



# 1<sup>st</sup> International Conference

On

## Energy, Environment and Green Technology

(For A Greener Future)

(ICEEGT 2025)

Event: 3<sup>rd</sup> - 4<sup>th</sup> April 2025

Department of Electrical Engineering

National Institute of Technical Teachers' Training & Research, Kolkata, India



### THEME OF CONFERENCE

ISEEGT 2025 is the 1<sup>st</sup> International Conference on Energy, Environment, and Green Technology, which is being organized by the Department of Electrical Engineering, NITTTR Kolkata, India during 3<sup>rd</sup> – 4<sup>th</sup> April 2025. This conference will provide an opportunity to the practicing engineers, academicians and researchers to meet in a common forum to discuss various issues and its future direction in the field of Energy, Environment and Green Technology developments. The different tracks in the conference mainly focus on the sustainable energy, green technologies and computing. This conference will be an interdisciplinary platform for the researchers to contribute their research works that address development and methodologies for the futuristic sustainable smart energy system.

### About NITTTR Kolkata

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 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 cutting edge 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.

### TOPICS TO BE COVERED

- ❖ Sustainable and Renewable Energy Sources
- ❖ Energy Access, Security, and Resilience
- ❖ Innovative Clean Energy Technologies
- ❖ Recent Advantage in Green Technology
- ❖ Energy Efficiency and Smart Management Strategies
- ❖ Power Electronics for Renewable Energy Applications
- ❖ Advanced Control Techniques for Energy Sustainability
- ❖ Electric Vehicles, Battery Technologies, and Charging Infrastructure
- ❖ Waste-to-Energy Solutions for a Circular Economy
- ❖ Smart Grids and Microgrids for Future Energy
- ❖ AI and Machine Learning in Intelligent Energy Grids
- ❖ Climate Change Mitigation, Risk, and Adaptation
- ❖ Cyber-Physical Systems for Sustainable Development
- ❖ Bioenergy and Biofuels
- ❖ Energy Policy, Planning, and Risk Assessment
- ❖ Power Systems: Stability, Protection, and Resilience
- ❖ Digital Twins for Sustainable Energy Optimization
- ❖ Solid Waste, Air Pollution Control, and Recycling Innovations
- ❖ Environmental Impact Assessments and Pollution Mitigation.

### Important Dates:

Submission Deadline: 25<sup>th</sup> January 2025

Acceptance: 10<sup>th</sup> March 2025

Registration: 28<sup>th</sup> March 2025

### Registration Fee:

All conference participants are required to register by paying a non-refundable registration fee.

Authors	Indian (Rs.)	Foreign (USD)
Student/Research Scholar	3000/-	200 \$
Faculty	5000/-	250 \$
Professional from Industry / Research Organization	8000/-	300 \$

### Publication:

All accepted, registered and presented papers in the conference will be published in the Springer Book Series Lecture Notes in Electrical Engineering. This series is indexed by EI Compendex and Scopus at a bases. (Subject to approval).

A few selected papers will be considered for future publication in the following journals:

- ❖ International Journal of Emerging Electric Power
- ❖ Indian Journal of Environmental Protection
- ❖ Environmental Science and Pollution Research

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