# **THEME OF THE SEMINAR**

This **hybrid mode** seminar (**NSGEET-2025**) is dedicated to exploring the critical role of **Green Energy**, **Environment, and Technology**. As global challenges like climate change and resource depletion intensify, the need for innovative solutions becomes increasingly urgent. This seminar will provide a platform for researchers, industry professionals, and policymakers to share insights on advancements in renewable energy sources, energy storage systems, and smart grid technologies.

Participants will engage in discussions on environmental technologies that promote sustainability, such as waste management and pollution control. Additionally, the seminar will address the necessary policy frameworks that support the adoption of green technologies. By fostering collaboration and knowledge exchange, this seminar aims to generate actionable strategies that empower stakeholders to implement effective solutions.

# **TOPICS TO BE COVERED**

- Renewable Energy Technologies and Systems
- Energy Security and Access Solutions
- Smart Grid Integration and Digitalization
- Policies for Sustainable Energy Development
- Electric Vehicles and Green Transportation
- Energy Efficiency and Resource Optimization
- Climate Change Mitigation and Adaptation
- Pollution Control and Sustainable Waste Practices
- Urban Planning for Sustainable Cities
- Sustainable Agriculture and Food Security
- Conservation of Biodiversity and Ecosystems
- Education and Awareness for a Sustainable Future

Venue: Guwahati Extension Centre NITTTR Kolkata, India.

# **COMMITTEE(S)**

<u>CHIEF PATRONS</u> Shri Sajjan Bhajanka, BOG Chairman, NITTTR Kolkata.

PATRON Prof. Debi Prasad Mishra, Director, NITTTR, Kolkata

#### PROGRAM CHAIR(S) Prof. Subrata Chattopadhyay, NITTTR Kolkata Prof. Dipankar Bose, NITTTR Kolkata Prof. Sailendra Nath Mandal, NITTTR, Kolkata

PROGRAM CO-CHAIR(S) Dr. Kunwar Raghvendra Sing, NITTTR Kolkata Dr. Papia Ray, VSSUT Burla, India Dr. Moushumi Patowary, AEC, Assam, India

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Prof. Subrata Chattopadhyay, NITTTR Kolkata. Prof. Soumitra Kumar Mandal, NITTTR Kolkata Prof. Gayadhar Panda, NITTTR Kolkata. Dr. Sagarika Pal, NITTTR Kolkata Mrs. Sheela Yadav Rai, NITTTR Kolkata

<u>CONVENOR</u> Prof. Gayadhar Panda, NITTTR Kolkata, India

# National Seminar On "Green Energy, Environment and Technology" (Towards the Sustainable Future) 16<sup>th</sup>-17<sup>th</sup> January 2025

(NSGEET-2025)



**Organized by** Department of Electrical Engineering National Institute of Technical Teachers' Training & Research (NITTTR), Kolkata

In Collaboration with

# **Star Cement Limited**

Shillong, Meghalaya.





Department of Electrical Engineering National Institute of Technical Teachers' Training & Research (NITTTR), Kolkata, West Bengal 700106 <u>http://www.nitttrkol.ac.in/</u>

#### **About the Institute**

The National Institute of Technical Teachers' Training & Research (NITTTR), Kolkata, originally established as the Technical Teachers' Training Institute (TTTI) in 1965, was the first of four such institutes set up by the Ministry of Education, Government of India. The other three institutes are located in Chandigarh, Bhopal, and Chennai. These institutes were created as fully centrally funded autonomous institutions to provide pre-service and in-service training to teachers and staff of degree and diploma-level technical institutions. They also play a crucial role in various activities aimed at improving the quality of the technical education system across the country. In recognition of their significant contributions to enhancing the quality of technical education, the Government of India accorded national status to NITTTR Kolkata and its sister institutes in 2003. The Institute's core activities include Education & Short-term Training. Curriculum Development, Learning Resources Development, Research & Development, and Extension Services & Consultancy. AICTE recognizes the short-term training programs conducted by NITTTR Kolkata for consideration under the Career Advancement Scheme (CAS). Additionally, the Institute offers four AICTE-approved, two-year M.Tech. programs in Artificial Intelligence and Machine Learning, Green Manufacturing, Mechatronics Engineering, and Structural Engineering. Recently, NITTTR Kolkata was granted "Deemed University" status by the UGC. NITTTR Kolkata is involved in several national-level projects, such as serving as the nodal agency for the centrally sponsored Community Polytechnic Scheme and designing AICTE-sponsored induction training programs for new engineering and polytechnic teachers. The Institute is also facilitating the integration of Persons with Disabilities (PWD) into mainstream technical and vocational education. With highly qualified faculty and state-of-the-art infrastructure, including well-equipped laboratories, NITTTR Kolkata continues to expand its reach, establishing extension centers in Guwahati and Bhubaneswar, and extending its services to technical and vocational institutions in SAARC and ASEAN countries.

