

# **IEEE-PEMC 2018**

18TH INTERNATIONAL CONFERENCE ON POWER ELECTRONICS AND MOTION CONTROL

### Hungary, Budapest, August 26-30, 2018

### **Special Session on**

## Power Electronics Applications in Microgrid and Distributed Generation

## **Call for Papers**

Extensive researches are being performed on renewable energy generation due to decreasing fossil sources and energy security. Innovative methods in energy generation are rapidly becoming attractive. There are many applications to integrate traditional and renewable energy sources to existing utility grid. Power electronics is one of the most important component of modern grid and microgrid systems. The increased efficiency and robustness of power semiconductors enable to improve many types of dc-dc, dc-ac, and ac-ac power conversion. The power converters and device topologies are improved in industrial, residential, commercial and many more specified areas to improve power system resiliency, flexibility, and reliability. On the other hand, electric vehicles and energy storage systems are widely integrated with renewable energy sources. In this special session, emerging technologies and advanced design and modelling studies on "Power Electronics Applications in Microgrid and Distributed Generation" will be discussed.

#### Topics of interest include, but are not limited to:

- ➤ Power factor correction (PFC) and PFC converters
- > Static VAR compensators (SVCs),
- ➤ Flexible AC Transmission System (FACTS)
- Active and reactive power flow control, uninterruptible power system (UPS)
- ➤ High-voltage dc (HVDC) systems,
- ➤ Novel dc/dc converter topologies
- ➤ Multilevel Converter Topologies
- > Power quality analysis
- > Energy storage systems and transient issues
- > Smart grids and integration of DG
- ➤ Hybrid coupled micro-grid (AC+DC), Energy efficiency in micro-grids
- ➤ Intelligent control of grid-connected converters and inverters
- ➤ Power control methods and algorithms

#### **Submission procedure:** This is the same as for regular papers.

All the instructions for paper submission are included in the conference website: http://ieee-pemc2018.org

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**Deadlines:** given on the conference webpage