

Special Section on:

Modelling, Control and Integration of Energy Storage Systems in E-Transportation and Smart Grid

RESearch IN energy storage systems (ESSs), such as batteries, ultracapacitors and flywheels, is essential to foster the use of renewable energy sources (RESs) and the future development of electric transportation. RESs are characterized by intermittences and they cannot be dispatched as conventional energy resources. ESSs are the key technology to solve these problems and allow the grid to increase the penetration of RESs. ESSs are also essential components to improve the performance of microgrids and are an enabling technology for smart grid operation. Major challenges are the design of high performance and cost-effective ESSs, which can safely meet the energy and power demand throughout the expected lifetime. The main objective of this Special Section is to provide timely solutions for the design and management of ESSs, as well as the required power electronics interface and control for their practical implementation in utility grids and electrified vehicles.

Editors invite original manuscripts presenting recent advances in these fields with special reference to the following topics:

- ✓ New emerging energy storage technologies
- ✓ Ageing mechanisms: testing and modelling
- ✓ Online state-of-charge and state-of-health estimation
- ✓ New trends in ESS monitoring and management
- ✓ Optimal sizing and management of ESSs
- ✓ Power electronics interface: topology, design, and control
- ✓ ESSs for integration of renewable energy sources
- ✓ Utility-scale ESSs

Manuscript Preparation and Submission

Check carefully the style of the journal described in the guidelines “Information for Authors” in the IEEE- IES web site: <http://www.ieee-ies.org/pubs/transactions-on-industrial-electronics> .

Please submit your manuscript in electronic form through: <https://mc.manuscriptcentral.com/tie-ieee/> .

On the submitting page, in pop-up menu of manuscript type, select: “**SS on Modelling, Control and Integration of Energy Storage Systems in e-Transportation and Smart-grid**”, then upload all your manuscript files following the instructions given on the screen.

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Timetable

Deadline for manuscript submissions:	Information about manuscript acceptance:	Publication date:
Jan. 31, 2017	Winter, 2017	Spring, 2018