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Advances in Control System for Power Electronics, Microgrids, and Smart Grids

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Message from the Guest Editors

Dear Colleagues,

The focus of this Special Issue is on the challenges faced and advantages offered by the seemingly inevitable shift from the existing traditional supply-demand model (characterized by centralized remote bulk power generation, long transmission lines, unidirectional power flow at distribution level from the producer (grid) to consumer (customer), irresponsive loads, separate energy carriers, and the low penetration of renewable energy sources) to the new pattern (characterized by distributed generation close to the point of use, bidirectional power flow in distribution feeders, controllable/responsive loads such as plug-in electric vehicle chargers, thermal loads and air conditioning systems, integrated energy carriers, and the very high penetration of renewable energy sources).

This Special Issue is devoted to the various advanced realtime control methods intended for application alongside micro and smart grids. In addition, research targeting novel technologies, new configurations of hybrid micro grids (AC and DC), V2G technologies, new challenges and advanced controllers are welcome.

Dr. Kambiz Tehrani Prof. Dr. Serge Pierfederici *Guest Editors*







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Message from the Editor-in-Chief

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