran, Dr. Ranjeet Kumar Sahu, Dr. Sumanth Govindarajan	21 to 25 February 2022	Prof. Kantesh Balani, IIT Kanpur Dr. Somashekhar S Hiremath, IIT Madras Prof. Mangal Roy, IIT Kharagpur Dr. Vamsi Krishna Balla, CGCRI, Kolkata Dr. Ravishankar, IIT Tirupati Dr. Kamath, KMC, Mangalore Devdatt Patro, Ducom, Bangalore, Dr. Karandikar, Kinetic Surface Technologies, Pune

2	5-Day SERB Online Workshop on Recent Advancements in Modeling and Analysis of Porous Materials RAMAPM 2022	Dr. N. Gnanasekaran, Dr. Kumar G.N., Dr. Sudhakar C. Jambagi, Dr. Arumuga Perumal D. and Dr. Parthasarathy P.	February 28 to March 04 2022	Dr. M. Mobedi, Shizouka University Japan; Dr. Gamze Gediz Ilias, Gabze Technical University Turkey; Dr. Srikanth Rangarajan, Binghamton University USA; Dr. Vasant Parthasarathy, Hanze University of Applied Sciences, Netherlands; Dr. Ranjan Das, National Institute of Technology Ropar; Dr. G. Venugopal, Govt Engg College Thrissur; Dr. Banjara Kotresha, Govt Engg College Haveri; Dr. Vishweshwara PS, M/s Valeo India Pvt Limited
3	DST funded Five-day online Workshop on Advances in Mechanical Engineering for Biomedical Applications	Dr. Anish S, Dr. Mrityunjay Doddamani, Dr. Ranjith M., Dr. Suvin P.S.	July 11-15, 2022	Dr. Prasad Patnaik B.S.V, IIT Madras; Dr. Sanjairaj Vijayavenkataraman, NYU, Abu Dhabi; Dr. Kaushik Chatterjee, Indian Institute of Science Bangalore; Dr. Rajneesh Bhardwaj, IIT Bombay; Dr. Anil Kumar P.R., Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram; Dr. Suresh Alapati, Kyungshung University, Korea; Dr. Falguni Pati, IIT Hyderabad; Dr. Gururaj, CEO Magloytech and Research Fellow, Department of Mechanical Engineering, National University of Singapore.

Department of Physics				
1	One-day Seminar on Scattering of quantum particles in one dimension	Dr. Sreenath V.	22 June 2022	Prof. Abhiram Soori
School of Humanities, Social Sciences and Management				
1	Five-day International Workshop on “Progress in Adoption of Sustainable Agriculture in India: Barriers and Opportunities”	Dr. Pradyot Ranjan Jena and Dr. Ritanjali Majhi	25-29 April 2022	Prof. Dillip Kumar Swain, IIT Kharagpur; Dr. Jeetendra Prakash Aryal, Economist, Asian Development Bank Institute, Japan; Prof. Shunsuke Managi Kyushu University, Japan; Dr. Ashwini Kumar Swain, Center for Policy Research, New Delhi; Dr. K.S. Kavi Kumar, Professor, Madras School of Economics
Department of Water Resources and Ocean Engineering				
1.	Summer School on Geospatial Science and Technologies (Level 1), Sponsored by NGP-DST, Govt. of India	Dr. H. Ramesh	11-31 May 2022	Dr. Shamitha Kumar, DST Representative, Department of Science and Technology, Government of India, New Delhi Mr. L. Shashikumar Director of Town & Country Planning Department, Govt. of Karnataka, Bengaluru

CENTRE FOR CONTINUING EDUCATION (C.C.E)

Details of Workshop conducted through CCE-NITK from January 2022 to June 2022

Sl.No.	Title of the Course	Duration	Organized through	Name of the Course Coordinators	No. of Participants attended	Course Intended for
1.	MACHINE LEARNING AND DEEP LEARNING FOR REMOTE SENSING APPLICATIONS	17-01-2022 to 21-02-2022	Department of Electronics and Communication Engineering, NITK	Dr. Shyam Lal	32	ISRO Scientists, sponsored by NRSC, Hyderabad
2.	MACHINE LEARNING AND DEEP LEARNING FOR REMOTE SENSING APPLICATIONS	21-04-2022 to 25-05-2022	Department of Electronics and Communication Engineering, NITK	Dr. Shyam Lal	35	ISRO Scientists, sponsored by NRSC, Hyderabad

Faculty Achievements

Department of Chemistry

1. Dr. Debashree Chakraborty received SERB Women Excellence Award-2022 with a research grant of Rs. 15 Lakhs from DST, Govt. of India.

Department of Chemical Engineering

1. Dr. Raj Mohan B. received the prestigious Prof. Satish Dhawan State Award for Young Engineers for the year 2019 from Karnataka State Council for Science and Technology, in appreciation and recognition of his outstanding contribution to the field of Engineering Sciences on 11th March 2022. The award consisted of Citation, Gold Medal and Cash Prize.

Department of Civil Engineering

1. Dr. Narasimhan M.C. received the "Concrete Teacher of Karnataka - 2021" award instituted by ICI (Bengaluru)-UltraTech on 25 February 2022.
2. Dr. Subhash C. Yaragal was appointed as a Nominee of VTU Belagavi to the "IQAC Member" of PDACE, Kalaburagi (Autonomous) from 31st January 2022 to 30th January 2025.

