

**Special Issue on Power Electronics in Sustainable Energy****Scheduled publication time: September 2011**

A special issue of the IEEE Transactions on Power Electronics is being planned for 2011 in the emerging area of Power Electronics in Sustainable Energy. The scope of the issue includes:

- Architecture of sustainable energy systems showing a role of power electronics
- Large solar plants: system design, integration, grid connection and fault management
- Large offshore wind farms: turbine design, dc or ac collection, transmission, grid connect
- Smart Grid: Solutions for grid power flow control, FACTS, renewable energy penetration issues
- Energy Smart Home: Integration of solar power, PHEVs, smart loads at the home level
- Power electronics systems in sustainable energy applications
- Topology, control and protection for power conversion systems in sustainable energy
- Power electronics systems for energy conservation and storage
- Power quality impacts of increased penetration of energy efficient lighting and loads
- Modeling and characteristics of power electronics systems in sustainable energy
- Design and/or control of power conversion systems for EVs and PHEVs
- Role of EVs and PHEVs in grid stabilization and regulation
- Design and/or control of distributed storage resources at a grid level
- Carbon footprint reduction in industrial, commercial and residential applications through power electronics
- Control of distributed generation, including steady state and dynamic power sharing
- System performance issues such as stability in power electronics systems including sustainable energy
- Design of power conversion systems for full sustainability

Surveys and papers with a tutorial flavor are also welcome. All papers will be evaluated through the normal Transactions review process.

All manuscripts must be submitted through Manuscript Central at <http://mc.manuscriptcentral.com/tpel-ieee>. Submissions must be clearly marked "Special Issue on Power Electronics in Sustainable Energy, 2011" on the cover page. When uploading your paper, please indicate, under step 4 – *Details & Comments*, that it is for the "Special Issue on Power Electronics in Sustainable Energy, 2011." Refer to <http://www.pels.org> for general information about electronic submission through Manuscript Central. Manuscripts submitted for the special issue will be reviewed separately and will be handled by the guest editorial board.

**Deadline for submission of Manuscript: January 15, 2011**

Guest Editor: Dr. Hirofumi Akagi, Tokyo Institute of Technology, JAPAN ([akagi@ee.titech.ac.jp](mailto:akagi@ee.titech.ac.jp))

**The Guest Editorial Review Board consists of the following people:**

- Hiro Akagi, Guest Editor
- Vassilios Agelidis, University of Sydney, Australia, Associate Editor
- Deepak Divan, Georgia Institute of Technology, USA, Associate Editor
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- Fang Z. Peng, Michigan State University, USA, Associate Editor

**Proposed time line**

- Approved by PELS Adcom at September 2009 meeting
- Approved by PELS Adcom at June 2010 meeting
- July 2010 – Call for papers
- January 15, 2011 - Manuscripts due
- April 15, 2011 - First reviews due
- May 15, 2011 - Revised manuscripts due
- July 1, 2011 - Final acceptance
- August 1, 2011 - Final manuscripts due
- August 15, 2011 - Send final manuscripts to IEEE
- September 2011 - Special issue appears