



## Call for Papers

# Special Issue on Modeling and Advanced Control in Power Electronics, 2009

Scheduled Publication Time: November 2009

Prospective authors are invited to submit original contributions or survey papers for review for publication in this special issue. Topics of interest include (but are not limited to):

- Reduced-order and behavioral modeling of devices, components, circuits, and systems
- Integrated electro-magneto-thermal modeling; EMI modeling, multilevel and multi-physics modeling
- Model validation, model certification; model identification, model development tools
- Parallel and distributed simulation of complex power electronic systems; multilevel simulation
- Hardware-in-loop simulation, mixed-signal simulation, interactive simulation; virtual prototyping
- Digital and mixed-signal control of high-frequency converters; digital pulse-width modulation
- Geometric, ripple-based, and other nonlinear control methods for power converters
- Modular converter control, current and voltage sharing control; sensorless and adaptive control
- Large- and small-signal methods for complex dc, ac, and hybrid dc/ac power electronic systems
- Modeling and control of mobile and autonomous power electronic systems
- Modeling and control of renewable energy systems

All manuscripts must be submitted through Manuscript Central at <http://mc.manuscriptcentral.com/tpel-ieee>. Submissions must be clearly marked "Special Issue on Modeling and Advanced Control in Power Electronics, 2009" on the cover page. When uploading your paper, please indicate, under step 4 – *Details & Comments*, that it is for the "Special Issue on Modeling and Advanced Control in Power Electronics, 2009." 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 noted below.

**Deadline for Submission of Manuscript: February 28, 2009**

**Guest Editor**

**Jian Sun, Rensselaer Polytechnic Institute, USA ([jsun@rpi.edu](mailto:jsun@rpi.edu))**

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## Proposed Timeline

- June 2008 – Proposal Approval by PELS AdCom
- July & September 2008 – Call for Papers in the Transactions
- July – December 2009 – Call for Papers in PELS Newsletter and Distribution at Conferences
- February 28, 2009 – Manuscripts Submission Deadline
- May 31, 2009 – First Review Complete
- June 30, 2009 – Revised Manuscripts Due
- August 15, 2009 – Final Acceptance Notification
- September 15, 2009 – Final Manuscripts Due
- September 30, 2009 – Manuscripts Forwarded to IEEE for Publication
- November 2009 – Special Issue Appears in Transactions