

IEEE - ICIT'2009
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Churchill, Victoria, Australia
<http://www.ieee-icit09.org/>

Invitation to the Special Section on
PREDICTIVE CONTROL OF POWER CONVERTERS

Predictive control is emerging as a very powerful and attractive alternative to control electric energy in power electronics and electrical drives, due to the advances in modern microprocessors. In effect, it was demonstrated recently that the use of predictive control in power electronics offers a number of advantages: very intuitive approach, no need of linear controllers, no need of modulators, easy inclusion of nonlinearities and restrictions and a practical realization with commercial microprocessors. This development has been recognized by the IEEE Transactions on Industrial Electronics in the preparation of a special section dedicated to Predictive Control of Power Electronics and Drives, to be published in February 2009. The aim of this special session is to attract all researchers in this field to a fruitful interchange of experiences and discussion of future work and applications.

- **Specific topics of interest:**
 - Current control of three-phase Inverters using predictive control
 - Current control for Shunt Active Power Filters using predictive control
 - Current control of AC/DC or AC/DC/AC Converters using predictive control
 - Current control of three-phase Source Rectifiers using predictive control
 - Predictive modulation in multi-switching systems
 - Model predictive control in Industrial Electronics.
 - Efficient predictive control strategies
 - Predictive control for multilevel power converters
 - New applications of predictive control for power converters
 - Predictive control for High-Power applications

Authors' Schedule:

Authors should contact the Special Session Organizers as soon as possible and consider schedule presented at ICIT'2009 website.

Submission of Papers:

Papers are to be submitted electronically. For further details please consult the conference web pages.

Session Organizers:

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