



The 43rd Annual Conference of the IEEE Industrial Electronics Society China National Convention Center, Beijing, China October 29 - November 1, 2017

Special Session on

Resonant and Soft-Switching Compensation Topologies applied in Wireless Power Transfer Systems

Organized and co-chaired by:

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Call for Papers

Research and development activities on Wireless Power Transfer System (WPTS) has been increased considerably in the last few years mainly for Electric Vehicle (EV) applications. The wireless charging process of EVs can be carried out by two ways namely stationary wireless charging and in-motion wireless charging. Former one occur while vehicle is stationary and later one occur when vehicle is moving along the road. The main issues in WPTS is the efficiency and amount of transferable power. Such requirements can be achieved by appropriate compensation topologies. Thus, in order to guarantee optimal operating condition of the WTPS and to maintain high transferable power and efficiency in a wide range of conditions, new-dedicated power electronic converters operating at high frequency, and taking advantage of softswitching and resonance commutation need to be used.

This special session (SS) aims to collect scientific and technical papers on the field. Researchers from both academia and industry are invited to present technological trends original solutions and in-progress researches on issues such on power electronic converter topologies in particular the resonant and soft-switching ones applied in WPTS.

Topics of the Session include but are not limited to:

- Compensation topologies
- RPCs and soft-switching topologies for WPTS
- Optimal operating conditions of WPTS
- Multi-level resonant inverter topologies for WPTS
- High frequency resonant inverter for WPTS
- RPCs design and implementation
- Modelling, simulation and control analysis of power electronics for the WPTS
- Environmental impacts and EMC design
- Applications of Wireless Power Transfer Technology
- Magnetics Coupling Design and Simulation

Author's schedule: Deadline for submission of special session papers

Notification of acceptance

Deadline for submission of final manuscripts

April 17, 2017 July 3, 2017 August 15, 2017

All the instructions for paper submission are included in the conference website: www.iecon2017.com