

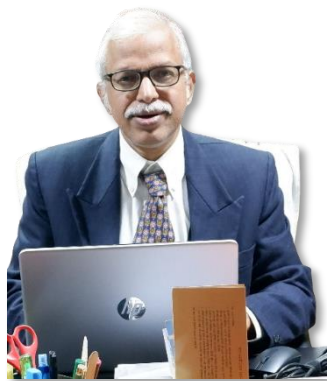


Vol. 15, No. 03



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## *Message from Director*



Namaskar. It is a great pleasure to inform all of you that NITTTR Kolkata has been conferred Deemed to be University status under Distinct Category by the Ministry of Education, Government of India. Hence we have an onerous task of empowering the technical teachers, students and others with the requisite skills in emerging technologies, for the cultivation of teaching prowess so that our trainees and students are well-prepared to assume roles as exemplary educators in the future. We are planning to roll out new PG programs that are crafted to be skill-centric, aligning closely with the core tenets of industry-oriented education as per the National Education Policy 2020. Furthermore, learners at NITTTR Kolkata will be getting enormous benefits from various Centre's of Excellence at NITTTR Kolkata namely Acharya Prafulla Chandra Ray Welding Centre, Curriculum Development Centre, Learning Resource Centre, Product Development Centre, CAD/CAM Centre, and other leading industries that can foster

practical, hands-on learning experiences. On the occasion of this momentous journey, I on the behalf of entire NITTTR Kolkata would like to extend heartfelt gratitude to all the stakeholders, for their unwavering support and recognition of our relentless pursuit of excellence.

It was an exhilarating and enchanting experience for all of us to be part and parcel of the ensuing Diamond Jubilee celebration on the occasion of 60<sup>th</sup> foundation day of National Institute of Technical Teachers' Training and Research which was celebrated in her modest journey on 11<sup>th</sup> January 1965. Since her inception, NITTTR Kolkata has been serving relentlessly covering the entire spectrum of technical teachers' training across pan India for the last 60 years. With a symphony of beat and sound in her exhilarating journey, NITTTR Kolkata has navigated the technical education system of the country encompassing teacher training, curricular activities, research in technical education, instructional material development and outreach activities for the community to a new but greater height. As a leading institute, NITTTR Kolkata along with other NITTTRs and AICTE, New Delhi has been designing and developing the policy for technical teacher training that is being implemented successfully. In recent times, NITTTR Kolkata has developed state-of-the-art laboratories and education in cutting-edge technology which has

augmented the quality of education and training for the technical teachers of India.

As a NITTR family, we will have to rededicate ourselves to imparting state of art teacher education to the next generation of educators, society builders and innovators, driving positive change and transformative impact in the present society. Let us get energized with the following eternal message from our ancient scripture.

ॐ भद्रं कर्णेभिः शृणुयाम देवः ।  
भद्रं पश्येमक्षभिर्यजत्राः ।  
स्थिरैरङ्गास्तुस्तुवा स्तिकेन्ससस्तनुभिः ।  
विशेषेण देवहितं यदायुः

Aum! O gods, may we hear auspicious words with the ears;  
May we see auspicious things with the eyes;  
While praising the gods with steady limbs,  
May we enjoy a life that is beneficial to the gods.  
May Indra of ancient fame be auspicious to us;  
May the supremely rich (or all-knowing) Pusa (god of the earth)  
Be propitious to us;  
May Garuda, the destroyer of evil,  
Be well disposed towards us;  
May Brihaspati ensure our welfare.  
Aum! Peace! Peace! Peace!

## ARTICLE

# The Library: A Temple of Learning and the Heart of Education

*Dr. Shivakumar T. C., Librarian*

Indeed, the sentiment that a library is a "temple of learning", and the "heart of education" captures the essence of its significance. A library transcends being a mere repository of books; it symbolizes a sacred space where knowledge is revered, and intellect is nurtured. It serves as the beating heart of education, pulsating with the lifeblood of information, wisdom, and the collective thoughts of humanity. In this hallowed sanctuary, learners embark on intellectual journeys, exploring the vast realms of literature, science, and culture. The quietude of a library fosters an environment conducive to concentration, reflection, and the pursuit of understanding. It stands as a testament to the timeless pursuit of knowledge, where

the echoes of past wisdom resonate with the aspirations of future generations. Truly, the library is not just a repository of books; it is a beacon of enlightenment, illuminating the path to greater understanding and inspiring the hearts and minds of all who enter its sacred confines.

Modern libraries play a vital role in supporting and enhancing technical education by serving as dynamic hubs for learning, research, collaboration, and innovation. Here are several reasons highlighting the need for modern libraries in technical education:

**Access to Diverse Resources:** Modern libraries offer access to a wide range of resources beyond traditional textbooks, including e-books, online journals, databases, multimedia materials, and specialized software. This diverse collection caters to the interdisciplinary nature of technical education, providing students with comprehensive resources to explore various topics and deepen their understanding.

**Cutting-edge Technologies and Tools:** Modern libraries are equipped with state-of-the-art technologies and tools that support technical education. This may include high-speed internet access, computer labs, 3D printers, virtual reality (VR) and augmented reality (AR) devices, maker spaces, and other innovative technologies. These resources enable students to engage in hands-on learning experiences, conduct research, and develop practical skills relevant to their field of study.

**Collaborative Spaces:** Modern libraries are designed to facilitate collaboration and teamwork among students, faculty, researchers, and industry partners. They offer flexible spaces for group discussions, project work, presentations, and interdisciplinary collaborations. These collaborative environments foster creativity, innovation, and knowledge exchange, enhancing the learning experience and preparing students for real-world challenges in technical fields.

**Information Literacy and Research Skills:** Modern libraries play a crucial role in promoting information literacy and research skills among students. Librarians provide guidance and support in navigating complex information landscapes, evaluating sources, conducting effective research, and citing references ethically. These skills are essential for students to critically analyse information, solve problems, and make informed decisions in their academic and professional pursuits.

**Support for Online Learning and Distance Education:** In an era of digital learning, modern libraries serve as key resources for online learning and distance education

programs in technical fields. They offer virtual access to digital collections, online databases, research guides, and instructional materials, enabling remote learners to access educational resources and receive support from library staff regardless of their location.