3. Dr. Subhash C. Yaraagal was invited as an Expert Member for Faculty selection at KLE Technological University, Hubballi on 11 February 2022.
4. Dr. Subhash C. Yaragal gave an Invited Talk on the topic “Water and its Judicious Use” on World Water Day organized by Karnataka Urban Infrastructure Development and Finance Corporation, under Community Awareness, Participation Rehabilitation & Resettlement Activities (CAPRR) on 22 March 2022.
5. Dr. Subhash C. Yaragal was invited as a Keynote speaker for Three-day Workshop on “Advances in Concrete Mix Design”, S.G. Balekundri Institute of Technology, Belgaum, on 25 March 2022.
6. Dr. Subhash C. Yaragal gave an Invited talk on World Environment Day on “Positive changes to protect the earth” at an event organized by Suez Projects Private Limited and Government College of Teacher Education, Mangalore on 6 June 2022.
7. Dr. Rajasekaran C. delivered a keynote lecture during Two-Day National Conference on “Sustainable Infrastructure with Responsible Consumption and Production” at Velammal College of Engineering & Technology, Madurai, Tamil Nadu on 25 March 2022
8. Dr. Babloo Chaudhary delivered a keynote lecture on the topic “17 Years after the 2004 Indian Ocean Tsunami: Are We Prepared Enough?” at the National Workshop on Recent Advances in Geotechnics for Infrastructure (RAGI 2022), jointly organized by the Association of Consulting Civil Engineers (India), Mysore Centre; Indian Geotechnical Society, Bengaluru Chapter; Vidyavardhaka College of Engineering, Mysuru; ATME College of Engineering, Mysuru; Maharaja Institute of Technology Mysore; Sri Jayachamarajendra College of Engineering, JSS Science & Technology University, Mysuru and The National Institute of Engineering, Mysuru on 28th May 2022.
9. Dr. Bibhuti Bhusan Das delivered a research talk on the topics “Nanotechnology (Hydration and Microstructure Characteristics)” and “Sustainable Advances and Requirements of Research in Concrete Technology in the Era of the 21st Century” during AICTE-sponsored one-week online ATAL FDP on ‘Advances in Construction Techniques’ organized by BLDEA’s V.P Dr. P.G. Halakatti College of Engineering and Technology, Vijayapur, Karnataka on 5th and 6th January 2022.
10. Dr. Bibhuti Bhusan Das delivered a keynote address on the topic “Hydration and Microstructure Characteristics of Nano-Silica Admixed Mortar” during the US2020 Partnership Workshop on “FRP Materials and Sustainable Structures,” organized by the Dept. of Civil Engineering, BITS-Pilani, India, held on 4th March 2022.

11. Dr. Bibhuti Bhusan Das has been nominated as a Member of the Board of Studies in Civil Engineering for a period of 3 years for NMAMIT, NITTE (Deemed to be University).
12. Dr. Bibhuti Bhusan Das has been nominated as a BOS Member for a period of one year for Mangalore Institute of Technology and Engineering (MITE), Mangalore.
13. Dr. Sridhar G. delivered an invited lecture titled “Utilization of Iron Ore Tailing as Granular Fill in Mechanically Stabilized Earth Walls” during the National Seminar on “Applications of Geosynthetics and Natural Fibers in Infrastructure Development” organized by the Department of Civil Engineering, IIT Madras on 24th June 2022.
14. Dr. Raviraj H. Mulangi has been nominated as a BOS Member KLE Technological University, Hubli.
15. Dr. Raviraj H. Mulangi has been nominated as a BOS Member GIT Belgaum.

Department of Computer Science and Engineering

1. Dr. Annappa of the Department of Computer Science & Engineering, received the award at BITES Best PhD Thesis Award Ceremony- 2020, Media Centre, Siddaganga Institute of Technology, Tumakuru on March 18, 2022

Department of Electronics and Communication Engineering

1. Dr. Shyam Lal received the Google Cloud Research Award of \$5000 (Rs. 3,73,681.25) for the project “Design and Development of Deep Learning based Automated Colon Cancer Detection System from H&E-stained CRC Histopathology Images” on 19 January 2022
2. Dr. Shyam Lal delivered an expert lecture on “Deep learning Architectures for Healthcare Applications” in virtual mode on 6 June 2022 in a short-term course on “Emerging Trends in Signal Processing, Communication and VLSI (ETSPCV-2022)” held during June 06-11, 2022 organized by Department of Electronics and Communication Engineering, National Institute of Technology Delhi, India.

Department of Information Technology

1. Dr. G. Ram Mohana Reddy delivered Keynote Talk on “AI Trends 2050 and Smart Applications”, in an FDP on AI for Computer Vision and Image Processing (AICVIP), E&ICT, NITW and KITS, Warangal, Telangana, India, June 6-18, 2022.
2. Hariharan and Dr. Anand Kumar M. got first place in the Shared Task competition organised by NITK_NLP at CLEF CheckThat! 2021: EnsembleTransformer Model for Fake News Classification, CLEF, University of Hildesheim, Information Science-2021 .

