Call for Papers

IEEE Open Journal of Instrumentation and Measurement (IEEE OJIM)

Special Section on

Instrumentation and Measurement for Smart Energy Systems

The modernization of power systems and the transition towards green energy generation have led to a broader definition of energy systems, to include centralized and distributed renewable energy generation, local energy storage, integration of electric transport with other energy systems, communication and automation, etc. All these aspects contribute to the broad concept of Smart Energy Systems. The control, management and optimization of those systems is increasingly relying on accurate, real-time and synchronized measurements, reliable instrumentation and accurate estimation of the state of the system, from local to network scales.

Advancements in Instrumentation and Measurement play a vital role in the success and rapidity of the transition towards Smart Energy Systems. Therefore, this Special Section encourages submissions of manuscripts that contribute to the development of Instrumentation and Measurement aspects relevant to energy generation, distribution, storage and utilization, electric transport, automation of energy systems, ICT issues, etc. Both theoretical innovations and real-world applications with field implementation and experiments are welcome.

The topics for this Special Section include but are not limited to the following:

- Sensors and instruments for voltage and current measurements
- Measurement systems for Smart Grids and power system automation
- Instrumentation and measurement to support renewable generation
- Measurement for control and optimization of energy generation and storage
- Instrumentation and measurement for electric transport
- Measurements for diagnostics of power system components
- Distributed measurement systems (architectures and algorithms)
- Communication and IoT in power system measurements
- Synchronized measurements in a power network (PMU, SAMU, etc.)
- Measurements for revenue metering
- Artificial Intelligence for power system measurements and monitoring

Each accepted paper for this Special Section will receive an Open Access fee waiver; i.e., accepted papers won’t be charged Open Access fee.

Deadlines
Submission: June 1, 2022
First decision: June 25, 2022
Final decision: August 5, 2022
Publication Volume: 2022

For more info and submission instructions, please visit OJIM’s official website: http://ojim.ieee-ims.org/

Guest Editors:
Roberto Ferrero University of Liverpool, UK roberto.ferrero@liverpool.ac.uk
Paolo Attilio Pegoraro University of Cagliari, Italy paolo.pegoraro@unica.it
Sergio Toscani Politecnico di Milano, Italy sergio.toscani@polimi.it