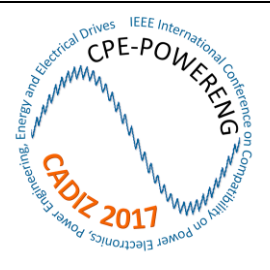




**2017 11th International Conference on
Compatibility, Power Electronics and Power
Engineering
CPE-POWERENG 2017
www.cpe-powereng2017.org**



**4-6 April, 2017
Cadiz, Spain**

CPE-POWERENG 2017 Special Session

Special Session on: Impedance Source Converters: Control, Improved Topologies, and Emerging Applications

Technical Outline of the Session (100-200 words) and Topics:

The impedance source converter with a network consisting of inductors, capacitors, and switches/diodes, overcomes the limitations of traditional solutions by offering buck or boost capabilities in a single stage and with short circuit immunity of power transistors. Thus, it is possible to get rid of the dead time between phase-leg switches and to enhance the reliability of the entire power system. The solution has found widespread investigations for dc-dc, dc-ac, ac-dc and ac-ac applications, including electric drives, renewable energy systems, transportation, and battery storage. The aim of this special session is to concentrate all related contributions on impedance source converters to provide a common environment for presentation and discussion on their emerging research, development, and applications.

Topics of interest of this session include (but are not limited to):

- New control methods of impedance source converters
- Improved and new topologies
- Multilevel / Multiphase impedance source converters
- Impedance source DC-DC converters
- Impedance source DC-AC / AC-DC converters
- Impedance source matrix converters
- Techniques of optimizing impedance source network parameters
- Applications of impedance source converters in electric drives and renewable energy power systems
- Novel applications of impedance source converters

Special Session Organizers (names and contact emails):

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