

CALL FOR PAPERS

Special Session on Advanced Signal Processing Tools for Failures Detection and Diagnosis in Electric Machines and Drives

to be held in the frame of
IECON 2013 - The 39th Annual Conference of the IEEE Industrial Electronics Society
10th -13th of November 2013, Austria Center, Vienna, Austria



TOPIC OF THE SPECIAL SESSION

Most of the used failure detection and diagnosis techniques perform spectral analysis, such as Fourier or MUSIC techniques. Although these techniques exhibit good results in stationary conditions, they are not well-suited for a majority of electric machines and drives applications. Indeed, these applications environment is predominantly nonstationary due to transients or variable speed operations. In this context, the involved signals are usually nonstationary, embedded in noise, and can contain closely spaced frequencies. It is then obvious that failures detection and diagnosis in such applications are challenging tasks that need using advanced signal processing tools.

Following, a successful special session organized in Montréal during IECON 2012, this session intends to focus on state-of-the-art researches and developments as well as future trends in (but not limited to) the following topics of interest in electric machines and drives applications.

1. High resolution techniques;

SPECIAL SESSION ORGANISATION

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The organizers look forward to welcoming you to Vienna, Austria from 10th to 13th November 2013.

Important Dates

Regular Paper submission:	April 01, 2013
Notification of acceptance:	June 15, 2013
Final submission:	August 01, 2013



2. Time-frequency representations;
3. Demodulation techniques;
4. Pattern recognition techniques;
5. Statistical signal processing techniques.

SUBMISSION OF PAPERS

The working language of the conference is English. Submit the full paper as PDF following the IEEE layout requirements by using the templates given at the conference web page. Accepted and presented papers will be published in an IEEE Proceedings volume and will be sent to IEEE Xplore. In addition, selected authors are encouraged to submit their papers for publication in the IEEE Transactions on Industrial Electronics or in the IEEE Transactions on Industrial Informatics.

THE CONFERENCE

IECON 2013 is the 39th Annual Conference of the IEEE Industrial Electronics Society, focusing on industrial and manufacturing theory and applications of electronics, controls, communications, instrumentation and computational intelligence. The objectives of the conference are to provide high quality research and professional interactions for the advancement of science, technology, and fellowship.

Papers with new research results are encouraged for submission. IECON 2013

will be held concurrently with the 7th IEEE International Conference on E-Learning in Industrial Electronics (ICE-LIE 2013). Participation in any of these events just requires a single conference registration fee. The world's industry, research, and academia are cordially invited to participate in the wealth of presentations, tutorials, special sessions and social activities, and furthermore, enjoy beautiful Vienna.