



**IEEE International
Conference on Power
Electronics and
Energy (ICPEE 2025)**



Special Session 01 (SS 01)

SS 01: Resilient and Secure Control Methods for Renewable-Powered Mobility through Vehicle-to-Smart-Grid Integration

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Call for Papers

Technical Outline of the Session:

Renewable and sustainable energy technology plays a major role in the attainment of the 7th Sustainable Development Goal (SDG) proposed by the United Nations in 2015, which symbolises affordable and clean energy as the key indicator of progress and development of people. Renewable power mobility by vehicle to smart grid integration is a promising option towards the attainment of the SDG. The special session invites papers addressing the issues associated with vehicle-to-smart grid integration, design and development of EV charging infrastructures, advanced control techniques for grid stability with V2G integration, intelligent techniques for efficient energy management, network security for protection against cyber threats and predictive maintenance of electric vehicles.

Topic of the Session includes, but are not limited to:

- ❖ Design and development of EV charging infrastructures for integration with smart grids
- ❖ Advanced control architectures for enhancing grid stability with vehicle-to-grid (V2G) integration.
- ❖ AI-driven techniques for efficient energy management of EVs
- ❖ Recent developments in network security protocols for V2G protection against cyberattacks.
- ❖ Predictive and preventive maintenance of electric and hybrid electric vehicles

Important Dates:

Special Session Paper Submission Due Date: 15.08.2025

Notification of Paper Acceptance Date: 31.08.2025

Camera Ready Paper Submission Due : 15.10.2025

Author guidelines areas per regular paper submission.

IEEE Template

Submission Portal

<https://icpee.kiit.ac.in/special-sessions/>

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