

CALL FOR PAPERS

Special Session on Advanced Signal Processing Techniques for Power Systems Applications

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

This special session will focus the last improvements in advanced digital signal processing techniques and in the field of intelligent systems. These include Artificial Neural Networks (ANN), Fuzzy Logic (FL), Genetic Algorithms (GA), but also various adaptive signal processing techniques. Essential aims of these techniques are to identify current harmonics, estimate frequency, filter disturbances, detect voltage quality events, classify disturbances, control loads, manage power flow, analyze signal quality, and improve power quality... when applied to power systems (motor drives, electrical grids, inverters, converters, etc.).

Interesting topics are, but not limited to:

- Advanced methods for the detection and classification of digital signals
- Characterizing and modeling of nonlinear loads and various electrical appliances
- Intelligent techniques such as Artificial Neural Networks (ANN), Fuzzy Logic (FL), etc.
- Implementation of neural networks approaches for power systems

SPECIAL SESSION ORGANISATION

Patrice Wira
patrice.wira@duha.fr

Djaffar Ould Abdeslam
djaffar.ould-abdeslam@duha.fr

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



- Advanced methods for electrical disturbances identification
- Harmonics identification and frequency tracking
- Active power filtering and power quality improvement
- Electrical signal filtering, processing and predicting
- Smart grids, smart homes, smart sensors
- Control of power converters used in renewable energy systems and power quality
- Digital control implementation based on DSP and FPGA

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.