



CALL FOR PAPERS

“Diagnostics of Electrical Machines, Power Electronics & Drives”

Topics: Diagnostics and monitoring of electrical machines, power electronics, adjustable speed drives and related areas are key elements for industrial systems. During the past 20 years diagnostics techniques in power electrical engineering were dedicated to components and many papers have been published on the topic. However, industrial interests have been moved towards global systems for which fault detection and predictive maintenance are more difficult. This Special Section is open for all the contributors in the field of diagnostics in power electrical engineering but authors having presented a paper at the 2009 edition of the Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED) are especially encouraged for a manuscript submission.

Topics of interest of this special section include, but are not limited to:

- **Electrical Machines:** Failure detection and location in electrical machines using vibration, audible noise, electrical or mechanical variables, sensors, insulation failures, electrical, mechanical and thermal models
- **Power Electronics:** Diagnostics in power converters using input-output monitoring, thermal and/or electrical measurements on power semiconductors, control supervision, signal processing
- **Adjustable Speed Drives:** Monitoring and diagnostics for ASDs using electrical machines, power converters and control systems supervision, computer-based signal processing and data analysis
- **Tools for Diagnostics:** Neural networks, fuzzy logic, artificial intelligence, genetic algorithms, expert systems, identification, signal processing techniques, observers
- **Materials for Electrical Machines:** Insulating and magnetic materials, remaining life models, ageing tests
- **Tests for Predictive Maintenance:** Partial discharge analysis, tests, new instruments for diagnostics

This Special Section is organized by the Technical Committee on Electrical Machines of IEEE Industrial Electronics Society

Manuscript Preparation and Submission:

If you are submitting the post conference paper please follow instruction on <http://tie.ieee-ies.org/tie/faq/auth/confPap.htm>. Remember that for post conference papers changes and extensions are mandatory. Please do follow the guidelines in “Information for Authors” in the IEEE Transactions on Industrial Electronics <http://tie.ieee-ies.org/tie/>. Check carefully the style of the journal IEEE Transactions on Industrial Electronics before any submission. Please submit your manuscript in electronic form through Manuscript Central web site: <http://mc.manuscriptcentral.com/tie-ieee>.

On the submitting page #1 in popup menu of manuscript type, select: **SS on Diagnostics of EMPED**.

Please be aware, that in order to secure a timely publication, in this Special Section there will not be an option for major revision, such papers will be rejected. Of course after revision you may resubmit them but only as regular papers.

Timetable:

Deadline for manuscript submissions
Information about manuscript acceptance
Estimated publication date

December 21, 2009
April 2010
September 2010

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