**Professional Development Opportunities:** Modern libraries provide opportunities for professional development and lifelong learning through workshops, seminars, guest lectures, and other educational programs. These initiatives cover a wide range of topics such as information technology skills, research methodologies, academic writing, career readiness, and emerging trends in technical fields, empowering students to stay competitive and adapt to evolving industry demands.

**Support for Innovation and Entrepreneurship:** Many modern libraries actively support innovation and entrepreneurship initiatives in technical education. They offer resources, mentorship, and networking opportunities for students interested in pursuing entrepreneurial ventures, launching startups, or commercializing their research innovations. These initiatives foster an entrepreneurial mindset, encourage creativity and risk-taking, and contribute to the development of a vibrant innovation ecosystem within the academic community.

**Integration of Online and Offline Resources:** Modern libraries seamlessly integrate online and offline resources. This integration allows users to access digital materials alongside traditional print resources, promoting a hybrid approach to learning that aligns with the evolving nature of information dissemination.

**Open Access and Open Educational Resources:** Libraries advocate for open access to scholarly resources and support the use of open educational resources (OER) in technical education. They promote the adoption of open textbooks, open courseware, and open-source software, reducing the cost of course materials and enhancing access to quality educational content for all students.

**Research Support Service:** Libraries offer research support services to assist students and faculty in their research endeavours. These services may include literature searching, citation analysis, data management, copyright clearance, and research impact assessment, helping students and faculty navigate the research process and maximize the impact of their scholarly work.

**Community Building and Networking:** Libraries serve as community hubs where students, faculty, and researchers can connect. Networking events, guest lectures, and community-building activities organized by libraries contribute to a sense of belonging and collaboration within the technical education community.

In summary, modern libraries play a multifaceted role in supporting technical education by providing access to diverse resources, cutting-edge technologies, collaborative spaces, information literacy instruction, support for online learning, professional development opportunities, and support for innovation and entrepreneurship. Embracing the evolving role of libraries as dynamic learning hubs is essential for preparing students to thrive in the rapidly changing landscape of technical fields.

## Faculty Development Programmes (FDPs)

Teachers' Training During the period of September-December 2023: 3548 numbers of Technical Teachers have been trained, through various Short-Term Training Programmes, broadly in the areas of Content Updating, Management, Pedagogy and Professional Skill Development. A total of 45 training programs were conducted for the Teachers and Technicians of different Polytechnic colleges and Engineering colleges all over the Country during the 3rd Quarter of the Year 2023.

**List of Training Programmes (September – December, 2023)**

Sl. No.	Programme Code	Programme Title	Programme Coordinator	From	To
1	CU72C	Nonconventional Energy	Subrata Chattopadhyay	04/09/2023	08/09/2023
2	SPL15C	Evaluation & Designing Question Paper	Habiba Hussain	04/09/2023	08/09/2023
3	CU74C	Design & Analysis of Algorithm	Samir Roy & Ranjan Dasgupta	11/09/2023	15/09/2023
4	CU75B	LABVIEW Programming and Applications	Sagarika Pal	11/09/2023	15/09/2023

Sl. No.	Programme Code	Programme Title	Programme Coordinator	From	To
5	CU77B	Advanced Materials Science and Engineering	Subrata Mondal	11/09/2023	15/09/2023
6	CU79F	Refresher Course on Fluid Mechanics	Dipankar Bose	11/09/2023	15/09/2023
7	CU80C	Computational techniques for mechanical engineers	Rayapati Subbarao	11/09/2023	15/09/2023
8	CU81C	Building Construction, Repair and Maintenance	Uday Chand Kumar	11/09/2023	15/09/2023
9	CU82C	Embedded System and 8051 Microcontroller	Soumitra Kumar Mandal	11/09/2023	15/09/2023
10	PS52B	Effective training	Sukanta Kumar Naskar	11/09/2023	15/09/2023
11	SPL32C	NBA Accreditation and SAR Preparation	Rayapati Subbarao	16/09/2023	18/09/2023
12	CU83F	Engineering Capstone Project	Prasanta Sarkar	18/09/2023	22/09/2023
13	PS53F	Induction Training	Urmila Kar	18/09/2023	29/09/2023
14	SPL26C	Enhancing Teaching Skills Using Technology	Mithu Dey	18/09/2023	29/09/2023
15	CU87F	Fundamentals of Machine Learning and Deep Learning	Indrajit Saha	25/09/2023	29/09/2023
16	PS55F	Ethics, Values and Morality	Uday Chand Kumar	04/10/2023	06/10/2023
17	CU90A	Introduction to Image Processing	Indrajit Saha	09/10/2023	13/10/2023
18	PS56F	Implementing experiential learning	Dipankar Bose	09/10/2023	13/10/2023
19	SPL13C (2 <sup>nd</sup> Batch)	NBA Accreditation (Pre-qualifier and SAR preparation)	Uday Chand Kumar and Rayapati Subbarao	03/10/2023	07/10/2023
20	CU93C	Machine Learning with MATLAB	Nirmal Kumar Mandal	09/10/2023	13/10/2023
21	SPL (Inhouse GIET)	Effective Teaching Learning Process Using Instructional Media	Subrata Chattopadhyay	09/10/2023	11/10/2023
22	CU94F	R Programming	Kinsuk Giri	09/10/2023	13/10/2023
23	MGT05C	Leadership & People Management	Habiba Hussain	09/10/2023	13/10/2023
24	PS59C	Outcome Based Accreditation and NBA	Urmila Kar	16/10/2023	20/10/2023
25	CU95F	Innovation and Startup in higher Education Institutions	Prasanta Sarkar	30/10/2023	03/11/2023
26	SPL (Inhouse - KEC)	Utilization of Instructional Media and CAI in Effective Teaching	Subrata Chattopadhyay	30/10/2023	03/11/2023
27	CU96C	RC Design – Limit State Method and Beyond	Santanu Bhanja	06/11/2023	10/11/2023
28	CU101B	Problem Solving with PYTHON	Kinsuk Giri	06/11/2023	10/11/2023
29	PS62C	Induction Training	Sagarika Pal	06/11/2023	10/11/2023
30	SPL18C	Problem solving and decision making-managerial	Sukanta Kumar Naskar	06/11/2023	10/11/2023
31	CU103F	Air, Water Pollution and Health	Sailendra Nath Mandal	13/11/2023	17/11/2023
32	MGT06C	Essentials of HRM	Sukanta Kumar Naskar	20/11/2023	24/11/2023
33	PS65C	Essentials of Outcome based education	Habiba Hussain	20/11/2023	24/11/2023
34	PS66C	NBA, NIRF and NAAC Accreditation Aspects	Rayapati Subbarao	20/11/2023	24/11/2023
35	CU107C	Engineering Capstone Project	Prasanta Sarkar	27/11/2023	01/12/2023
36	PS67B	NEP 2020: Plan for Implementation	Urmila Kar	27/11/2023	01/12/2023
37	CU109A	Fundamental and Applications of Nanomaterials	Subrata Mondal	04/12/2023	15/12/2023
38	CU108C	Bio-Medical Instrumentation	Subrata Chattopadhyay	11/12/2023	15/12/2023
39	PS58F	Professional Values and Ethics	Mithu Dey	04/12/2023	08/12/2023

