



Special Session on *Battery Modeling and Control with Industrial Applications*

Session Theme and Scope

The past decade has witnessed an ever-increasing use of battery-based energy storage systems across a diversity of sectors, which represents a key technology for moving the world into a sustainable energy era. This trend has motivated rapidly growing research on advanced battery management from diverse communities such as controls, power electronics, power systems, and transportation. This special session is aimed to share up-to-date research progress on battery modelling, control and operation management in practical systems. It will also encourage open discussion among researchers from different communities yet with common interest in battery management about potential future challenges and opportunities in this emerging field.

The topics of interest include, but are not limited to:

- Battery modeling, and model identification
- State-of-charge/state-of-health estimation
- Optimal charging control, and cell balancing
- Battery thermal management
- Ageing diagnosis and prognostics
- Battery grouping and packing
- Power electronics design and realizations of battery management systems
- Novel applications in electric vehicles, smart grids, energy-aware buildings, etc.

Important Dates

- Full paper submission: January 15, 2018 (tentative)
- Acceptance notification: March 15, 2019
- Final paper submission: April 15, 2019

Organizers

- Dr. Huazhen Fang, University of Kansas, USA (fang@ku.edu)
- Dr. Ziang Zhang, Binghamton University, State University of New York, USA (zhangzia@binghamton.edu)
- Dr. Jian Chen, Zhejiang University, China (jchen@zju.edu.cn)
- Dr. Chengbin Ma, Shanghai Jiao Tong University, China (chbma@sjtu.edu.cn)

Conference Information

Information about the conference and paper submission is available at <http://www.ieee-isie2019.org>.