

Hybrid Event:  
(On-site In-person Presentation & Virtual Presentation)

Barcelona, Spain  
August 23-25, 2021



Call for  
Papers

### Track Name: Enabling Technologies in Smart Energy Systems

The motivation of this track is to solicit the efforts and ongoing research work in the domain of IoT, machine learning, big data, and blockchain for Smart Energy Systems. Specific topics include, but are not limited to, the following:

- IoT Architectures (Things-Centric, Data-Centric and Service-Centric Architectures) for smart energy systems (e.g., heat, gas, electricity from generation, transmission, and distribution to consumption systems)
- Reliable, low-latency communication networks in IoT for smart energy systems
- Planning and management of sensors for smart energy systems (e.g., phasor measurement unit and smart metering infrastructure for heat/gas/electrical grids)
- Big data analytics for smart energy systems
- Intelligence data-driven IoT-based optimization and control for smart energy systems
- Intelligent software-controlled renewable energy generation (e.g., solar, wind, geothermal, hydro, combined heat and power)
- IoT-based solutions for energy storage and electric/alternative energy vehicle management
- Energy management techniques with Hybrid-Deep Reinforcement Learning (DRL) and Neural Network (NN) in large scale IoT system
- IoT-based energy management for data centers, smart homes, smart buildings, and smart cities (e.g., HVAC control, district heating and cooling)
- Security, safety and privacy in IoT for smart energy systems
- Edge-fog-cloud computing for smart energy systems
- Artificial Intelligence Platform for Smart Energy
- The application of Distributed Ledger Technologies (DLTs) and blockchain for smart energy systems
- Blockchain, AI/ML, big data and IoT business model in smart energy
- Experiences from Blockchain, AI/ML, big data and IoT testbeds as well as field-trials for smart energy systems