Sl. No.	Programme Code	Programme Title	Programme Coordinator	From	To
40	SPL (inhouse IMIT)	R-Programming	Kinsuk Giri	06/12/2023	10/12/2023
41	CU113C	Application of Green Design and Manufacturing in Mechanical Engineering	Dipankar Bose & Arpan Kumar Mondal	04/12/2023	08/12/2023
42	SPL27C	Machine Learning and its Applications	Indrajit Saha	04/12/2023	08/12/2023
43	PS68B	Academic Writing and Tools	Rayapati Subbarao, Kinsuk Giri & Samir Roy	04/12/2023	15/12/2023
44	PS73C	Digital Tools for Teachers and Staffs	Chandan Chakraborty	11/12/2023	15/12/2023
45	SPL (Inhouse AEC)	NEP 2020: Plan for Implementation	Urmila Kar	11/12/2023	15/12/2023

## List of programmes in which Prof. Debi Prasad Mishra, Director has delivered a talk

### A. In programmes organized by NITTTR, Kolkata

1. Delivered talk on celebration of Teacher Day at NITTTR, Kolkata on 5<sup>th</sup> September 2023.
2. Delivered talk on celebration of Hindi Pakhwara Diwas at NITTTR, Kolkata on 14<sup>th</sup> September 2023.
3. Delivered talk on celebration of Ek Tarikh Ek Ghanta Shramdaan at NITTTR Kolkata on 1<sup>st</sup> October 2023
4. Delivered talk on celebration of Gandhi Jayanti at NITTTR Kolkata on 2<sup>nd</sup> October 2023
5. Delivered a talk on "Cyber Security Awareness Week "NITTTR Kolkata on 18<sup>th</sup> October 2023
6. Delivered a talk on celebration of Vigilance Awareness Week NITTTR Kolkata on 31<sup>st</sup> October 2023
7. Celebration of Rashtriya Ekta Diwas NITTTR Kolkata on 31<sup>st</sup> October 2023
8. Patron on Special Talk on Lesson Study organized by NITTTR Kolkata in association with AIAER W.B. Chapter proudly celebrates National Education Day on 11<sup>th</sup> November 2023 at 3 PM
9. Delivered a talk on "Relevance of Traditional Indian Technology in Modern Time", IKS Lecture Series on 24<sup>th</sup> November 2023 at 4:00 PM

### B. In programmes organized by other institutions

1. Chief Guest on 2<sup>nd</sup> International Conference on Mechanical Engineering (INCOME-2023) Netaji Subhas University of Technology, New Delhi on 1-2, September 2023.
2. Delivered a lecture on Relevance of Indian Traditional Technology in Modern Era at IIT Guwahati on 11<sup>th</sup> September 2023.

3. Delivered a lecture on An Introduction to Indian Traditional Temple Architecture at IIT Guwahati on 12<sup>th</sup> September 2023.
4. Chief Guest on Hindi Pakhwara Diwas at ICAR-Agricultural Technology Application Research Institute, Kolkata on 14<sup>th</sup> September 2023.
5. Chief Guest on "प्राकृतिक संसाधनों से देश के उन्नयन विकास में आधुनिक तकनीकों का योगदान" at ICAR-National Institute of Natural Fibre Engineering and Technology on 25<sup>th</sup> September 2023
6. Chief Guest on Closing Ceremony of Hindi Week Celebration – 2023 on 29<sup>th</sup> September 2023 at Saha Institute of Nuclear Physics
7. Delivered a talk "Glimpses of Ancient Indian Technology" at NIT Durgapur on 5<sup>th</sup> October 2023
8. Chief Guest on Annual Student Convention of ISTE WB Section on "National Educational Policy 2020: Engineering Education" on 10<sup>th</sup> October 2023
9. Keynote Speaker on Meet the Educationalist at Indian Business & Professionals Council, Qatar on 30<sup>th</sup> October 2023
10. Delivered a talk on Industry Academia Conclave at NIT Jamshedpur on 23-25 November 2023
11. Guest of honour on "Indian Heritage and Culture" on 01-12-2023 at Ritwik Hall, 4<sup>th</sup> Floor in Hardinge Building, University of Calcutta.
12. Delivered a talk on Pandit Hemchandra Goswami memorial on "Environment Consciousness in Ancient India" on 11<sup>th</sup> December 2023 at IIT Guwahati
13. Delivered a talk on Indian Knowledge System Strategic Conclave on 14-15 December 2023 at Pune.
14. Delivered a talk as a Keynote Speaker "International Multidisciplinary Conference on Recent Innovations in Science, Engineering, Management and Humanities (RISEMH-2023)" on 16-17 December 2023 at J. S. University, Shikohabad.

