



ICEM2020 – Gothenburg, Sweden, August 23-26, 2020

Special Session on

Motor and Generator Windings – Design, Performance and Manufacturing

Organized and co-chaired by:

Fernando J. T. E. Ferreira, University of Coimbra, PORTUGAL, ferreira@deec.uc.pt
Marco Villani, Università degli Studi dell'Aquila, ITALY, marco.villani@univaq.it

Call for Papers

Windings are a key part of electric motors and generators, having a strong impact in their efficiency, reliability and manufacturing cost. Hence, the respective design optimization, considering the manufacturing constraints, is of major importance.

In this scope, the topics of interest for this Special Session include, but are not limited to:

- Windings for asynchronous and synchronous motors/generators;
- Distributed/concentrated and integer-/fractional-slot windings;
- Multiflux/multivoltage, partial, Dahlander, and other special winding types;
- Winding connection-mode change for flux/torque adjustment;
- Windings for axial-flux motors (including those with copper/aluminum foil coils);
- Industrial winding manufacturing materials, processes and constraints;
- Winding insulation system (materials, partial discharges and fault diagnosis);
- Stator winding heat dissipation (impregnation, potting, cooling techniques, etc.);
- Rotor winding/cage (design, materials, motor performance, etc.);
- Winding design, modelling, simulation and performance evaluation;
- Winding optimization techniques/methods;
- Best practices for motor/generator rewinding/repair;
- Hairpin winding for automotive applications.

Submission of papers: deadline follows the deadline for the regular papers. All the instructions for paper submission are included in the conference website: <http://www.icem.cc/2020>