

# International Conference on Energy, Materials and Communication Engineering - 2023

14 & 15 December 2023



Organized by  
Departments of  
Electrical and Electronics Engineering  
Electronics and Communication Engineering  
and Physics  
Thiagarajar College of Engineering  
Madurai - 625 015, Tamilnadu, India

Accepted papers will be submitted  
for inclusion in IEEE Xplore  
IEEE Conference Code: 57940

Chettiar. TCE offers 9 Undergraduate Programmes, 10 Postgraduate Programmes, and Doctoral Programmes in Engineering, Science, and Architecture. The UG and PG programmes of TCE are accredited by the National Board of Accreditation. TCE is ranked 85th among the top 200 engineering institutions in India in the National Institutional Ranking Framework published by MHRD, Govt. of India in 2022.

## Institute vision

World class quality technical education with strong ethical values

## Institute mission

- Academic excellence in Science, Engineering and Technology through dedication to duty, commitment to research, innovation in learning and faith in human values.
- Enable the students to develop into outstanding professionals with high ethical standards capable of creating, developing and managing global engineering enterprises.
- Fulfill expectations of the society and industry by equipping students with state of art technology resources for developing sustainable solutions.
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the traditional electric grid has been transformed into a smart grid by embedding advanced communication protocols and network security. Power systems, power electronics, electrical machines, instrumentation, and control are subsets of energy. As we are moving towards Industry 4.0, it is essential to know about the modern technologies involved in communication, manufacturing, product development, and customer services such as the Internet of Things (IoT), advanced human-machine interface, smart sensors, cyber-physical systems, and big data analytics. Communication technologies such as 5G, wireless networks, energy-efficient communication, and visible light communication are being widely researched. In recent years, intensive research has taken place in several types of materials such as smart materials, semiconducting materials, metamaterials, and nanomaterials. Since everything almost is based on data these days, the application of data analytics and artificial intelligence is diversified in all fields of research and engineering. The theme areas of the conference include:

## Energy:

Energy Engineering  
Power Systems Engineering  
Power Apparatus and systems  
Instrumentation and control  
Power Electronics & Energy Efficient Drives  
Renewable Energy systems  
Power Quality  
HVDC/FACTS  
Electrical Machines and Industry Applications  
High Voltage Engineering & Insulation Technology  
Electric vehicles  
Application of Artificial Intelligence (Machine learning/Deep learning) to power system

Network Security and Privacy  
Optical Networks  
Cyber Physical Systems

## Materials:

Energy harvesting materials  
Nano materials  
Smart materials  
Thin film materials  
Semiconducting materials  
Magnetic materials  
Bio materials  
Optical materials  
Ceramic, polymeric, and composite  
Meta materials

ICEMCE 2023 will be conducted in hybrid mode

## Manuscript Submission

The paper should be submitted through Microsoft CMT system <https://cmt3.research.microsoft.com/ICEMCE2023>

Paper should be submitted in IEEE format, follow the Instruction for Authors before paper submission in the website: <https://icemce2023.github.io/icemce/>

## Key Dates

Full paper submission: 31<sup>st</sup> September 2023  
Notification of Acceptance: 15<sup>th</sup> October 2023  
Camera ready paper submission: 15<sup>th</sup> November 2023  
Conference date: 14 & 15 December 2023

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## The Conference includes:

Keynote address will be given by experts from IITs, NITs and leading Industries.

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It is mandatory for at least one author of an accepted paper to register in order to submit it in the inclusion of IEEE Xplore. The registration fee is non-refundable.