# Publications

## JOURNALS

- **Niladri Pratap Maity** et. al., “Charge-Based Trans-Capacitance Model for SiO<sub>2</sub>/HfO<sub>2</sub> Based Nano Scale Trigate FinFET Including Quantum Mechanical Effect”, Silicon (Springer), Online Published on 19<sup>th</sup> September, 2023, <https://doi.org/10.1007/s12633-023-02631-z>, (Impact factor: 3.4).
- **Niladri Pratap Maity** et. al., “Analytical model and analysis of RF MEMS switch for Ka-band applications”, Microsystem Technologies (Springer), Online published on 28<sup>th</sup> December, 2023, <https://doi.org/10.1007/s00542-023-05581-z>, (Impact factor: 2.1).
- **Niladri Pratap Maity** et. al., “Modeling and investigation of immersion based capacitive micromachined ultrasonic transducer”, Microsystem Technologies (Springer), Online published on 16<sup>th</sup> December, 2023, <https://doi.org/10.1007/s00542-023-05569-9>, (Impact factor: 2.1).
- **Niladri Pratap Maity** et. al., “An analytical and FEM simulation-based study of the dependence of capacitance profile on structural parameters of CMUT with and without vent,” Microsystem Technologies (Springer), Online published on 11<sup>th</sup> October, 2023, <https://doi.org/10.1007/s00542-023-05537-3>, (Impact factor: 2.1).
- Anasuya Mondal and **Santanu Bhanja**, Flexure design of high strength concrete slender shear walls using the limit state design philosophy for reinforced concrete sections as per IRC: 112 (2020), Indian Concrete Journal, Vol 97, Issue 10, October, 2023.

## CONFERENCE, SYMPOSIUM

- **Niladri Pratap Maity** et. al., “Early Detection of Alzheimer’s Disease using Feed Forward Neural Network”, 2023 IEEE 14<sup>th</sup> International Conference on Computing Communication and Networking Technologies (ICCCNT), Online Published on 23<sup>rd</sup> November 2023, <https://doi.org/10.1109/ICCCNT56998.2023.10307151>.
- **Niladri Pratap Maity** et. al., “A Review on the Diagnosis of Epilepsy using ML”, 2023 IEEE 14<sup>th</sup> International Conference on Computing Communication and Networking Technologies (ICCCNT), Online Published on 23<sup>rd</sup> November 2023, <https://doi.org/10.1109/ICCCNT56998.2023.10306863>.

- **Niladri Pratap Maity** et. al., “Modeling and Simulation of DG SOI MOSFET with Fringing Capacitance and High-k Material,” 12<sup>th</sup> International Conference on Computing, Communication and Sensor Networks, Mumbai, 15<sup>th</sup> -17<sup>th</sup> October 2023.
- **Niladri Pratap Maity** et. al., “Characteristics and Behavioural Study of Circular, Hexagonal and Square Shaped Membrane Based CMUT MEMS,” 12<sup>th</sup> International Conference on Computing, Communication and Sensor Networks, Mumbai, 15<sup>th</sup> -17<sup>th</sup> October 2023.
- **Niladri Pratap Maity** et. al., “Design and Analysis of Double Ended Tuning Fork for MEMS Based Vibrating Beam Accelerometer,” 12<sup>th</sup> International Conference on Computing, Communication and Sensor Networks, Mumbai, 15<sup>th</sup>-17<sup>th</sup> October 2023.
- **Niladri Pratap Maity** et. al., “A Novel MEMS Based Vibrating Beam Accelerometer for Early Earthquake Warning System,” 12<sup>th</sup> International Conference on Computing, Communication and Sensor Networks, Mumbai, 15<sup>th</sup> -17<sup>th</sup> October 2023.
- **Niladri Pratap Maity** et. al., “Modeling, Proposal and Investigation of Perforated Membrane Based Micromachined Transducer,” 6<sup>th</sup> International Conference on ‘Energy Systems, Drives and Automations, Kolkata, 30<sup>th</sup> -31<sup>st</sup> December 2023.
- **Niladri Pratap Maity** et. al., “Improved Capacitance Modelling for Better Sensitivity Optimization of a Circular MEMS Transducer,” 6<sup>th</sup> International Conference on ‘Energy Systems, Drives and Automations, Kolkata, 30<sup>th</sup> -31<sup>st</sup> December 2023.
- **Niladri Pratap Maity** et. al., “Investigation of Static and dynamic Analysis of a MEMS Accelerometer based Cantilever Beam,” 6<sup>th</sup> International Conference on ‘Energy Systems, Drives and Automations, Kolkata, 30<sup>th</sup> -31<sup>st</sup> December 2023.
- **Niladri Pratap Maity** et. al., “Investigation of MEMS based Capacitive Ultrasonic Transducer with and without Perforations,” 6<sup>th</sup> International Conference on ‘Energy Systems, Drives and Automations, Kolkata, 30<sup>th</sup> -31<sup>st</sup> December 2023.
- **Niladri Pratap Maity** et. al., “Investigation and Analysis of Parameter Extraction of MEMS Accelerometer Based Early Earthquake Warning System,” 6<sup>th</sup> International Conference on ‘Energy Systems, Drives and Automations, Kolkata, 30<sup>th</sup> -31<sup>st</sup> December 2023.

- **Niladri Pratap Maity et. al.**, “Optimized Model Designing and Analysis of a Micro Lever for the MEMS based Resonant Accelerometer,” 6<sup>th</sup> International Conference on ‘Energy Systems, Drives and Automations, Kolkata, 30<sup>th</sup>-31<sup>st</sup> December 2023.
- Niladri Pratap Maity et. al., “A New Combinational Circuit Approach Using Improved Diode Free Adiabatic Logic Families,” 6<sup>th</sup> International Conference on ‘Energy Systems, Drives and Automations, Kolkata, 30<sup>th</sup> -31<sup>st</sup> December 2023.
- **Rayapati Subbarao**, ‘Secondary Flow Scenario in case of a Counter Rotating Turbine with Flow Rate’, P-105, Proceedings of the 15<sup>th</sup> International Symposium on Experimental Computational Aerothermodynamics of Internal Flows (ISAIF15), IIT Madras, pp. 243-247, 2023.
- **Rayapati Subbarao**, ‘Shear Strain Rate Aspects in case of flow through a Counter Rotating Turbine’, P-142, Proceedings of the 15<sup>th</sup> International Symposium on Experimental Computational Aerothermodynamics of Internal Flows (ISAIF15), IIT Madras, pp. 269-273, 2023.
- **Rayapati Subbarao** and Sayon Dey ‘Scenario of joining various aluminium and its alloys for automobile applications by using FSW method’, 89, 9<sup>th</sup> International & 30<sup>th</sup> All India Manufacturing Technology, Design Research Conference (AIMTDR 2023), IIT (BHU) Varanasi, 2023.
- Geetika K. Salwan, **Rayapati Subbarao**, Subrata Mondal, ‘Effect of Heat Treatment on the Properties and Microscopic Characteristics of Different Alloys Used in Gas Turbine Engines’, 24, 9<sup>th</sup> International & 30<sup>th</sup> All India Manufacturing Technology, Design Research Conference (AIMTDR 2023), IIT (BHU) Varanasi, 2023.