Department of Mechanical Engineering

1. Dr. Arumuga Perumal D. delivered a Keynote Talk on “Numerical Study on Performance of Polyethylene-Graphene based Composite Phase Change Materials for Thermal Energy Storage”, at PSN Institute of Technology and Science, Tamilnadu, on 29 April 2022.
2. Dr. Ranjith M. delivered a Keynote Talk on “Computational Modeling of Bio-Heat Transfer Problems”, at Faculty Development Program on Advances in Energy and Environmental Research held by Providence College of Engineering, Chengannur, 21 January 2022.
3. Jitendra Kumar Katiyar and Ranjeet Kumar Sahu published a book titled “Modern Manufacturing Technology: Spotlight on Future”, CRC Press, Taylor & Francis, Boca Raton, New York.
4. Dr. A. Sathyabhama received the IREDA (Indian Renewable Energy Development Agency)-NIWE (National Institute of Wind Energy) award for Best Research Work in Wind Energy for the year 2020
5. Dr. Mrityunjay Doddamani’s paper on “3D Printing of Highly Pure Copper, Metals”, MDPI, 2019, 9(7), 756; became the most cited paper in 2020.

Department of Mining Engineering

1. Dr. Ch. S.N. Murthy received the Excellence Award during the 21st Annual Geomintech International Symposium on New Equipment Technology Management and Safety in Mines and Mineral-based Industry, Organized on 11-12 May 2022.
2. Dr. Ch. S.N. Murthy was appointed as the expert member of the NBA for evaluating the PG programme at NIT-Rourkela, during 21 -22 April 2022.
3. Dr. Ch. S.N. Murthy was appointed as Member-BOS, Department of Mining Engineering, JNTU Hyderabad, Telangana, from May 2022- May 2024.
4. Dr. Harsha Vardhan received the prestigious Prof. Satish Dhawan State Award for Young Engineers, 2019, from the Hon’ble Chief Minister of Karnataka, Government of Karnataka in appreciation and recognition of his outstanding contribution to the field of Engineering Sciences on 11th March 2022. The award consisted of Citation, Gold Medal and Cash Prize.
5. Dr. Harsha Vardhan was appointed by Govt. of Karnataka as a Member of a High-Level Committee for establishing a Mining School in Karnataka State
6. As inventors, Dr. Harsha Vardhan, Dr. Govinda Raj and other team members got an Indian Patent entitled “Hydro-squeeze pressure filtering for the efficient beneficiation of coal

material” (Patent number: 396632; Application No: 202141026712; Date of Grant: 11-05-2022)

7. Dr. Aruna M. was appointed as a member of the Technical Committee for the ‘Verification of Techno-Economic Feasibility Report of Various Leases of Karnataka State Minerals Corporation Limited’ by the GOK.
8. Dr. Aruna M. was appointed as a member of the Technical Committee constituted by the Karnataka State Pollution Control Board to give recommendations for Building Stone Quarrying activities.
9. Dr. Karra Ram Chandar was co-opted to the National Council of Mining Engineers Association of India
10. Dr. Karra Ram Chandar was appointed Editorial Board member of the Mining Engineers Journal.

School of Humanities, Social Sciences and Management

1. Dr. Pradyot Ranjan Jena published a book titled “Development and Opportunities in the Maize Sector in Eastern and Southern Africa” by Cambridge Scholars Publishing, Cambridge, UK.
2. Dr. Pradyot Ranjan Jena was elected as an executive member of the Indian Society for Ecological Economics (INSEE) for 2022 – 24
3. Dr. Shashikantha Koudur delivered an expert lecture titled “From Weigle to Kittel: Perceptions of Dasasahitya among the Basel Missionaries” organized virtually by the Department of South Asian Languages and Civilizations, University of Lausanne, Switzerland, on 17 May 2022.
4. Dr. Shashikantha Koudur has been nominated as an external member of the Board of Studies in Humanities by NMAMIT, NITTE (Deemed to be University) for a period of 3 years from 1 April 2022.

Department of Water Resources and Ocean Engineering

1. L. Nandagiri, Narasimhan, M.C., Marathe, S., Dinesh, S.V. edited and published a book titled “Sustainability Trends and Challenges in Civil Engineering”, Select Proceedings of CTCS 2020, under the series: Lecture Notes in Civil Engineering, 1st Edition, 2022, Springer.

Students' Achievements

Department of Chemistry

1. Panchami HR, Ph.D. scholar of the Department of Chemistry received the "Dr. B.R. Ambedkar Young Entrepreneurs League (AYEL)" award on 14th April 2022, at Dr. Ambedkar International Centre, New Delhi.

Department of Civil Engineering

1. Mr. Niranjana P and Mr. Vaibhav Prathap were selected for the prestigious MITACS summer internship programs, for 12 weeks, during May-July 2022, at Ecole Polytechnique de Montreal University and Ryerson University, Toronto, respectively.

Department of Computer Science and Engineering

1. Anirudh Achal of VII Sem B.Tech had the opportunity of interning at Databricks, San Francisco, CA, US, from May 16 to Aug 5, 2022.
2. Pranav Agarwal of VII Semester B.Tech did his internship at IIT Madras (online mode) from 1 June to 31 August 22.

