

# APEC 2005

Twentieth Annual IEEE Applied Power Electronics Conference and Exposition

## Announcement and Call for Papers

March 6-10, 2005

Hilton Austin

Austin, Texas

APEC 2005 will continue the tradition of focusing on the practical aspects of the power electronics profession. Presented papers, Professional Education Seminars and a comprehensive exposition will address the specification, design, manufacture and marketing of power electronic components, products and systems. Presentations that address new and emerging topics are welcome. Papers of practical importance are solicited in the following areas of power electronics:

- 1. AC-DC Power Supplies and DC-DC Converters**
  - 1.1 AC-DC Power Supplies, Single-Phase
  - 1.2 AC-DC Power Supplies, Three-Phase
  - 1.3 DC-DC Converters, Hard-switched
  - 1.4 DC-DC Converters, Soft-switched
  - 1.5 Voltage Regulator Modules (VRMs)
- 2. Utility Interface**
  - 2.1 Power Factor Correction, Single-Phase
  - 2.2 Power Factor Correction, Three-Phase
  - 2.3 Utility Interface and Power Quality
  - 2.4 Distributed Energy Systems
- 3. Lamp Ballasts and Lighting Systems**
- 4. Uninterruptible Power Supplies (UPS)**
- 5. Motor Drives and Inverters**
  - 5.1 AC Motor Drives
  - 5.2 DC Motor Drives
  - 5.3 Inverters, Single-Phase
  - 5.4 Inverters, Three-Phase
  - 5.5 PWM Techniques
- 6. Devices and Components**
  - 6.1 Semiconductor Devices
  - 6.2 Magnetic Components
  - 6.3 Capacitors
  - 6.4 Batteries and Chargers
  - 6.5 Interconnects
  - 6.6 Device Integration
- 7. System Integration**
  - 7.1 Packaging
  - 7.2 Thermal Management
  - 7.3 EMI and EMC
- 8. Modeling, Simulation, and Control**
  - 8.1 Systems
  - 8.2 Converter Circuits
  - 8.3 Devices and Components
  - 8.4 Parasitic Components
  - 8.5 CAD /CAE Tools
  - 8.6 Digital Controls
- 9. Manufacturing**
  - 9.1 Production Processes
  - 9.2 Quality and Quality Systems
  - 9.3 Design for Manufacturability
  - 9.4 Material Procurement
  - 9.5 Supplier Qualification
  - 9.6 Technology Transfer
- 10. Power Electronics Applications**
  - 10.1 Automotive and transportation
  - 10.2 Distributed Energy and Generation
  - 10.3 Telecommunication
- 11. Regulatory Agencies and Standards**
- 12. Marketing, Sales and General Business**

**Deadline for Submission of Abstract and Digest is August 9, 2004.**

**Notification that a paper was accepted or declined will be e-mailed no later than October 18, 2004.**

**Final papers are due no later than December 13, 2004.**

Preparation of Abstracts and Digests: Prospective authors of technical papers are asked to submit a 50-word Abstract and a three to five-page Digest (double spaced, including figures, tables and references) of their planned presentation. Digests for APEC 2005 must be submitted in electronic format no later than August 9, 2004. For details, please visit [www.apec-conf.org](http://www.apec-conf.org). Authors should obtain any necessary company and governmental clearance prior to submission of Abstracts and Digests. Abstracts and Digests will be sent to multiple reviewers; therefore, "Confidential" and "Proprietary" information should be omitted. **Please note that papers presented at APEC must be original material and not have been presented at previous conferences or previously published. Manuscripts not received by the deadline above may not be published in the Proceedings and will not be presented at the conference. Finished manuscripts exceeding seven pages will be subject to publication page charges.**

A peer review process will be used to evaluate all papers submitted for consideration. Anyone interested in becoming a reviewer is encouraged to register at [www.apec-conf.org](http://www.apec-conf.org) (under "More about APEC"). The principal criterion in reviewing papers for acceptance will be the usefulness of the presentation to the practicing power electronics professional. The reviewers value evidence of completed experimental work.

Professional Education Seminars at APEC are typically three hours in length and can range from broad to narrow in scope, introductory to advanced in level. If you are interested in presenting a Professional Education Seminar at APEC 2005, please see the APEC 2005 Call for Seminar Proposals at [www.apec-conf.org](http://www.apec-conf.org).

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