#### BOOK CHAPTER

- Subrata Mondal, Polysaccharide based adsorbents for water treatment, In Polysaccharides: Advanced Polymeric Materials, Eds: Bhasha Sharma, Md Enamul Hoque and Shreya Sharma, December 2023, CRC Press (Taylor & Francis), eBook ISBN: 9781003265054, DOI: <https://doi.org/10.1201/9781003265054>, CRC Press (Taylor & Francis).

## Observance of Teachers’ Day

To mark the tribute to the valuable contribution of teachers to the society, students of the Institute celebrated the ‘Teachers Day’ on 5<sup>th</sup> September 2023 in the Institute. This is also the birthday of Dr.

Sarvapalli Radhakrishnan, the President of India. Prof. Debi Prasad Mishra welcome the participants of the programme and discussed at length of role of a teacher in forming the society and the qualities of a student. Students participated the in the programme actively. Also various competitions were organized to celebrate the occasion.



## Hindi Pakhwada Divas (Hindi Pakhwada)

Official Language Month (Hindi) was celebrated as Hindi Divas on 14<sup>th</sup> September 2023 as per guidelines of O.L. Department. Govt. of India. Program was held at Sri Ramakrishna Paramahansa, Mini Auditorium, 2<sup>nd</sup> Floor, Sarvepalli Radhakrishnan Bhavan at 5:00 P.M. In the presence of students, employees and officers, the program was celebrated successfully. Program started with the speech of Honorable Director and the entire program was conducted by Dr. Rajeev Chatterjee and Dr. Rayapati Subbarao.



On this occasion, as per the instructions of the Honorable Director the essay writing competition was arranged on the topic of ‘How to make Hindi language into national language’ 2000 words in Hindi language. A committee was formed for selection the winner, most of staffs took part in the program and Honorable Director announced the name of participants, cash

Prize of Rs. 1500.00 was given to the winner who took place of 1<sup>st</sup> position.

The entire program was successfully organized. At the end, Dr. Rayapati Subbarao gave a vote of thanks.

## Live Streaming G20 University PM Modi on 26<sup>th</sup> September 2023



## Visit of new Chairman, Board of Governors of the Institute on 29<sup>th</sup> September 2023



New Chairman of the Board of Governors (BoG), Shri Sajjan Bhajanka, Managing Director, Century Plyboards (India) Limited, P-15/1, Taratala Road, Kolkata-700088 visited the Institute for the first time on 29<sup>th</sup> September 2023. He was received by the Director, Prof. Debi Prasad Mishra and other senior faculty members and staff of the Institute. Later, Shri Bhajanka visited various academic Departments, Laboratories and other facilities of the Institute.

Chairman expressed his pleasure after visiting the Institute.



## Ek Tarikh Ek Ghanta Shramdaan at NITTTR Kolkata FC Block Campus on 1-10-2023 (From 10.00 AM to 11 AM)

1. **Prominent Personality gracing the event:**
  - A) Padma Shri Dr. Jagadish Chandra Halder
  - B) Prof. Debi Prasad Mishra, Director, NITTTR, Kolkata
2. **Involvement of civil society and NGOs:**

Faculty, staff of NITTTR Kolkata and their family members will participate in Ek Tarikh Ek Ghanta Shramdaan
3. **Coverage of site:** Residential Section of the NITTTR Kolkata, FC Block, Salt Lake, Sector-3, Kolkata
4. **Any best/ Innovative practice being used:**
  - Compost Pit is constructed in the NITTTR Kolkata campus for the processing and treatment of tree leaves from the campus, residential and hostel buildings.
  - Door to door collection of solid waste from the campus residences and hostels.
  - Ensuring plastic free campus.
  - Publishing and implementation the SDGs
  - Plantation activity is organized in the campus time-to-time.
  - The roads in the office campuses repaired and cleaned properly on regular basis



- The drains inside office campus repaired and cleaned thoroughly time to time
- Trimming of bushes inside the campus on regular basis
- Spreading of bleaching power throughout the campus to kill the worms, insects, bacteria and fungi, etc. that work together to maintain the fertility of the soil.



*Padma Shri Dr. Jagadish Chandra Halder, Doctor and social worker giving his address*

At the onset the nodal officer of the event Dr. Arpan K. Mondal welcomed all the dignitaries and community members. The event started with welcoming the Chief Guest of the Event Padma Shri Dr. Jagadish Chandra Halder, Doctor and social worker. Prof. Debi Prasad Mishra, the Director, NITTTR Kolkata welcomed everyone and explained the need of swachhata, Padma Shri Dr. Dr. Jagadish Chandra Haldar graced this event by his speech on the need of saving our environment. The senior most professor of the institute Prof. Prasanta Sarkar greeted all and told the importance of organising such kind of activities.



*Nodal Officer Dr. A. K. Mondal is giving the inaugural speech*



*Campus cleaning activities are going on*

After that everyone moved towards the residential section of the institute. Faculty members, staff members, residents of the campus and the students were present. All started to clean the roads, drains and gardens in the residential area. Residents also wholeheartedly joined the initiative and helped to collect the garbage. All the biodegradable garbage was accumulated and then put into the Compost Pit, which was then filled with soil.

After the cleaning activity was over, everyone was gathered together for tree plantation drive, in presence of the Chief Guest Padma Shri Dr. Jagadish Chandra Haldar and Prof. Debi Prasad Mishra, Director, NITTTR Kolkata, senior Professors Prof. Prasanta Sarkar and Prof. Uday Chand Kumar trees were planted across the campus to memorize this event.



*Prof. Debi Prasad Mishra, Director NITTTR Kolkata giving his address*



*Prof. Prasanta Sarkar, Professor, Electrical Engineering, NITTTR Kolkata giving his address*

At the end everyone left for their home with inspiration of positive change, and a sense of ownership and pride for shaping the future of the community towards making this a successful Jan Andolan. Some of the glimpse of the event is given as follows.



