DEADLINES

October 15, 2009
Special Session Proposals

December 1, 2009
Tutorial Proposals

January 15, 2010
Digest Submission via ECCE Website

May 1, 2010
Paper Acceptance Notification

July 1, 2010
Final Paper Upload / Registration

http://www.ecce2010.org

SECOND ANNUAL ENERGY CONVERSION CONGRESS, September 12-16, 2010

This conference combines the former IEEE Power Electronics Specialist Conference (PESC) with the technical sessions of the Industrial Power Conversion Systems Department (Electrical Machines Committee, Industrial Devices and Components Committee) previously presented at the IEEE Industry Applications Society Annual Meeting, but the event is much greater than the sum of its parts! Application-focused sessions will be a featured part of the technical program, taking into account real-world challenges, such as energy conservation, carbon emission reduction, renewable energy and smart grid, and sustainable/electrified transportation.

Papers are solicited on any subject related to the conference scope that includes, but is not limited to the following areas.

Energy Conversion Systems

RENEWABLE AND ALTERNATIVE ENERGY Renewable and alternative energy systems (e.g., solar, wind, hydro, etc.) and interfaces, energy harvesting, fuel cells and conversion, solid-state generation, and energy storage.

CONTROL ISSUES Power converter and motor control algorithms, real-time controls, digital control techniques, sensorless control techniques for power electronics and motor drives, and measurement and instrumentation.

THERMAL MANAGEMENT AND EFFICIENCY Thermal management of electrical machines, power converters, and drives; energy efficiency of power electronics and motor drives.

ELECTRICAL POWER SYSTEMS Power system architectures and management, distributed resources and microgrid.

POWER QUALITY, GRID INTERFACE, AND EMI EMI-EMC, power quality including harmonics and active filters, and power factor correction.

RELIABILITY AND DIAGNOSTICS Reliability, fault management, protection and fault tolerance; power converter and machine diagnostics & prognostics.

MODELING, ANALYSIS, AND SIMULATION Modeling, analysis, simulation and optimization of power electronics, machines and drives.

OTHER TOPICS Education methodology and tools for power electronics, electric machines, and drives; development and harmonization of standards for electric machines, power converters, and drives; energy public policy and business perspectives.

Components, Subsystems, and Applications

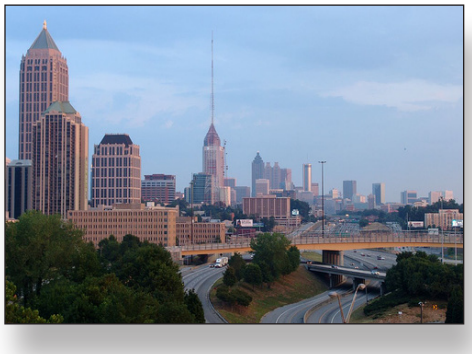
POWER CONVERTERS DC-DC; DC-AC; AC-AC; AC-DC; soft switching and resonant converters; inverters and converters for motor drives, and multilevel converters.

ELECTRIC MACHINES AND ACTUATORS Permanent magnet machines, induction machines, reluctance machines, linear electric machines, electromechanical energy storage systems (flywheels), special machines, actuators and transducers, new materials used in machines.

ELECTRIC DRIVES Drive configurations, all issues related to the performance, control, reliability, and cost of electric drives; drives of all performance levels ranging from general-purpose to high-performance servos; system interactions between drives, machines, and sources; machine drive integration issues.

POWER ELECTRONICS DEVICES & COMPONENTS Power semiconductor devices and integrated circuits, passive components, batteries and ultra-capacitors,packaging and modules, system integration, new materials in power electronics, operation under extreme enviromental conditions.

APPLICATIONS Transportation applications for automotive, rail, aerospace, and marine, sories; lighting and displays; uninterruptible power supply (UPS) industrial, residential, and commercial systems; utility applications in transmission and distribution including HVDC; biomedical applications; other applications of power electronics, machines, and drives.



Call for Papers and Tutorials

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