Department of Electronics and Communication Engineering

1. Subham Roy, Kiran Kumar Lad, Rekha S., Laxminidhi T., of the department of Electronics and Communication Engineering won the Best paper award for the paper titled, "A low mismatch current-steering charge pump for high speed PLL", in the Second International Conference on Computational Electronics for Wireless Communications (ICCWC-2022) during June 9-10, 2022.

Department of Mechanical Engineering

1. Erin Sam Joe (191ME131) published a journal paper with an Impact Factor of 2.891 (Computational analysis of fluid immersed active cooling for battery thermal management using thermal lattice Boltzmann method; Joe, E.S., Arumuga Perumal, D., European Physical Journal: Special Topics, 1-13, Springer, 2022).
2. Abhived Nair, Nikhil Shobu Varghese, Joel Chacko Jacob, Devan Rajendran, and Suvin P. presented one of the Most Distinguished Papers at the 2nd International Conference on Industry 4.0 and Advanced Manufacturing (I-4AM 2022), held online by the Centre for Product Design and Manufacturing (CPDM), partnering with twelve other departments at Indian Institute of Science (IISc), Bengaluru, during 10-11 January 2022.
3. Devika Harikrishnan, Shrivatsa Hegde, and Pratyush Purohit are selected for MITACS Globalink Research Internship, Canada.

4. Athul Shankar was selected as Technical Intern at Toyota Qatar Abdullah and Bros. Co. W.L.L

Department of Mining Engineering

1. Pradum Kumar of V Semester B. Tech was awarded Mr. NITK award in the intercollegiate Cultural Festival, Incident 2022.

School of Humanities, Social Sciences and Management

1. Manu Vishwanath and Venkatesh Prasad got 1st place in the Operations vertical at the International Management Fest, "Cranium 2022", held in Bangalore on 13 and 14 May 2022.
2. Brighto Raphael and Shaunusha Shetty got 2nd position in the Marketing vertical at the International Management Fest, "Cranium 2022", held in Bangalore on 13 and 14 May 2022.

Department of Water Resources and Ocean Engineering

1. Mr. Parthasarathy K.S.S. Research scholar and Dr. Subrahmanya Kundapura have received the 'Best Presentation Award' for the paper titled 'Mapping of flood inundated urban regions using Sentinel-1 SAR imagery for the 2018 and 2019 Kerala floods' in the 2nd International Conference on River Corridor Research and Management, held from 30 May to 1 June 2022 at IIT, Guwahati.
2. Mrs. Alka Abraham, Research Scholar and Dr. Subrahmanya Kundapura have received the 'Best Presentation Award' for the paper titled 'Identifying the potential impacts of climate change in streamflow in a humid tropical basin' in the 2nd International Conference on River Corridor Research and Management, held from 30 May to 1 June 2022 at IIT, Guwahati.

Projects/Consultancies Sanctioned

Project Title	Investigator(s)	Funding Agency	Sanctioned Amount (in Lakh Rs.)	Duration
Department of Civil Engineering				
New Resilient Breakwater for Safety of Port and Harbour against Tsunami	Chief Investigator: Dr. Babloo Chaudhary	Ministry of Ports, Shipping and waterways	45	2022-25

	Co-investigators: Dr. Katta Venkataramana and Dr. Sridhar G.			
Development of Microbial Biosurfactant for the Remediation of Selected NSAIDs	Dr. C.P. Devatha	SERB DST	29.9	2022-25
Department of Computer Science & Engineering				
Logical Correctness for Batteryless Internet of Things	Dr. Biswajit R. Bhowmik	SERB, DST	20.01	2022-24
Proof of Concept (v2) of New IP	Dr. Mohit P. Tahiliani	Futurewei Technologies Inc.	20.01	2022-23
Re-implementing Hyperloglog in a Binary Compatible SPARK	Dr. Annappa & Dr. Mohit P. Tahiliani	Epsilon, India	3.30	April 2022 – July 2022
Department of Electronics and Communication Engineering				
Design and Development of Automated Software Tools for Early Forest Fire Detection and Burn Severity Analysis from Multi-sensor Satellite Imagery Data	Dr. Shyam Lal	IIRS (ISRO)	37.9	2022-25
Design and Development of Deep Learning based Automated Colon Cancer Detection System from H&E-stained CRC Histopathology Images	Dr. Shyam Lal	Google, USA	3.7	2022-23
Design, Development of Harmonically Tuned GaN HEMT Power Amplifier Over Broadband	Dr. Sandeep Kumar	ISRO, Govt of India	14.5	2022-25

Development of Low Phase Noise Optoelectronic oscillator with Phase Compensation Approach for Radar Application	Dr. Mandeep Singh	DRDO-DST Project	30.04	2022-25
Nanophotonic Porous-silicon based Nanostructures for Ultra-fast Methanol Sensing at Room Temperature	Dr. Mandeep Singh	SERB-DST	35.58	2022-25
Programmable Photonic Microwave Signal Generation Using On-chip Spectral Shaper for Satellite Communication.	Dr. Mandeep Singh	ISRO, Govt of India	22.51	2022-24
Development and Deployment of a Speaker Diarization System for a Multilingual Setup for Indian Languages	Dr. Deepu Vijayasanan	SERB-DST	94.1	2022-25
Department of Information Technology				
Microsoft AI for Earth Grant for Spatial Data Analytics for Environmental Modeling	Dr. Sowmya Kamath S. and Dr. Shrutilipi Bhattacharjee	Microsoft	US \$15,000	2022-23
Department of Mining Engineering				
Scientific Study for Slope & Dump Stability as per Reg. No 106(2) of CMR 2017 for Utkal-'D' Coal Mine of M/s. NALCO - Odisha	Dr. K. Ram Chandar	M/s. Utkal Coal Mining India Private Limited	10.0	May-August 2022 (four months)

