

CALL FOR PAPERS



Special Session on Novel Energy Storage Solutions for E-Transportation and Smart Grid

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TOPIC OF THE SPECIAL SESSION

Energy Storage Systems (ESSs) still represent a performance/cost bottleneck to the expected development of sustainable electro-mobility and energy systems, such as electrified vehicles, microgrid and smart grid. The fast progresses in battery chemistry and materials are providing new solutions able to overcome the performance/cost barriers. In this context, in-situ characterization, modeling, control, and integration of novel ESSs are a priority for the development of e-mobility and smart grid and an emerging research topic. In fact, the improvement in performance/cost of ESSs can support the integration of intermittent renewable energy systems in the power system and the development of sustainable e-transportation accelerating their integration and consequently the paradigm shift towards smart grid.

Topics of the Session

- Energy storage characterization
- Energy storage modeling
- Energy storage state estimation
- Energy storage diagnosis, prognosis, and health management (PHM)
- Energy storage electrochemical/material characteristics
- Energy storage cell balancing
- Energy storage grouping/packing techniques
- Charging control and management
- Energy storage heat generation and system heat transfer analyses
- System-level integration and control of batteries into electric vehicles and smart grid

IEEE IES Technical Committee Sponsoring the Special Session:

- IEEE IES TC on Energy Storage

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Author's schedule:

- **Deadline for submission of special session papers**
Date 1 (use from <http://www.iecon2018.org>)
- **Notification of acceptance**
Date 2 (use from <http://www.iecon2018.org>)
- **Deadline for submission of final manuscripts**
Date 3 (use from <http://www.iecon2018.org>)