

Enabling High Performance & Resilience Power Grid: Decarbonization, Digitalization, Automation and Beyond



The APSCOM Conference

The challenges and opportunities of the power industry are changing rapidly in recent years by the transformational technological advancement of different sectors such as artificial intelligence, Internet of things and Green energy.

IET Hong Kong as always are taking an active role in leading the industry in confronting these challenges. Since the event's inception in 1990, APSCOM has been the flagship event of IET Hong Kong and serves as a forum for professionals and specialists to share ideas, innovations and experiences on promoting the high performance & resilience power grid.

Management and Planning

- T&D Asset Management
- Architectures and models for Smart Grid
- Design and application of modern generation, transmission and distribution equipment
- Active Distribution Network & Micro-grid
- Grid Optimization
- Demand Dispatch
- Distributed energy resources (DER) & Combined Heat and Power (CHP)
- Power to Gas & Hydrogen
- Renewable energy systems and sustainable development initiatives
- Energy storage facilities
- Asset condition monitoring
- Operation & Maintenance strategies
- Carbon Neutrality/Net Zero planning and strategies

Operation and Control

- Economic and optimal operation
- Self-healing capability & system resilience
- Stability and control of power electronics dominated grid
- Distribution Automation
- Interconnection of renewable energy systems and electric vehicles with Smart Grid
- Power quality & reliability
- Operation & control of AC/DC grid
- Transmission and Distribution Coordination
- Decentralized & Distributed Control and Operation

End Use Management

- Building energy management systems & automation
- Demand side management & smart loads
- Demand response & dynamic pricing
- Energy efficiency and conservation initiatives
- Application of electric vehicles and associated charging infrastructure
- Smart home application and end use data analytics

Smart Grid Technology

- Internet of Things (IoT)
- Communication protocol & 5G
- Standardization, Interoperability and Coexistence & Regulation
- Big data management and mining
- Renewable and demand forecasting
- Cyber physical power system and cyber security
- SCADA/EMS/DMS and information systems
- Phasor Measurement Unit (PMU) & Smart Meter
- Advanced Metering Infrastructure (AMI)
- Home area network
- Power conversion technologies
- Long life-time power electronic systems
- Energy Internet
- Integrated Energy Systems
- Carbon Capture and Storage
- EV Load Management and V2G technology

Electric Power Market

- Power market restructuring
- Independent power producer & distributed and embedded generation
- Smart grid and power market interactions
- Peer to peer energy trading and prosumer
- Energy and ancillary service market
- Carbon trading market
- Feed-in Tariff (FIT) and Renewable Energy Certificate (REC)

Papers

Papers of quality are invited to present original work or practical experiences relating, but not restricted, to the topics below. **Papers will be recommended for publication in IET INSPEC database and IEEE Xplore.**

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APSCOM 2022 Organizing Committee

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Key Dates

July 30 2022 Deadline for submission of Abstracts

August 15 2022 Notification of provisional acceptance

September 15 2022 Deadline for submission of Final Paper

October 1 2022 Notification of final acceptance

Abstracts and Final Papers are to be submitted in electronic format through the following website: <https://www.apscom.org/>

The following data entries are mandatory for the submission of an Abstract to the web-site.

- Title of the paper
- Authors and Co-authors, each with name, affiliation, email address
- Contact e-mail address and telephone of the principal author
- Abstract in text form (300 to 400 words) (no graphic or formula)
- Up to 4 keywords
- Related conference topic

Final Paper shall be in PDF format, ready for printing on paper of A4 size (21cm x 29.7cm) with margins of not less than 2.5cm from all edges and in double-column, with a maximum of 6 pages.

All Abstracts and Final Papers will be reviewed by the Technical Programme Committee. Acceptance will be individually informed through email.

Accepted papers shall be presented by at least one of the authors who must have paid the registration fee. Each registered author can present up to three papers. If the author would like to present more than three papers, an extra 15% of the full registration fee will be charged for each of the additional paper. All accepted papers will be included in the conference proceedings.

Special Panel Sessions and Tutorials

Some special panel sessions are opened for paper submission. For details, please refer to the website: <https://www.apscom.org/call-for-papers/special-sessions/>

Other topics of relevance to the conference theme are invited to be subjects for special panel sessions and tutorials. Proposed topics shall reach the Organizing Committee via E-mail on or before **31st May 2022**. The Organizing Committee reserves the right to accept, decline, make whole or partial use of, or modify the proposals and their contents for APSCOM 2022 without referring to the proposers.

Exhibition

An exhibition will be staged at the conference. Manufacturers, utilities, publishers and software developers are invited to sign up display booths. For details please contact the Secretary through <https://www.apscom.org/>

Best Student Paper Award

To encourage students to present their research work, three Best Student Award will be presented in APSCOM 2022. Each winner will receive HK\$1,000 together with a certificate. For a paper to qualify for the award, an author must be the first author and the presenter of the paper.

THE 12TH IET INTERNATIONAL CONFERENCE ON ADVANCES IN POWER SYSTEM CONTROL, OPERATION AND MANAGEMENT (APSCOM)

Organized by The Institution of Engineering and Technology Hong Kong, Power and Energy Section