

INTRODUCTION

Sponsored by IEEE, IEEE IAS, organized by Shanghai Jiao Tong University, co-organized by University of Electronic Science and Technology of China, Shandong University, and North China Electric Power University, 2022 IEEE IAS Industrial and Commercial Power System Asia (IEEE I&CPS Asia 2022) Conference will be held during July 8-11, 2022 in Shanghai, China.

IEEE I&CPS Asia 2022 will focus on 'Towards Low-carbon Power System', and aim to provide a high quality platform for researchers, practitioners, professionals, and students from all over the world to present their latest research findings, ideas, and applications in the related fields of Power Systems. Featured with keynote session, technical session, tutorial session and special session, IEEE I&CPS Asia 2022 will provide the delegates an unparalleled opportunity to exchange with qualified professionals and build future partnership.

SPECIAL SESSION ON

Modeling, Analysis and Optimization of Coupled Transportation and Power Networks

Electric vehicle (EV) is a promising option for sustainable development of cities due to its low impacts on environment. The application of large-scale electric vehicles also promotes the interaction of transportation networks and power networks. In this situation, the coupling characteristics of those two networks are increasingly highlighted and should be considered in their operation and planning. However, the coupled transportation and power networks are extremely complex and usually affected by amounts of uncertainties (e.g., variable renewable energy generation and road capacity), which have brought great challenges to study the coupled systems. Therefore, it is crucial to explore the modeling, analysis and optimization methods for the coupled transportation and power networks with an objective of guaranteeing the secure and stable operation of the coupled systems.



TECHNICAL OUTLINE OF THE SESSION

This special session focuses on a hot research topic — coupled transportation and power networks. Electricity and transportation have always been two core issues in the development of human society. With the application of large-scale electric vehicles, the coupled operation characteristics of transportation and power networks are increasingly highlighted. In this sense, coupling analysis and coordinated operation of transportation and power networks have attracted significant attention from researchers. Novel modeling, analysis and optimization methods in related area are encouraged in this special session. Topics of interest include (but are not limit to): electric vehicles, models of transportation and power networks, coordinated operation, optimization methods for the coupled systems, planning of EV charging facilities, etc.

SPECIAL SESSION ORGANIZERS

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IMPORTANT DATES

Submission Deadline

May 15, 2022

Notification Deadline

June 15, 2022

PUBLICATION

Submissions to IEEE I&CPS 2022 will be peer reviewed on the basis of technical quality, relevance to conference topics, originality, significance, clarity, etc. Accepted papers will be submitted for inclusion into IEEE Xplore subject to meeting IEEE Xplore's scope and quality requirements.

Please enter IEEE I&CPS Asia 2022 online submission system and choose 'SP012. Modeling, Analysis and Optimization of Coupled Transportation and Power Networks' to submit papers.

Submission Link:

<https://easychair.org/conferences/?conf=ieeEICPSAsia2022>