Scientific Study on Slope Stability Analysis of Highwall Benches & OB Dumps at Proposed JK Coal Mine, Yellandu Area- SCCL	Dr. K. Ram Chandar	The Singareni Collieries Company Limited	7.0	June-September 2022 (four months)
Scientific study for stability analysis of pit and dumps of Basant Nagar Limestone Mine	Chief Investigator: Dr. Sandi Kumar Reddy, Co-investigator: Dr. K. Ram Chandar	Kesoram Cements	11.21	January 2022 onwards

Department of Physics

1	Investigation of the primordial origin of anomalies in the cosmic microwave background.	Dr. Sreenath V.	SERB	11.858	2021-2023
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Students' Activities

Chapter Inauguration

On 5 February, the NITK chapter of the Robotics and Automations Society (RAS) was inaugurated in the presence of the Bangalore Section RAS Chair, Dr. Venkatarangan MJ. The inauguration was followed by a talk by Nagarakshith M. Sreenivasalu, an Autonomy Engineer at BrainCorp.



Campus Clean-up Drive: A campus clean-up drive was conducted on 12 February 2022. Many locations were cleaned including the SAC, Pavilion, Adke Circle, etc. Volunteers from the Students Council, ACM, IE, Artists Forum, NSS helped achieve the goal.



Bharath Darshan

This bright and colourful extravaganza showcases brilliant performances by groups representing the various states of India and is held on the occasion of Republic Day. Dance, Drama and Fashion Club takes pride in conducting this festival annually where students can see and feel the culture of their home state.



Inaugural of Bharath Darshan



Incident 2022

The cultural festival of NITK, *Incident 2022* came back with its former glory after a gap of two years during 3-6 March 2022. The Chief Guest of the inaugural, Dr. Ashwathnarayan CN, Minister, Government of Karnataka sent a video message to the students of NITK as he could not attend the event because of his busy schedule. Dr. Bharat Shetty Y, a Member of the Legislative Assembly of Karnataka representing Mangalore North, was the Guest of Honor. He addressed the gathering and shared his experiences. The Padma Shri awardees from the district, Shri Harekala Hajabba, Shri Amai Mahalinga Naik, alongside Dr. Soujanya J. Anchan, Medical officer at the Surathkal Primary Healthcare Center, were felicitated by the guests for their contributions and achievements. Prizes were distributed to the winners of various competitions organized by I-Care, the social initiative wing of *Incident* for the school kids. Various events were conducted under the banner of this festival. Some of them are as follows:

Inci Talks: Fostered by the vision of serving the student community with the most innovative and inspiring ideas, Inci Talks is an event that is held during Incident. Various inspiring people from various fields are invited to share their experiences, breakthroughs, and ideas in this stage. Incident '22, in association with Photography Club NITK, invited an elite wildlife photographer, Ms. Arzoo Khurana, with acknowledgments from Discovery, Nat Geo, and BBC.



Raga Rhapsody, Tandav, Nritya, and Pulse were some of the competitive events in music and dance. Following are a few glimpses.





Kite festival, Tug of war and Sand art on the beach

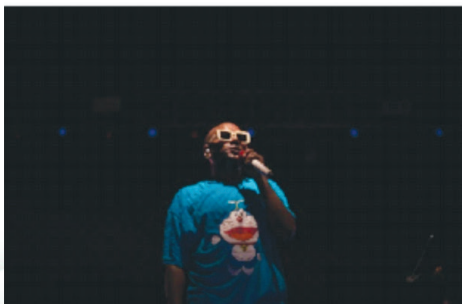


Bike and Cycle stunts by invited Stunt Teams

E-Bike Release: During one of the pro-shows, *Incident* gave stage to the Centre for System Design, NITK, to release their e-bike VidhYug 4.1 by the then Director Prof. Udayakumar R. Yaragatti. By steering the bike on the stage in style, Prof. Yaragatti unveiled the E-bike fully developed in-house at NITK – which is only a stepping stone to much more technological advancements to come. The e-bikes project has been supported by our alumni.



Pro-Show: Karunesh Talwar, Non-Violinist Project, Pineapple Express, Lohar the Blacksmiths and Benny Dayal were the bands that made the pro-show a success on each of the days of the festival. They attracted a crowd of five to six thousand each day.





Engineer 2022



The annual technical festival of NITK Surathkal, *Engineer 2022*, was also celebrated from 4 to 6 March 2022. The event started with the Inauguration Ceremony and hosted over 60+ events enveloping all disciplines of engineering and including business events. Baja, Robocon, Mechanics Events, Computer Events, Tronix Events, Tech Mela, Civil and Astro Events, Flying & Robotics Events, Chemical Events, Metamorph, Gaming Events, Engi Talks, Lazer Show, Weapon Show, DJ Night were some of the events that pulled the crowd.

