











IEEE-International Conference on Electrical and Electronics for Sustainable Innovations 2026 (ICEESI 2026)

(Hybrid Conference with IEEE Record Number #68020)

27th & 28th March 2026

Special Session on

SS 05: Smart Integration of Renewable Energy and Electric Vehicles for Sustainable Transportation

Organized & Co-Chaired by:



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CALL FOR PAPERS

This session focuses on the smart integration of renewable energy with electric vehicles (EVs) to promote sustainable transportation. Key themes include power electronic converters, advanced control strategies, and intelligent energy management for efficient renewable–EV interaction. Emphasis will be given to bidirectional charging, vehicle-to-grid (V2G) technologies, DC microgrids, and hybrid renewable architectures. The session also addresses AI/ML-based forecasting, optimization, and digital twin applications for reliability and grid stability. Through interdisciplinary perspectives, the session aims to present innovative solutions and practical case studies, fostering collaboration toward achieving net-zero and sustainable mobility goals.

TOPICS OF INTEREST, BUT NOT LIMITED TO:

- We invite original research contributions and case studies on (but not limited to):
- Smart integration of renewable energy sources with electric vehicle (EV) systems
- Power electronic converters and control strategies for EV charging infrastructure
- Bidirectional and fast-charging technologies for sustainable transportation
- Vehicle-to-Grid (V2G), Grid-to-Vehicle (G2V), and Vehicle-to-Home (V2H) applications
- Energy management and optimization for renewable–EV hybrid systems
- AI/ML-based forecasting, scheduling, and control for EV-renewable integration
- DC microgrids and solid-state transformer applications in EV ecosystems
- Digital twins, IoT, and intelligent platforms for smart EV energy systems
- Reliability, stability, and cybersecurity in renewable–EV power systems

IMPORTANT DATES:

Paper submission opens: July 25, 2025 Paper submission closes: December 15, 2025 Paper acceptance notification: January 01, 2026 Early Bird Registration opens: January 02, 2026 Last date of Early Bird Registration: January 31, 2026 Normal Registration opens: February 01, 2026

Last Date of Camera-ready paper submission: February 15, 2026

Last Date of Normal Registration: February 16, 2026

Conference Date: 27-28 March 2026
The detailed information can be found here:
Conference URL: https://iceesi2026.opju.ac.in/

Submission Link: https://cmt3.research.microsoft.com/ICEESI2026

(Please Submit Under SS05: Smart Integration of Renewable Energy and Electric Vehicles for Sustainable Transportation Tab).

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