



## “Plug-in Hybrid Electric Vehicles”

**The Theme:** Due to the ever-growing need for higher fuel economy and minimal environmental impact, advanced vehicular technologies, such as plug-in hybrid electric (PHEV) vehicles are being researched upon at a brisk rate. The improvement of overall efficiency is the most important issue for the emergence and acceptance of these vehicular technologies. This special section primarily aims at addressing the practical issues for commercialization of current and future PHEVs, and aims to focus primarily on power electronics and motor drives based solutions for both the current as well as future automotive industry. Furthermore, one of the major goals of this special section is to highlight detailed modeling, simulation, analyses, and comparative studies of existing and future PHEV technologies. Topics of interest of this Special Section include, but are not limited to:

- Advanced PHEV power electronics
- Novel machine designs for PHEV propulsion
- Advanced PHEV motor drive solutions
- Modeling and simulation of PHEV power trains and drive trains
- New PHEV power system architectures
- Battery technologies for PHEV applications
- Fuel cell based PHEV technologies
- Ultra-capacitor based hybrid storage systems
- Design and implementation of PHEV energy management strategies
- PHEV market trends and future prospects

### Manuscript Preparation and Submission

Follow the guidelines in “Information for Authors” in the IEEE Transactions on Industrial Electronics <http://tie.ieee-ies.org/tie/>. 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 Hybrid Electric Vehicles**.

### Timetable

<b>Deadline for manuscript submissions</b>	<b>February 28, 2009</b>
<b>Information about manuscript acceptance</b>	<b>July 2009</b>
<b>Estimated publication date</b>	<b>December 2009</b>

### Guest Editors:

**Sheldon S. Williamson** (Corresponding Guest Editor), Power Electronics and Energy Research Group, P. D. Ziogas Power Electronics Laboratory, Department of Electrical and Computer Engineering, Concordia University, 1455 de Maisonneuve Blvd. W., Montreal, QC H3G 1M8, CANADA; Phone: +1/(514) 848-2424, ext. 8741; Fax: +1/(514) 848-2802;: [sheldon@ece.concordia.ca](mailto:sheldon@ece.concordia.ca)

**William Cai** Chief Technology Officer, Jing-Jin Electric Technologies (Beijing) Co., Ltd., Building E, Suite 511A, Wangjing Technology Park, 2 Second Lizhezhong Road, Chaoyang District, Beijing 100102, CHINA; Phone: +86 (10) 6439-8472 Ext. 8003; Fax: +86 (10) 6439-8479; [william.cai@jjecn.com](mailto:william.cai@jjecn.com)

**Chunbo Zhu** School of Electrical Engineering and Automation, Harbin Institute of Technology, Harbin, CHINA; Phone: +86 (0451) 8641-3621/20; [zhuchunbo@hit.edu.cn](mailto:zhuchunbo@hit.edu.cn)

**Editor-in-Chief:** **Bogdan M. Wilamowski**,  
[tieedit@auburn.edu](mailto:tieedit@auburn.edu) Tel: +1-334-844-1629

**Journal Administrator:** **Sandra McLain**  
[tieadm@auburn.edu](mailto:tieadm@auburn.edu) Tel: +1-334-844-1887

Alabama Nano/Micro Science and Technology Center, Auburn University, 200 Broun Hall, AL 36849-5201, USA, Fax: +1-334-844-1888