NITK Hostels

Planting of Coconut Saplings:

Planting of coconut saplings was undertaken in the coconut garden behind Vindhya (III) Boys Hostel Block on 05 June 2022, on World Environment Day and the event was inaugurated by the then Director (In-charge) Prof. Udaykumar R. Yaragatti by planting a coconut sapling. About 105 coconut saplings were planted on that day. Professor in-charge of Hostel Affairs, Dr. Raj Mohan B, Block wardens and Hostel staff participated in the event by planting saplings. The event was supported by the NCC and NSS units of NITK Surathkal.



Inauguration of Medical Room Facility in Girls Hostel:

A medical room facility was inaugurated in Nethravathi (Girls Hostel 5) on 27 June 2022 by the then Director (In-charge) Prof. Udayakumar R. Yaragatti. The facility would be available during night hours from 8 pm to 6 am. The medical room is well-equipped with first-aid kits, essential medicines and other minor medical services to cater to the emergency needs of more than 1200 girls residing in the hostels. A trained nurse would be available on-site to provide necessary first aid and assess and manage any health issue that may arise during the night hours. NITKSH management has left no stone unturned in taking proper care of the students.



Hostel Automation: Computerization of accounts has been initiated to improve the accounting process in the hostels. A new website has been developed by Dr. Kiran M, Warden (Himalaya – MT II/ Students' Welfare), students and the IRIS Team for room booking and mess selection by students. Students are not required to be physically present in the hostel office to get the rooms and mess allotted, as was the practice earlier. To receive feedback related to messes and maintenance issues, an online complaint registration system is also initiated.

Alumni Activities

Visit of '79 Impact Group'

The alumni of the 1979 batch have formed a group called IMPACT. This group visited the campus after more than 40 years of graduating on May 26 and 27, 2022. Some of the alumni who visited are Dr. A.K. Suresh, Dr. Ramakrishna Sonde, Mr. Mahesh Myakal, Dr. Y.S. Mayya, Mr. K. Ramamurthy, Mr. M. Srinivas Rao, Mr. C.J. Jagadeesha, Mr. Ashok V. Naik, Mr. Ramarao Anantapur, Mr. Babu Anvekar, Mr. Ajit Kadwadkar, Mr. A.R. Krishna Reddy, Mr. Kiran Koppalkar, Mr. Jayanth Deshpande, Mr. Vishnudas Pai and others. The alumni visited the projects sponsored by the Impact group and interacted with the faculty of the respective project. They also visited Central Research Facility (CRF), Centre for System Design (CSD), STEP and various departments to identify the research areas and help the alma mater to connect to relevant industries. Mr. Jayanth Deshpande addressed the students of NITK on 26 May 2022 about career success. Dr. Ramakrishna Sonde addressed the NITK faculty and research scholars on 27 May 2022 on Grand Challenges and Opportunities for NITK. The team had a discussion with the then Director Prof. Udayakumar R Yaragatti and also one of the alumni handed over a cheque of Rs. 1.0 lakh as a donation to the Institute Corpus Fund.



Visit to Central Research Facility (CRF)



**1979 Batch alumni donating to the NITK
Corpus fund**

MoUs Signed with Industries and Institutions/Universities (January-June 2022)

SLNo.	MOU SIGN DATE	DURATION (years)	ORGANIZATION	DOMAIN
1	02-03-2022	3	UniCourt	To collaborate on Research and Consultancy projects and Internship
2	02-03-2022	3	Mangalore Infotech Solutions Pvt. Ltd, Mangalore	To collaborate on Research and Consultancy Projects and Internship
3	02-03-2022	3	Trishilabs Infosystems LLP, Bangalore	To collaborate in academic, scientific, and technical research in specific areas of common interest, in the broad areas of artificial intelligence, in medical image analysis under a project titled 'Development of Software tools for retinal image analysis'
4	16-03-2022	2	TATA Consultancy Services Limited, Mumbai	Consultancy Services
5	11-04-2022	5	CSIR-Institute of Minerals & Materials Technology, Bhubaneswar	To Promote Collaborative research and exchange of knowledge and technical know-how between the two institutions in areas of mutual interest

6	19-04-2022	5	Department of Psychiatry, Yenepoya Medical College, Deralakatte, Mangalore	To encourage cooperation between administration on providing necessary service and expertise from either end to address the stress-related medical issues and psychological problems among NITK Students
7	29-04-2022	3	UD Trucks India Private Limited, Bengaluru	To promote interaction among students, faculty and employees of UD Trucks
8	10-05-2022	1	Fourth Frontier Technologies Private Limited, Bangalore	To collaborate on learning new technologies with the FFTPL program, develop project prototypes, and organise student internships
9	26-05-2022	3	SEG Automotive India Pvt. Ltd, Bengaluru	To cooperate with each other to explore the possibility of research collaboration in Electric Vehicle Technology
10	13-06-2022	2	TATA Consultancy Service, Mumbai	To build research collaborations and also augment projects and patents in the area of Quantum Computing as well as the exchange of students to the TCS to work on their problem statements.
11	23-06-2022	3	Robosoft Technologies Private Limited, Udupi	To collaborate in India to develop curriculums or any other mutually agreed activities

Placement Statistics (AS ON 30.06.2022)

