

# CALL FOR PAPERS

## Special Session on Advanced Controllers for High Performance AC Drives

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



### TOPIC OF THE SPECIAL SESSION

Advanced control theory is always very attractive for application in AC drives. However, industry needs controllers those are easily realizable, less computation-intensive and easily understandable. Therefore, there is always a gap between the theoretical development and the corresponding implementation. This special session aim to explore the use of advanced control theory for AC drives. Special emphasis will be given on easy implementation of the controllers.

Topics of interest include but are not limited to

- Application of model reference adaptive controllers in AC drives
- Application of gain scheduling and advanced adaptive control techniques
- Use of sliding mode control in AC drives,
- Implementation of advanced controllers using FPGA
- Application of soft computing to enhance performance of AC drives
- Deadbeat and anti wind up control to improve dynamic performance
- Advanced parameter identification techniques
- Challenges in speed sensorless control at very low speed

### SPECIAL SESSION ORGANISATION

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

### Important Dates

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



- Predictive control and advanced PWM 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.