



OCT 17-20, 2016
HANGZHOU

The 13th IEEE Vehicle Power and Propulsion Conference

#SS9 - Special Session on

INTEGRATED MULTILEVEL POWER CONVERSION AND ENERGY STORAGE

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Call for Papers

In the emerging electrification of transport, energy storage plays an ever more important role. A lot of effort is put into the development of new storage techniques to increase energy and power density. Additionally, with power electronics the stored energy can be used in a more efficient way. A new development is the integration of both storage and power conversion. Multilevel power converters with integrated energy storage provide significant advantages over the more common solutions. By combining smart topologies with intelligent control, battery cells can be actively balanced such that a maximum amount of energy can be supplied to the load. Also, the output voltage of the battery pack can be changed to match the demands. Ultimately, the battery pack itself may be used to directly drive the propulsion motor of the vehicle.

Topics of interest include, but are not limited to:

- Multilevel power converters with integrated storage
- Variable output voltage battery packs
- Multi-phase battery packs
- Modeling of converters
- Active balancing
- Model predictive control

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.