



VPPC 2016

OCT 17-20, 2016
HANGZHOU

The 13th IEEE Vehicle Power and Propulsion Conference

#SS1 - Special Session on

DEPENDABILITY OF ENERGY STORAGE SYSTEMS

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Call for Papers

During the last decades, energy storage systems (ESS) emerged as essential subsystems in many applications such as portable electronics, electric or hybrid vehicles, stationary power supplies and decentralised storage in power grids. In order to capitalize on the benefits of ESS, such as batteries, supercapacitors, fuel cells and capacitors and compensate their short lifetime, deep and focused knowledge of ESS behaviour is required during the whole life cycle. In the frame of this special session, many aspects of ESS would be discussed such as reliability issue and its impact on system operation, online diagnosis and prognosis and determination of optimum replacement and maintenance policies. Also, special interest would be given to the implementation of ESS by taking into account the aging impact on sizing problems, performance concerns and cost effectiveness. Finally, ESS are usually considered as environmental friendly but some hazards linked to some ESS technologies would be a crucial discussion subject.

Topics of interest include, but are not limited to:

- Aging tests procedures, safety and failure analysis
- Evaluation and lifetime estimation of ESS, Batteries, Supercapacitors and Fuel Cells Management Systems: architectures, thermal management, balancing circuits,...
- Cost study over service life
- Diagnosis and prognostics methods for SOH
- Online supervision of ESS parameters
- Optimal lifetime of hybrid energy storage systems

Deadlines:

Submission of digests: ~~March 31, 2016~~ April 30, 2016
Notification of acceptance: May 15, 2016
Submission of full papers: July 15, 2016

All special session digests must be prepared and submitted in the same way as those for the conference regular tracks (see <http://www.vppc2016.org/>), except that the corresponding special session should be identified during submission.