

CALL FOR PAPERS



• Special Session on Advanced Control of Power Converters in Distributed Generation Systems

IECON 2018 - The 44th Annual Conference of the IEEE Industrial Electronics Society
October 21-23, 2018, Washington D.C, USA



TOPIC OF THE SPECIAL SESSION

Renewable sources, such as photovoltaic panels, wind generators and fuel cells, could be used to feed an isolated load in stand-alone systems, or connected directly to the grid for cogeneration. In either case, this connection is made through power electronics interfaces that should ensure high stability, voltage regulation, power flow control, and low electromagnetic emission, along with high power density, low cost and high reliability. In some applications where high power level is required, the switching frequency of the power semiconductors is limited and the use of multilevel or interleaved converters becomes mandatory in order to get an acceptable power quality. This session addresses the issues of advanced control techniques applied to such converters to improve their performance, efficiency, reliability and cost-effectiveness

Topics of the Session

- Advanced control of power electronics in DC grids
- Grid-connectivity control requirements
- Control of paralleled or interleaved topologies
- Model-based control of switch-mode power converters
- Optimal control in hybrid cogeneration systems
- Predictive control of power converters
- Direct power control of power converters
- New PWM techniques for power electronics control
- Real-time control and simulations of high power converters

IEEE IES Technical Committee Sponsoring the Special Session:

- TC – Power Electronics (Control in Power Electronics subcommittee)

ORGANIZED AND CO-CHAIRRED BY

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Author's schedule:

- Deadline for submission of special session papers
May 1st, 2018
- Notification of acceptance
July 15th, 2018
- Deadline for submission of final manuscripts
August 1st, 2018

For additional information please visit www.iecon2018.org