#### **About the EEE Department**

The Department of Electrical Engineering is a core part of the Institute, known for its highly qualified faculty drawn from premier institutions across the country. It has established itself as a leader in offering Long-Term and Short-Term Training Programs in Electrical, Electronics, and Instrumentation Engineering, meeting the needs of educators in the Eastern region and nationwide. Faculty members are deeply engaged in cuttingedge research in various areas, including Electrical Drives, Measurement and Instrumentation, Medical Electronics, Microcontrollers, PLCs, and Control Systems. The Department is also advancing research in key areas of electrical engineering, such as renewable energy systems, power electronics, smart grids, and energy storage technologies. These efforts contribute to the development of energy-efficient systems and the integration of renewable energy into power networks. In addition to research, the Department provides consultancy services to technical institutions and manages educational projects supported by industries, governments, and international bodies. These activities enhance the connection between academia and industry, promoting innovation and practical application of new technologies. Since the 2005-2006 academic year, the Department has offered M.Tech program in Mechatronics Engineering, addressing the growing demand for expertise in automation industries.

## **CALL FOR PAPERS**

Original research papers relevant to the theme and subthemes of the seminar are invited from teachers, teacher educators, researchers, and educational administrators. The submissions should adhere to the following:

#### **Abstract Submission:**

Authors are requested to submit a one-page detailed abstract of their research paper.

The abstract should include:

- > Title of the Paper.
- Names and Affiliations of the Authors.
- **Keywords (3-5)**
- A brief overview of the research problem, objectives, methodology, and key findings.

### **Presentation Format:**

- All accepted papers will be presented through oral presentations during the seminar.
- Presentations should be concise, focusing on key findings and implications

### **Publication:**

- All accepted and presented abstracts will be compiled and published in PDF format by NITTTR Kolkata in the form of a Book.
- > A digital copy will be shared with all authors for reference and academic use.

#### **Resource Persons:**

The seminar will feature **distinguished speakers** who are **eminent faculty members** from **prestigious institutions** such as the **IITs**, **NITs**, **NITTTR** and other **renowned academic institutions** from India and abroad. In addition, experts from **leading industries** and **global research organizations** will also share their insights. This diverse panel of speakers will ensure a comprehensive blend of **academic rigor**, **industrial relevance**, and **international perspectives**.

## Website Link:

Detailed about Seminar is available on NITTTR Kolkata website. <u>http://www.nitttrkol.ac.in/</u>

# **REGISTRATION LINK**

**Registration link** will be provided shortly.

## **IMPORTANT DATES:**

Last Date of Abstract Submission: 30-11-2024 Acceptance Notification: 25-12-2024 Last Date of Registration: 05-01-2025 Seminar Date: 16th-17th January 2025

# **CERTIFICATION:**

All participants will receive certificates issued by the Department of Electrical Engineering, National Institute of Technical Teachers' Training & Research (NITTTR), Kolkata, India. The certificates will acknowledge their active participation and contribution to the seminar.

## **REGISTRATION FEE:**

All participants of the seminar will need to register by paying non-refundable registration fee.

Authors	Indian		Foreign (USD)	
	Offline	Online	Offline	Online
Student/Research Scholar	1500/-	500/-	125 \$	100 \$
Faculty	2500/-	1500/-	150 \$	125 \$
Professional from Industry / Research Organization	5000/-	2500/-	200 \$	150 \$

**Venue Location:** NITTR Kolkata Extension Centre, Guwahati, Girls' Polytechnic Campus, Bamuni Maidan, Guwahati-781021, Assam.

# NOTE:

- The registration form, duly filled in all respects, along with the proof of the prescribed fee payment, needs to be submitted through the Google Form link (link will be shared shortly).
- Registration will be confirmed on a first-come, first-served basis.

## **Contact Persons:**

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