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Special Session on

"Hybrid Energy Storage Systems for Electric Vehicles and Smart Grids"
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Call for Papers

The wide range of applications in which energy storage systems are employed requires different features and properties, which cannot be always satisfied by a single energy storage technology. Hybrid Energy Storage Systems (HESSs) aim at solving this issue by coupling two or more energy storage technologies with complementary features, in order to exploit their advantages and relieve their weaknesses at the same time.

This special section is focused on HESSs for transportation electrification and smart grids, namely on the most recent improvements to make them affordable from both technical and economic points of view. Particularly, special attention will be given to the most popular combinations, such as batteries and supercapacitors, fuel cells and batteries and/or supercapacitors, batteries and flywheels, especially for any kind of electric vehicle (road, marine, rail, etc.).

Topics of the Session:
Topics of interest include, but are not limited to:
- New topologies/configurations of hybrid energy storage systems
- HESS control strategies

- Energy management strategies for hybrid energy storage systems
- New energy storage technologies for HESSs
- Full electric and hybrid electric propulsion systems employing a HESS
- Automotive, marine, rail, aerospace HESS applications
- Smart grid and microgrid HESS applications