INSTITUTE

Sant Longowal Institute of Engineering and Technology (SLIET), Deemed to be University, has been established and funded by Ministry of Education (MoE), Govt. of India, in 1991 to provide technical education in emerging areas of engineering and technology. Over the years the institute has established itself as a premier Institute imparting technical education of a very high standard.

The institute caters to the technical manpower requirements at various levels by adopting a concept of a modular system in imparting professional education with an emphasis on practical training in the industry. The study programs include various courses at ICD, B.E. (NBA accredited) M.Tech. and Ph.D. in different branches of engineering and technology. The attention now of different institutions of higher education in different nations is on students' learning outcomes and assessment. The institute has a sprawling area of 451 acres surrounded by lush green land and offers a perfect environment to nurture a peaceful state of mind required to carry out research and other student activities.

INSTITUTE VISION

SLIET shall strive to act as an international podium for developing and transferring technical competence in academics through formal and non-formal education, entrepreneurship, and research to meet the changing needs of society.

DEPARTMENT OF EIE

The electrical and Instrumentation Engineering department is poised to impart technical education related to the development of human resources, from the level of skilled workers to the engineering post-graduates. The courses being run by the department include:

- Integrated Certificate-Diploma Program DEE
- Integrated Certificate-Diploma Program DIN
- B.E. (Instrumentation and Control Engineering)
- B.E. (Electrical Engineering)
- Integrated M.Tech. (Electrical Engineering)
- M.Tech. (Instrumentation and Control Engineering)
- Ph.D. Programme

ABOUT THE PROGRAM

This Workshop on "Emerging Renewable Energy Technologies" on (Hybrid mode) aims at faculty, staff members and research scholars of engineering institutions and polytechnics approved by AICTE, officials from industry and other Research and Development organizations.

The program will also inspire faculty members and research scholars to generate new ideas in their research areas. This Workshop will impart hands-on training in the various electrical energy tools used for simulation and validation.

BACKGROUND

The proposed workshop on "Emerging Renewable Energy Technologies" aims to bridge the gap between theoretical understanding and real-world applications. The workshop will provide participants with insights into the latest technological advancements, system design methodologies, integration challenges, and operational practices. Through expert lectures, interactive sessions, and case studies, the program will enhance technical competency, promote innovation, and encourage sustainable engineering practices, thereby contributing to the development of skilled manpower for the rapidly evolving renewable energy sector.

Emerging renewable energy technologies such as advanced solar photovoltaics, wind energy systems, energy storage, hydrogen technologies, smart grids, and microgrids are transforming the modern power sector. These innovations play a crucial role in achieving energy security, sustainability, and climate resilience. It is essential for students, researchers, academicians, and industry professionals to gain updated technical knowledge and practical exposure.

RESOURCE PERSONS

Renowned experts and scientist from prestigious academic institutions, and ministry, specializing in New and Renewable Energy research and application levels, will conduct the online sessions in this program.

WORKSHOP
ON
Emerging Renewable Energy Technologies

(6th – 7th May, 2026)

ORGANIZED BY
DEPARTMENT OF EIE

Sant Longowal Institute of Engineering & Technology
(Deemed to be University under MoE, Govt. of India)
Longowal, Distt. Sangrur-148106
Punjab (India).

Patron: : **Prof. Mani Kant Paswan, Director, SLIET**
Co-Patron : **Prof. A. S. Shahi, Dean (Academics)**
Chairperson : **Prof. Manpreet Kaur, HOD, EIE**
Coordinators : **Dr. A. K. Aggarwal**
Dr. Rishabh Verma
Dr. Barasha Mali

CONTENTS

- India's Energy Transition: Policy, Technology, and the Road to Net Zero 2070
- Fundamentals of renewable energy systems and global energy transition
- Advanced solar photovoltaic technologies and hybrid solar systems
- Biomass, biogas, and waste-to-energy conversion technologies
- Hydrogen energy systems and fuel cell technologies
- Energy storage systems: batteries, supercapacitors, and pumped storage
- Power electronics and control systems for renewable energy applications
- Smart grids, microgrids, and grid integration of renewable energy sources
- Techno-economic analysis, project planning, and feasibility studies
- Policies, standards, safety practices, and regulatory frameworks for renewable energy systems
- Climate-resilient energy infrastructure and sustainable energy planning

MODE OF CONDUCTION

The workshop will be conducted in Hybrid Mode. The soft copy of study material and PPTs will be shared with the participants with the due support of experts. E-certificates will be provided to all participants.

REGISTRATION

The number of seats is limited to 30. There is **no registration fee** for eligible **participants** from **SLIET Longowal**.

For participants from other organizations, the registration fee is as follows:

Faculty/Staff/Industry:	₹ 250
Research Scholars:	₹ 100

How To Apply

Interested candidates must register for the workshop using the following link by **April 30, 2026**. Selected candidates will be notified on **May 05, 2026.**

https://forms.gle/X6Nr58YsjAqsWqp36

Address for Communication:

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