

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

Modelling, Optimization and Control of Urban Multi-energy Systems

Developing urban multi-energy systems is of great significance for the transition toward low-carbon energy systems. However, the extreme weather and multiple uncertainties have brought great challenges to the reliable and stable operation of urban multi-energy systems. Modelling, optimization and control technologies play an important role in urban multi-energy system operation under different contingencies and risks. Therefore, it is essential to introduce novel techniques and theories for modelling, optimization and control of urban multi-energy systems to support the safe, stable and efficient operation of urban multi-energy systems.

TECHNICAL OUTLINE OF THE SESSION

This special session focuses on a hot research topic – modelling, optimization and control of urban multi-energy systems. With the decarbonization of the energy system, the urban multi-energy system is inevitably developing towards high penetration of renewable energy and deep integration of multi-energy systems, which aims at replacing fossil energy and improving energy efficiency. Meanwhile, the reliable and stable operation of urban multi-energy systems has also been subjected to extreme weather and other uncertainties. In this condition, modelling, optimization and control of urban multi-energy systems have attracted significant attention from both academia and industry. Novel techniques and theories in related areas are encouraged in this special session. Topics of interest include (but are not limited to): urban multi-energy system operation and planning, reliability and resilience evaluation, excavation and management of new reliable resources, coordinated control methods for different resources, etc.

SPECIAL SESSION ORGANIZERS

Chengjin Ye

Zhejiang University

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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 'SP009. Modelling, Optimization and Control of Urban Multi-energy Systems' to submit papers.

Submission Link:

<https://easychair.org/conferences/?conf=iieeeicpsasia2022>