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RPG 2025
Invited Session Call for Papers

The 14th International Conference on Renewable Power Generation
24-26 October 2025 | Shanghai, China

Full Paper Submission Deadline: 05 June 2025 | https://rpg2025.theiet.org.cn/

Session Chair:
- Session Chair: Yun ZHOU, Shanghai Jiao Tong University

Invited Session on:
10 Advanced Strategies and Technologies for Electric Vehicle Charging: Integration, Optimization, and Grid Interaction

This session will focus on the advanced strategies and technologies driving the integration, optimization, and grid interaction of Electric Vehicle (EV) charging systems. As the global transition to electric vehicles accelerates, the need for innovative solutions to optimize EV charging and swapping stations becomes paramount. This session will explore state-of-the-art approaches for enhancing the efficiency, sustainability, and resilience of EV charging infrastructure.

Key topics will include:

Charging and Swapping Station Optimization: Presenting novel methods for optimizing the scheduling and operational efficiency of charging and swapping stations, considering factors such as energy demand, peak shaving, and load balancing.

Grid Interaction and Vehicle-Grid Integration: Investigating how EV charging systems can be integrated into the broader grid through smart charging, demand response, and Virtual Power Plants (VPPs), enabling them to provide grid services like frequency regulation and load shifting.

Renewable Energy Integration and Storage Solutions: Exploring the role of renewable energy sources (solar, wind) and energy storage technologies in enhancing the sustainability and operational flexibility of EV charging infrastructure.

Policy and Market Mechanisms: Discussing regulatory frameworks, market incentives, and business models that support the large-scale deployment of EV charging stations and their interaction with the grid.

By bringing together experts from academia, industry, and government, this session will provide valuable insights into the future of EV charging infrastructure and its integration with the energy grid

Session Chair: Yun ZHOU, Shanghai Jiao Tong University

Chair's Bio:

Yun Zhou, Ph.D., is currently a Lecturer and Master's Supervisor at the Department of Electrical Engineering, Shanghai Jiao Tong University. He also serves as a part-time Master's Supervisor at Lanzhou University of Technology. He has led one project funded by the National Natural Science Foundation of China and four provincial and ministerial-level research projects. He was selected for the Shanghai Youth Science and Technology Talent Sailing Plan and was awarded the Outstanding Young Teacher Award by the FOTILE Boyue Education Fund at Shanghai Jiao Tong University.

BENEFITS OF SUBMITTING

- Successful Authors will receive **10% off the Adult Registration Fee** (early bird or standard registration) Please use code **INVITED25** during registration
- Accepted paper will be published in the RPG 2025 conference proceeding
- Accepted paper will paper published on **IET Digital Library** and indexed by **IET Inspec, Scopus, IEEE Xplore and Ei Compendex**
- Around 30 papers from the conference will be awarded the Best Conference Paper prize and will be invited to submit an extended version to IET renewable Power Generation Journal (open access journal, APC fee applies)

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