

# **34<sup>th</sup> IEEE International Symposium on Industrial Electronics (ISIE 2025)**

**Special Session on**

## **“Emerging Innovations in Electric Transportation: Paving the Way for a Sustainable Future”**

**Organized by**

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### **THEME:**

Emerging innovations in electric transportation are rapidly transforming the way we think about mobility and sustainability. From breakthroughs in battery technology, like solid-state and fast-charging solutions, to the integration of wireless charging and vehicle-to-grid systems, the future of electric vehicles (EVs) is becoming more efficient and accessible. Advancements in lightweight materials and autonomous driving systems are enhancing performance and reducing energy consumption. Additionally, the rise of electrified public transport and hydrogen fuel cells as alternative power sources are expanding the scope of sustainable transportation. These innovations not only reduce emissions but also pave the way for a cleaner, more connected future in mobility.

**TOPICS OF INTEREST INCLUDE, BUT ARE NOT LIMITED TO:**

Fast-Charging Technologies for Electric Vehicles: Challenges and Innovations  
Power Electronics for Efficient Energy Conversion in Electric Vehicles  
Wireless Charging Systems for Electric Vehicles: Potential and Limitations  
Hybrid Energy Storage Systems for Next-Generation Electric Vehicles  
Optimization of Powertrain Efficiency in Electric and Hybrid Vehicles  
Artificial Intelligence Applications in the Optimization of Electric Vehicle Systems  
Strategies for Grid Integration of Energy Storage Systems in Smart Grids  
Thermal Management Solutions for Improved Efficiency in Electric Vehicles  
Dual-Source Regenerative Braking Systems for Energy Recovery in Electric Vehicles  
Modeling and Control Challenges in Renewable Energy Applications

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### Submission Procedure:

All the instructions for paper submission are included in the conference website: <https://iee-isie-2025.org/>

### Deadlines:

Full paper submission:	March 31, 2025
Paper acceptance notification:	April 15, 2025
Camera-ready paper submission:	May 14, 2025
Date of the conference:	June 20-23, 2025

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