AMRITCON

Innovate, Integrate and Transform for Sustainable Development2027

October 14-16 2027

KhalsaCollegeofEngineering and Technology
in-association with
National Institute of Technology, Delhi

International Conference on Advancements in Modular Power Electronics, Resilient Energy Systems and Intelligent Computing Technologies.

CALL FOR PAPERS

ORGANIZERS

PATRONS

S. Rajinder Mohan Singh Ch hina
(Honorary SecretaryKhalsa College Charitable Society)

Prof. (Dr.) Ajay Kumar S harma
(Director, NIT Delhi)

HONORARY CHAIRS

Prof. (Dr.) Kashim Muttaqi, University of Wollongong, Australia

GENERAL CHAIRS

Prof.(Dr.)Manju Bala
(Khalsa College of Engineering and Technology, Amritsar)

Dr. Anmol Ratna Saxena
(Associate Professor, NIT Delhi)

GENERAL CO-CHAIRS

Prof. (Dr.) Georgios Konstantinou, University of New South Wales, Sydney, Australia

Dr. Anurag Singh
(NIT Delhi)

Oragnizing Chair/ Secretary

Dr. Ripin Kohli
(Khalsa College of Engineering and Technology, Amritsar)

Dr. Malti Puri
(Khalsa College of Engineering and Technology, Amritsar)

Finance Committee

Dr. Ripin Kohli (Chair)
(Khalsa College of Engineering and Technology, Amritsar)

Mr. Rajeev Sharma (Chair)
(Khalsa College of Engineering and Technology, Amritsar)

Er. Karanbir Singh (Co-Chair)
Khalsa College of Engineering and Technology, Amritsar)

DEADLINES

Full Paper Submission Open
1st September 2026

Full Paper Submission Deadline
31st March 2027

Acceptance Notification
31st May 2027

Early Bird Registration
30th June 2027

Last Date of Registration
31st July 2027

Camera Ready Paper Submission
30th June 2027

International Conference on Advancements in Modular Power Electronics, Resilient Energy Systems and Intelligent Computing Technologies (Innovate, Integrate and Transform for sustainable development) :AMRITCON 2027, is envisioned as a comprehensive academic forum dedicated to advancing knowledge, innovation, and responsible technological development in the domains of computing, electronics, energy systems, and intelligent infrastructure. The conference seeks to bring together researchers, academicians, industry professionals from various domains to engage in meaningful discourse on emerging technologies and their role in addressing contemporary societal and environmental challenges. This conference aims to foster interdisciplinary collaboration, promote ethical and responsible innovation, and contribute to capacity building by disseminating high-quality research that supports societal progress and sustainable development.

The conference emphasizes on the development of intelligent systems capable of supporting data driven decision-making, automation, and digital transformation across multiple sectors. A strong focus is placed on the convergence of software, hardware, and communication technologies to enable smart environments, connected infrastructure, cyber-physical systems, design, implementation, and optimization of embedded and electronic systems supporting next-generation connectivity, sensing, and real-time interaction.

Sustainability forms a core pillar of the conference, with emphasis on clean energy systems, efficient power management, intelligent control, and mobility solutions that contribute to reduced environmental impact and enhanced energy security. Research that supports energy transition, grid resilience, and sustainable transportation is particularly encouraged, aligning with global sustainability goals and national development priorities. The conference also highlights transformative applications that enhance human well-being through intelligent automation, immersive technologies, and advanced human–technology interaction. It provides a platform to explore future-oriented innovations that augment human capabilities, improve accessibility, and enable safer and more efficient interaction between humans and intelligent systems.

TOPICS OF INTEREST*(Proposal is submitted to IEEE for Conference)

Track 1 : Artificial Intelligence, Software Systems, Cybersecurity & Emerging Digital Technologies

- Artificial Intelligence, Machine Learning & Computational Intelligence
- Data Science, Vision & Intelligent Information Processing
- Cloud, Edge, Distributed & High-Performance Computing
- Software Systems, Cybersecurity & Blockchain Technologies
- Quantum & Emerging Digital Technologies
- AI for Society, Governance & Healthcare

Track 2 : Emerging Electronics, VLSI, IoT& Cyber-Physical Systems

- Embedded Systems, IoT& Cyber-Physical Platforms
- Communication Technologies & Wireless Innovations
- VLSI, Semiconductors & Hardware Technologies

Track 3 : Power Electronic and Drives, Wide-Band Gap Devices, and Intelligent Control

- Wide Bandgap and Ultra-Wide Bandgap Devices and Applications
- Power Electronic Converter Topologies
- Electrical Drives and EV Drivetrain Systems
- Control Strategies for Power Converters

Track 4 : Transportation Electrification

- EVs, Light Electric Vehicles, Hybrid EVs, Fuel-Cell EVs, Autonomous Vehicles, More Electric Aircraft
- Special Electrical Machines,Hyperloop and Next-Generation Transit
- Charging Technologies: Wireless Chargers, DC Fast Chargers, On-Board, and Off-Board Chargers
- Battery Management Systems and Charging Station Planning
- Vehicle-to-X (V2X)

Track 5 : Transportation Electrification

- Hybrid AC/DC Grids, DC Microgrids, and Smart Grids
- Power System Resilience
- Waste to Energy, Hydrogen Technologies,Fuel-Cells, and Green Hydrogen Production
- Battery Technologies, V2G and G2V Integration, Energy Transition and Decarbonization
- AI and ML for Smart & Sustainable Infrastructure

Track 6 : Transformative Technologies for Future Energy Systems

- Digital Twin and Virtual Prototyping
- Artificial Intelligence and Machine Learning for Energy Systems
- Hardware-in-the-Loop and Real-Time Simulation
- Autonomous Energy Systems
- Cyber-Physical Energy Systems
- Quantum Technologies for Energy Applications

Track 7 : Industrial Applications of Power Electronics

- Data-Centres /Telecom Power Supplies
- Power Electronics/Energy Systems for Railway,Aerospace, and MarineElectrifications
- Power Electronics in Electrolyze and Fuel cell systems
- Solid-State Lighting and Electronic Ballasts
- Biomedical Applications
- High Power Charging Infrastructures
- Defence and Military Power Electronic

*The topics are not limited to the ones mentioned above.

https://amritcon2026.kcet.ac.in/