





ARTIFICIAL INTELLIGENCE IN ADVANCED ENERGY, ENVIRONMENTAL, AND SUSTAINABLE DEVELOPMENT

November 24-25, 2025







Organized by:

Research and Development Cell, Lovely Professional University, India

Co-organized by

International Leadership University, Myanmar



Lovely Professional University (LPU) is a multi-faculty research-oriented institution with hi-tech campus offering more than 200 professional programmes. LPU campus is a complete world in itself having students from all states of India and more than 40+ countries of the world. LPU is a world class institution with internationally benchmarked curricula, innovative pedagogy focused on experiential learning, cutting edge research, 450+ foreign tie-ups, well qualified faculty with industry exposure, outstanding sports & cultural facilities, excellent residential facilities, In-campus shopping mall, hospital, banks, postal services etc. The University is ranked high on various parameters by Government Bodies and other credible organisations. LPU receives Highest Grade A++ with 3.68 score on 4 Point Scale by NAAC (National Assessment & Accreditation Council), an Autonomous Institution of the University Grants Commission (UGC), Ministry of Education, Govt. of India. The Times Higher Education World University Rankings 2025 has ranked LPU amongst Top 10 Universities in India Including all Government (even IITs & NITs), & Private Institutions, and many more.

ABOUT THE CONFERENCE

The International Conference on Artificial Intelligence in Advanced Energy, Environmental, and Sustainable Development (ICAIAEESD2025) aims to bring together academia, researchers, industry, practitioners, and thought leaders to explore cutting-edge Artificial Intelligence (AI) applications in addressing global challenges for sustainable development. With a special focus on sustainability, ICAIAEESD2025 will highlight AI's role in revolutionizing the energy utilization sectors for environmental sustainability. This includes agriculture, healthcare, urban and rural development, industrial production, water and waste management, land and water energy balancing. The conference will serve as a platform to exchange knowledge, explore innovation, and build collaborations for impactful solutions to society-solved AI methods for energy conservation methods with reduced environmental impact.

With the rising urgency of climate change, resource scarcity, and the global shift toward cleaner and more efficient energy systems, the integration of AI has become indispensable. AI offers powerful tools to predict environmental patterns, optimize energy use, and automate sustainable industrial processes, making this conference particularly significant in today's rapidly evolving world. By bridging the gap between technological innovation and sustainable practices, ICASIAEESD 2025 aims to inspire actionable solutions and collaborations that support the global agenda for a greener, more resilient future. It serves as a critical meeting point for those who seek to harness the power of AI to create impactful, long-term solutions in environmental and energy sectors.

CONFERENCE TRACKS AND TOPICS

(BUT NOT LIMITED TO):

Track 1: Smart and Sustainable Energy Systems (SDG 7)

Al-driven approaches in energy generation, optimization, smart grids, renewable integration, and predictive maintenance.

Track 2: AI in Climate Modeling and Change Mitigation (SDG 13)

Al applications for climate prediction, carbon footprint estimation, and policy development for climate resilience, smart disaster management

Track 3: Sustainable cities and communities (SDG 11)

Smart city frameworks, rural resource planning, traffic and mobility optimization, Al-driven disaster response systems and contingency planning, waste management, recycling processes, waste generation prediction, landfill management, and creating sustainable economic models.

Track 4: Innovative Industrial Strategies (SDG 7, 9, 12)

Al-driven exploration techniques in infrastructure, safety monitoring in mining, predictive maintenance, sustainable resource extraction, responsible consumption, production, and affordable and clean energy for future sustainability, green technologies.

Track 5: Land-Water Smart Management (SDG 6, 14, 15)

Al for water conservation, smart irrigation systems, flood prediction and management, and wastewater treatment optimization, clean water, and smart sanitation, life perspectives on the land and under the water.

Track 6: Smart Environmental Monitoring and Resource Management (SDG 6, 12)

Al-based solutions for monitoring air, water, and soil quality, and managing ecosystems and natural resources.

Track 7 Security and Ethics in AI for Energy and Environment (SDG 16)

Investigates ethical, legal, and cybersecurity challenges in deploying AI in sensitive energy and environmental domains.

PUBLICATION

All the accepted and registered papers will be submitted to CRC Publishers for publication.

KEYNOTE SPEAKER



Richard DareRector & Professor
International Leadership University,
Myanmar



Dr. Majid FarooqScientist, Remote Sensing
Application Centre, Jammu
& Kashmir



L Venkata Subramaniam IBM Quantum India Lead and IBM Quantum Distinguished Ambassador IBM, New Delhi



Mohit Sewak
Ex Head of AI Researcher & Developer
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Research Scientist, Microsoft R&D
Software Engineer, Google



Dr. Muhammad ShafiqCyberspace Institute of Advanced
Technology, Guangzhou University,
China



Dr. Priyabrata BanerjeeSenior Principal Scientist & Professor
CSIR - Central Mechanical Engineering
Research Institute, West Bengal
Ministry of S & T, Government of India



Conference Details



Registration

TIMELINE OF SUBMISSIONS (TENTATIVE)

Conference Dates: November 24-25, 2025 Last Date of Paper Submission: October 10, 2025

Paper Acceptance Notification: October 15-30, 2025

Registration Last Date: October 30, 2025

Camera Ready Submission End Date: October 30, 2025

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