

# CALL FOR PAPERS

## Special Session on Electric Traction Drives for Road Vehicles

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

With the recent technological advancements and the growing environmental concerns, application of electric drives has gone beyond process industry and household applications to all the transportation means. Focus of this special section is on the electric traction drives for road (electric) vehicles, EVs, including new converter topologies and advanced motion control techniques. Different types of electric traction drives starting from PM brushless ac and dc drives to induction drives are categorized with the advantages of one over others for EV applications. Increasing cost of PM materials has pushed to the development of PM-reduced or PM-free brushless traction drives. Power devices as well as power converters with low switching losses are explored for the supply of the traction motors. Novel motion control algorithms are investigated to achieve high road EV drivability. Management processes of the power flow within the electric traction drives are studied with the aim of increasing the EV overall efficiency and mileage.

This special session intend to collect scientific papers on the electric traction drives for road EVs of various size and power. Authors from academia and industry are invited to present technological trends, original solutions and in-progress

### 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



researches on the issues of architecture, converter topologies, control techniques and management strategies for the electric traction drives. Topics of interest include but are not limited to

- Purely and hybrid EV traction systems
- Traction drives for electric bi-cycle, three- and four-wheeler
- Mini-to-large passenger EV electric traction drives
- Motorcycle electric traction drives
- Light-to-heavy commercial EV traction drives
- Off-road EV electric traction drives
- PM, PM-reduced and PM-free ac and dc brushless motor traction drives
- Switched reluctance motor traction drives
- Induction motor traction motor drives
- Power converters for the supply of electric traction drives
- Motion control techniques for electric vehicles
- Management strategies of electric traction drives

### **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.