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Special Session on

"Induction heating systems" Organized by

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Call for Papers

Advances in power electronics have allowed a significant development of the induction heating systems, which is a key technology for both industrial processes and domestic appliances. Nowadays this technology is evolving towards more flexible, cost-effective, and efficient systems through the development of the power electronic converter, the control algorithms, and the inductor optimal design.

Topics of interest include, but are not limited to:

This special session invites papers presenting recent advances in this field with special reference to the following topics:

- Power converter topologies and devices.
- Digital control of induction heating systems.
- Magnetic component design for induction heating systems.
- Induction heating systems modelling and simulation.
- Efficiency optimization of induction heating systems.
- New architectures of induction heating systems.
- Applications of heating by electromagnetic sources: biomedical, industrial, and domestic devices.
- Educational issues and activities
- Application of bidirectional DC-DC converter in HVDC Transmission, AC/DC microgrid, smart grid, electric vehicle charging infrastructure, space applications etc.