DEPARTMENT	ELIGIBLE STUDENTS	PLACED	% PLACED
B.Tech.			
CIVIL	89	75	84
CHEMICAL	46	44	96
COMPUTER SCIENCE	104	100	96
ELECTRONICS & COMMUNICATION	102	100	98
ELECTRICAL & ELECTRONICS	101	93	92
INFORMATION TECHNOLOGY	91	91	100
MECHANICAL	158	142	90
METALLURGICAL & MATERIALS	39	34	87
MINING	32	29	91
Total B.Tech	762	708	93
M.Tech			
CIVIL ENGG			
STRUCTURAL ENGG.	41	35	85
GEO THERMAL ENGG	18	16	89
ENVIRONMENTAL ENGG	34	21	62
TRANSPORTATION SYSTEMS ENGG	30	23	77
CONSTRUCTION TECH & MGMT	63	29	46
WATER RESOURCES & OCEAN ENGG			
MARINE STRUCTURES	32	26	81
WATER RESOURCE ENGG & MGMT	18	11	61
REMOTE SENSING & GIS	29	14	48

CHEMICAL ENGG			
ENVIRONMENTAL SCIENCE	13	10	77
CHEMICAL ENGG	17	14	82
INDUSTRIAL BIOTECHNOLOGY	24	21	87
COMPUTER SCIENCE			
COMPUTER SCIENCE & ENGG	37	33	89
INFORMATION SECURITY	33	31	94
ELECTRONICS & COMMUNICATION ENGG			
VLSI	30	23	77
COMMUNICATION ENGG & NETWORK	27	27	100
SPML	24	19	79
ELECTRICAL & ELECTRONICS ENGG			
POWER & ENERGY SYSTEM	34	26	76
INFORMATION TECHNOLOGY			
INFORMATION TECHNOLOGY	29	28	97
MECHANICAL ENGG			
THERMAL ENGG	16	11	69
MANUFACTURING ENGG	21	19	90
MECHATRONICS	34	22	65
MECHANICAL DESIGN	20	17	85
METALLURGICAL & MATERIALS ENGG			
PROCESS MET.	17	10	59
MATERIALS ENGG.	28	13	46
NANOTECHNOLOGY	17	13	76

MINING ENGG			
MINING	1	0	0
MATHEMATICAL & COMPUTATIONAL SCIENCE			
COMPUTATIONAL DATA SCIENCE	37	34	92
Total M.Tech	724	546	75.41
MCA	52	46	88
MBA	29	22	76
MSc (Chemistry)	32	17	53
MSc (Physics)	27	11	41
TOTAL	ELIGIBLE STUDENTS	PLACED	TOTAL % PLACED
	1626	1350	83
Total Companies Visited: 405	Maximum salary Rs.45.03 LPA		
Average Salary UG: Rs. 15.84 LPA	Median Salary 12.84	UG: 93 %	PG: 74.3 %

Training Slots for the Academic Year 2021-22 as on 30-06-2022

Sl. No.	Branch	No. of Slots
01	Chemical Engineering	22
02	Civil Engineering	55
03	Computer Engineering	103
04	Electronics & Communication Engineering	60
05	Electrical & Electronics Engineering	59
06	Information Technology	82
07	Mechanical Engineering	147
08	Metallurgical & Material Engineering	17
09	Mining Engineering	28

Number of Companies: 134

Number of Training Slots: 573

New Infrastructure

- **New Building Completed:** A new building for “Construction of Concrete testing Laboratory and Environmental Engineering Laboratory for the Department of Civil Engineering (G+1 floor as an annex to the existing building)” was completed in March 2022. The building was constructed through CPWD at an estimated cost of Rs. 132 lakh.
- **New Infrastructure Planned:**
 - ❖ Construction of the New Annex Building for the Central Library: The Board of Governors, vide meeting dated 10 June 2022, has accorded approval for the construction of a new annex building for the central library (at the site of the demolished old Library block) with G+4 floors of a total built-up area of about 2,277 sqm, at an estimated cost of Rs. 13.97 crore. The proposal has further been submitted to MoE for funding through HEFA.
 - ❖ Extension of electrical lines to the campus residential area from the 33kV substation: The Board of Governors, vide meeting dated 10 June 2022, has accorded approval for the work of ‘Extension of electrical lines to the campus residential area from the 33kV substation’ at an estimated cost of Rs. 8.15 crore. The work would be commenced soon through CPWD. After completion of this work, the power supply to the residential area of the campus would be from the 33kV substation of NITK, thus avoiding frequent power failures in the area.

Central Research Facility (CRF)

List of Equipment Installed During January - June 2022

1. Field Emission Gun Scanning Electron Microscope (Jeol)



SEM, EDS modes available. High-temperature measurements up to 600o C possible.

Functional materials, nanomaterials, films, reflective and magnetic coatings, biomaterials, energy materials, water purification media, etc. with micro-tensile (up to 1 kN).

2. Fourier Transform NMR Spectrometer



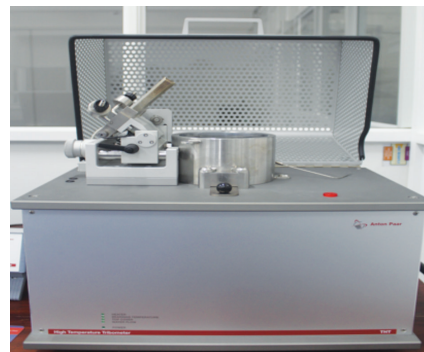
Structural elucidation of a variety of chemical compounds; organic molecules, inorganic complexes, drug molecules, dyes, biomolecules, etc. To determine the structure of organic molecules in solution and study molecular physics and crystals as well as non-crystalline materials.