*Campus cleaning activities are going on*



*Tree Plantation is going on*

## Amrit Kalash Yatra

As per the direction of our Ministry of Education, Amrit Kalash Yatra was organized in the institute on 11<sup>th</sup> October 2023. It started from Netaji Subhash Chandra Bose Auditorium (Main Auditorium) and via tapovan and welding centre, it returned to the auditorium.

Earlier, students brought small amounts of Mitti or rice from their residences to the institute. The Mitti and rice were then collected in the Amrit Kalashas. Later, they were decorated with vermilion and turmeric powders. Coconut shells draped with red-coloured holy cloths, formed the top of the Amrit Kalash.



*Initiation of Amrit Kalash Yatra*



*Amrit Kalash Yatra*

## Observance of International Year of Millets (IYoM)-2023

As per the direction from the Ministry of Education, various activities were conducted in the month of Oct 2023 as part of observing International Year of Millets (IYoM)-2023 at NITTTR Kolkata. Different events like Rangoli completion and Slogan completion were conducted. Talk on the 'Potential of Millets' was given

by Prof. Urmila Kar on 16<sup>th</sup> October 2023. She talked about the importance of Millets. Quiz completion on Millets was conducted by Mr. Tapas Sarkar on 18<sup>th</sup> Oct 2023. Students and staff actively participated in the event. Poster making competition and Rangoli making competition on the theme were conducted on 25<sup>th</sup> Oct 2023. Students and employees participated actively in the competition. Dr. Urmila Kar and Mr. Tapas Sarkar acted as judges. Rangoli made by Ms. Baishakhi Bose Neogi was adjudged first. All the faculty, staff and students witnessed the events.



International Year of  
**Millets**  
2023

National Institute of Technical Teachers' Training and Research,  
Kolkata



## Cyber Security Awareness Programme

**Cyber Security Awareness Week**  
16-20 October 2023

Observed by  
National Institute of Technical Teachers' Training & Research, Kolkata

Cyber Security Guideline [https://nitar.nic.in/core/Circulars/2022/e-Gov\\_21-09-2022\\_14.pdf](https://nitar.nic.in/core/Circulars/2022/e-Gov_21-09-2022_14.pdf)



Cyber Security Awareness program is a global event in order to increase the cyber resilience. This activity aims to educate, promote and motivate the digital age citizens of our country, to be cyber aware and secured netizens. Keeping this in view, Cyber Security Awareness Week was observed from 16<sup>th</sup> to 20<sup>th</sup> October 2023 at NITTTR, Kolkata. In this regard, a banner related to cyber security awareness was published through Institute website and social media of the institute. Moreover, an awareness program was organised with Director, Faculty, Student, Expert and Staff members of this institute on 18<sup>th</sup> October 2023. In this program, Dr. Indrajit Saha, Assistant Professor of NITTTR Kolkata and the coordinator of this even welcomed the faculty, student, expert speaker and staff members and discussed the relevance of this

program. As an expert speaker, Mr. Samyajit Mukherjee, Indian School of Ethical Hacking (ISOEH, Kolkata) discussed and demonstrated various aspects of security issues and disseminate the awareness among participants. The faculty, student and staff members were also involved in the discussion session after the presentation of Mr. Mukherjee. Finally, the programme ended with vote of thanks. From the staff members, Mr. Kallol Modak assisted Dr. Indrajit Saha to organise this even successfully.



*Dr. Indrajit Saha, Coordinator of this programme extends a warm welcome to all gathered.*

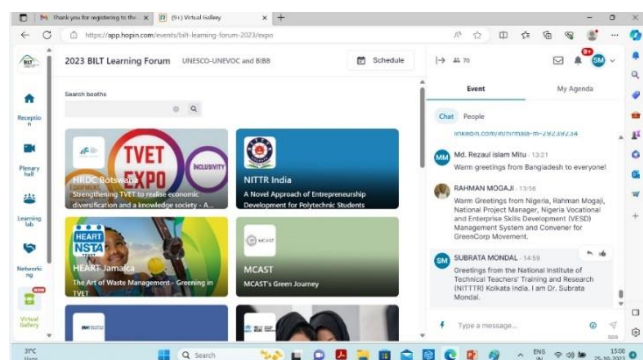


*Mr. Samyajit Mukherjee, Indian School of Ethical Hacking (ISOEH, Kolkata) discussed and demonstrated various aspects of security issues and disseminate the awareness among participants.*



## Poster Presentation at Bridging Innovation and Learning in TVET (BILT) Learning Forum 2023

A poster proposal entitled “A Novel Approach of Entrepreneurship Development for Polytechnic Students” by Subrata Mondal and Debi Prasad Mishra has been accepted by the Bridging Innovation and Learning in TVET (BILT) Learning Forum 2023. The event was organized by the UNESCO-UNEVOC International Centre for TVET and the German Federal Institute for Vocational Education and Training (BIBB) at the UN Campus, Platz der Vereinten Nationen 1, Bonn, Germany 24-26 October 2023. This is a highly prestigious forum, and the proposal has been selected based on the merit of the proposal and subsequent a virtual interview which was held on 08<sup>th</sup> September 2023. A virtual poster presentation was held on 25<sup>th</sup> October 2023.



## Celebration of Rashtirya Ekta Diwas-2023

The Institute celebrated the Rashtirya Ekta Diwas on 31<sup>st</sup> October, 2023 in the Institute premise to commemorate the birth anniversary of Sardar Vallabhbhai Patel.

On the occasion of the Rastriya Ekta Diwas, a pledge taking programme and Run for Unity was organised. Run for Unity was organised in view of spreading the message of unity and brotherhood to all fellow citizens, which was flagging off the Director of the Institute. Immediately after the run was over, pledge taking programme had taken place in Sri Ramakrishna Paramahansa Mini Auditorium, where the programme was attended by the members of faculty, staff, students and other who are associated with the various activities of the Institute. The programme was chaired by Prof. Debi Prashad Mishra, Director of the

Institute and coordinated by Dr. Samir Roy, Chief Vigilance Officer and Shri Joseph Bhutia, SSA. The Director and the Chief Vigilance officer delivered the speeches on Rashtriya Ekta Diwas with special emphasis on importance of “Rashrtiya Ekta”. The Rashtriya Ekta Diwas Pledge was taken by all who were present in the programme in Hindi through the Director and in English through Chief Vigilance Officer respectively.