3. Metal 3D Printer



Has applications in the field of the aerospace industry, biomedical industry, die and tooling industry, and automotive industry. The machine can be used for laser metal deposition, laser cladding and laser surface melting.

4. Tribometer



Used for wear and friction monitoring.

Measures friction coefficient across lubricant, grease, bio, automobile, semiconductor, aerospace, materials, ceramics, space industries, and more.

To get the correct friction force, it is important to conduct experiments in conditions close to the real application.

5. High-Velocity Air Fuel (HVAF)



Coating to improve the surface integrity of the material. To improve the corrosion and wear properties of substrate materials. It is convertible to high-velocity oxy field. Used in chemical and petroleum pipelines, High-temperature valves, etc.

6. Automatic Multi Specimen Polisher/Grinder Electrohydraulic Specimen mounting press



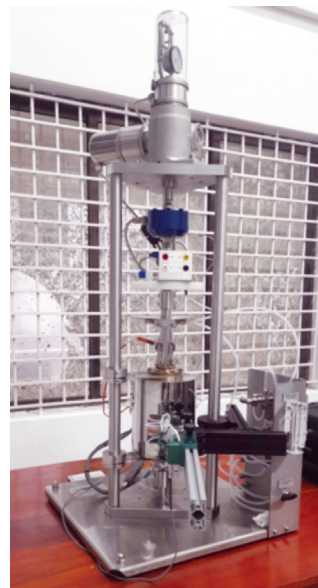
Helps in sample preparation for microscopic study. Helps in attaining more consistent part quality. Helps in getting a fine finish of the surface with less operator dependence.

7. Abrasive Cut-off Machine



This is a sectioning machine for cutting and slicing various materials. Absolute minimal deformation, cool & burn – free sample production. Effortless cutting by lever mechanism, counterbalancing.

8. Slow Strain Rate Test (SSRT) System



Helps in the study of slow strain. It is a common means to investigate stress corrosion cracking (SCC) in key engineering structural materials of light-water reactors, and it is an important task to real-time monitor the crack growing length and rate of the specimen during the test.

9. UV Ozone Cleaning System



It is effective for creating atomically clean surfaces Used for cleaning semiconductor wafers, QCM-D sensors, AFM tips, and SEM/ TEM samples. It is equipped with a mercury vapor UV lamp that generates UV light.

10. Gas Chromatography (GC x GC ToF MS)



Helps in the quantitative and qualitative analysis of volatile and semi-volatile compounds. The Pegasus BT system combines gas chromatography and mass spectrometry, two very powerful analytical techniques. It involves two columns which help in resolving the peak of target analytes better and it uses a very non-traditional type of mass spectrometer a ToF (time of flight) mass spectrometer.

11. Integrated Lab Scale Hollow Fiber Membrane spinning System



Used for fabricating the hollow fiber. Hollow fiber is majority used for water purification. The equipment is capable of producing hollow cylinder both single and double layered of length 1000m lengthwise, self-supporting and at the rate of 28 - 30m production per minute. The formed hollow fiber has invisible nanoscale pores throughout the surface.

12. Liquid Nitrogen Plant



Used for generating liquid nitrogen.

13. Twoport Automated Inert Gas Workstation (Glove Box)



Glove Box provides a leak-tight environment for work with contamination-sensitive materials. Variable speed circulation blower 110 m³/h, Automatic pressure control +/- 15mbar, Automatic purging Integrated moisture analyzer 0-1000 ppm.

14. 250 kN Servo - Hydraulic Fatigue testing Unit



Used for measuring static and fatigue properties of metals, nonmetals and composite materials. Static tensile and compression tests can be done. Loading capacity -25 to +25 kN and -250 to +250 kN Fatigue tests can be performed under elevated temperature and environmental conditions.

RETIREMENT ON SUPERANNUATION

Faculty






Dr. T.P. Ashok Babu, Professor (HAG), Department of Mechanical Engineering, retired on 31 January 2022.



Dr. Aloysius Henry Sequeira, Professor (HAG), School of Humanities, Social Sciences and Management, retired on 31 May 2022.

RETIREMENT ON SUPERANNUATION
Non-Teaching Employees

Sl. No.	Name of the Employee	Date of Superannuation	
1	Shri Monappa Mera K, Superintendent (SG-II), Accounts – II Section.	31-05-2022	
2	Shri Narayana Naik N., Assistant (SG-I), Central Library.	31-05-2022	
3	Smt. Parvathi, Assistant (SG-I) / Superintendent I/c Hostel Office	31-05-2022	
4	Shri K Ravindra, Technician, Works Establishment Section (RE Office)	31-05-2022	

5	Shri Yogeesha, Assistant (SG-I)/ Superintendent I/c Establishment & General Section	30-06-2022	
6	Shri Annu, Senior Office Attendant, Office of the Security Officer.	30-06-2022	
7	Shri Jaya, Junior Assistant, Works Establishment Section (RE Office)	30-06-2022	





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