*Dr. Samir Roy, leads the pledge of the Rastrriya Ekta Diwas*



*Run for unity event is going on*

## Inauguration of Smart Classroom



*Prof. Debi Prasad Mishra, Director, NITTTR Kolkata Inaugurates Smar Classroom*

To conduct online and offline STTP classes, online seminar, official meeting etc. there was a huge demand for a Smart Classroom having modern teaching and learning aids. Keeping this demand, Learning Resource Centre develop a Smart Classroom having state of art gadgets like Interactive Panel, Wacom Tablet, Document viewer, PTZ Camera, Anycast Recorder etc. on the first floor of Chanakya Bhavan of NITTTR, Kolkata. This classroom was inaugurated by Prof. Debi Prasad Mishra, Director, NITTTR Kolkata on 1<sup>st</sup> November 2023



*A hybrid mode Short Term Training Programme is going on*

## Celebration of National Education Day on 11<sup>th</sup> November 2023

Dr. Habiba Hussain conducted the observation of National Education Day on 11<sup>th</sup> November 2023. A special lecture by Prof. Peter Dudley, University of Cambridge faculty of Education was delivered online. The topic was “Using lesson study to improve student and teacher learning in lecture rooms, colleges and across universities”. The lecture was organised by NITTTR Kolkata in collaboration with the West Bengal Chapter of AIAER. 30 participants participated in the event.

## Janjatiya Gaurav Divas 2023



Like previous year, this institute has celebrated the 15<sup>th</sup> November 2023 as Janjatiya Gaurav Divas to marks the birth anniversary of brave tribal freedom fighter Birsa Munda who is revered as God by tribal communities across India. The objective of this occasion to recognize the efforts of the tribal in the preservation of cultural heritage and promotion of Indian values of national pride, valour, and hospitality. The programme was chaired by Prof. Debi Prasad Mishra, Director of the Institute and coordinated by Dr. S.N.Mandal Professor and Shri Shyamapada Mandi, SSA. The Director, Dr. S.K Naskar, Professor and Shri Praveen Chandra Dayalji Siyodiaji, STA delivered the speeches on Janjatiya Gaurav Divas 2023 with special emphasis to tribal movements across different regions of India against the British colonial rule

## Observance of Constitution Day

Constitution Day or 'Samvidhan Divas' was celebrated in this Institute on 30<sup>th</sup> November 2023 to commemorate the adoption of the Constitution of India. Most of all faculties, staff, students were present to witness this remarkable day in the Mini Auditorium of this Institute. Prof. Dipankar Bose welcomed all the participants. He explained the significance of our Constitution in a lucid way. He stressed to keep on truth as a mark of 'Satyameva Jayote' which is the backbone of our Constitution.

Prof. Debi Prasad Mishra, Director of the Institute in his speech emphasized the Constitution Day should be a day of responsibility or duty to carry out. In continuation of the tune of Professor Bose, he said that to speak truth may be bitter at first time, but it results a good direction in future. He also defined the principles upon which this institute is based. ledge has been taken in English and Hindi to observe this day.

## Bharatiya Bhasha Utsav 2023

Bharatiya Bhasha Utsav was launched by Hon'ble Education Minister Shri Dharmendra Pradhan on 28<sup>th</sup> September 2023 to celebrate the linguistic diversity of our country and to experience the feeling of oneness and pride in that diversity.

The Bharatiya Bhasha Utsav will culminate on 11<sup>th</sup> December 2023, which is the Janma Jayanti of renowned Tamil poet and freedom fighter Subramania Bharathi.

In view of the above celebration of Bharatiya Bhasha Utsav was held in our Institution on 11<sup>th</sup> December 2023 as per letter dated 22<sup>th</sup> November, 2023 D.O. No. 8-35/2023 from Ministry of Education, Government of India.

The program was held at Netaji Subhas Chandra Auditorium at 5:00 P.M. In presence of students, employees and officers. A Debate presentation was arranged on the topic of "Several languages exist in India, Unity in Diversity". Many participants including Research Assistants participate in it. The program was celebrated successfully. Program started with the speech of Dr. Prasanta Sarkar, Professor Electrical Engineering Department and the entire program was conducted by Dr. Rajeev Chatterjee.

Program was continued for almost 1:30 hours and ended with a vote of thanks by Dr. Rajeev Chatterjee.

## Entrepreneurship Related Training for the North-Eastern States

Under the patronage of the Director, Prof. Debi Prasad Mishra, one year entrepreneurship development related training for the North-eastern states has been started at the National Institute of Technical Teachers' Training and Research, Kolkata from December 2023. The project proposal has been funded by the Ministry of Education, Government of India. The coordinator of the project proposal is Dr. Subrata Mondal.

## Miscellaneous

- **Dr. Habiba Hussain** conducted the Creditisation workshop for faculty members of NITTTR Kolkata on 27th September 2023
- **Dr. Habiba Hussain** conducted the workshop on Modification / Revision of the Vision & Mission of NITTTR Kolkata with the faculty members and officers of NITTTR Kolkata & other stakeholders on 16th October 2023.
- Project by **Prof. Naveen B. P.** (Professor of Civil Engineering) titled 'Assessment of Modified

Sewage Sludge as Cover Material in Landfills' has been approved by the Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India.

- i) Janjatiya Gaurav Divas on 15th November 2023
- j) Viksit Bharat @2047 Dec11 2023
- k) Bharatiya Bhasha Utsav Dec11 2023

- **Dr. Rayapati Subbarao** participated and presented two papers in the 15<sup>th</sup> International Symposium on Experimental Computational Aerothermodynamics of Internal Flows (ISAIF15), which was held at the Indian Institute of Technology Madras, Chennai, from 24<sup>th</sup> to 27<sup>th</sup> Oct 2023.
- **Dr. Rayapati Subbarao** chaired 2 sessions at the 15<sup>th</sup> International Symposium on Experimental Computational Aerothermodynamics of Internal Flows (ISAIF15), which was held at the Indian Institute of Technology Madras, Chennai, from 24<sup>th</sup> to 27<sup>th</sup> Oct 2023.

**iii) Any other news item worth publishing.**

During this period 4 numbers on-line / hybrid mode, STTP and 3 numbers meeting (online and off-line) conducted from Smart-Classroom.

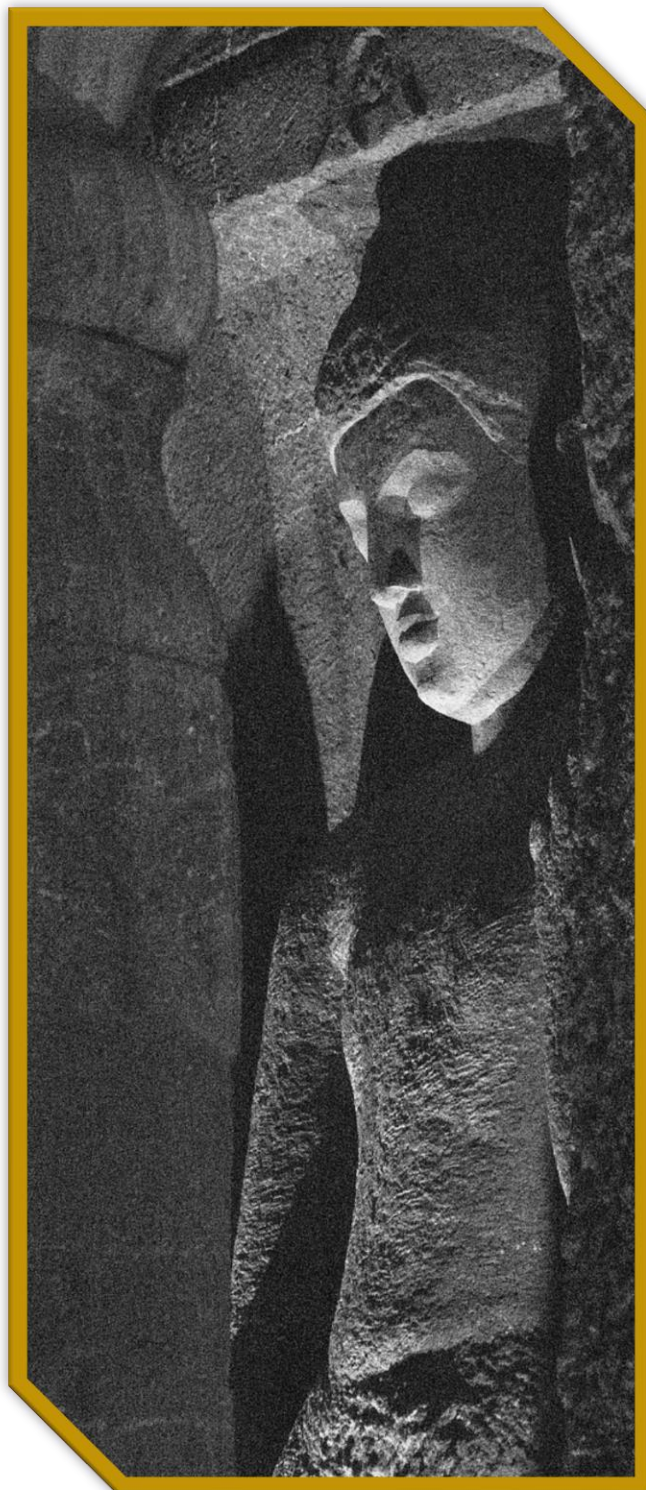
### Award

**Dr. Subrata Mondal** has been enlisted as top 2% of scientists in Polymers discipline like past few years, which was published by the Stanford University, USA together with Elsevier BV (<https://elsevier.digitalcommonsdata.com/datasets/btchxktyw/6>). Dr. Mondal's current (published on 04 October 2023) world rank is 594 in the Polymers discipline.

**Ms. Shruti Das** completed a Winter internship programme in December 2023 in the Department of Education & Management, NITTTR Kolkata. Her area of work was Digital Pedagogy and she worked under the supervision of Dr. Habiba Hussain and Dr. Ajoy Kumar Khan.

### **Activities of LRC**

- i. *List of educational resources developed/video coverage during the period*
  - a) Educational Video Film – 03
  - b) MOOC Videos – 18
- ii. *Photography of the events: During this period following events were covered:*
  - a) Observing Teachers' Day on 5<sup>th</sup> Sept2023
  - b) Hindi Pakhwara2023
  - c) Visit of new Chairman and 46th BOG ad 43 FC on Sept29 2023
  - d) Ek Tarik Ek Ghanta Samdraan Oct1 2023
  - e) Amrit Kalash Yatra Oct11 2023
  - f) Run for Unity 31 Oct2023
  - g) Rashtriya Eakta Diwas Oct31 2023
  - h) Inauguration of Smart classroom of LRC 1st Nov 2023





## NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING AND RESEARCH, KOLKATA

Block-FC, Sector-III, Salt Lake City, Kolkata-700106

Phone: +91-33-66251900, Email: [ds@nittrkol.ac.in](mailto:ds@nittrkol.ac.in)

Visit us at [www.nittrkol.ac.in](http://www.nittrkol.ac.in)

**“You must not lose faith in humanity. Humanity is an ocean; if a few drops of the ocean are dirty, the ocean does not become dirty.”**

**– Mahatma Gandhi**



### Distance:

- From Howrah Railway Station: **42 min** (8.1 km) via Maniktala Main Road
- From Sealdah Station: **26 min** (7.4 km) via Beliaghata Main Road and Broadway Road
- From Kolkata Railway Station: **16 min** (4.8 km) via Canal Circular Road
- From Shalimar Station: **38 min** (18.8 km) via Parama Island Flyover
- From Netaji Subhas Chandra Bose International Airport: **27 min** (11.5 km) via Kazi Nazrul Islam Sarani/VIP Road

Google map link: <https://goo.gl/maps/F7gssJoeqxSvffqf9>



### Newsletter Committee, NITTR Kolkata

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- Dr. Habiba Hussain, Member
- Shri Utpal Chakraborty, Member
- Layout and cover design and DTP work, Shri Utpal Chakraborty
- Photo coverage, Learning Resource Centre