

EPE 2009

8 -10 September. **Barcelona, Spain**

13th European Conference on Power Electronics and Applications

Receipt of synopses:
Monday 3 November 2008

Receipt of full papers:
Monday 11 May 2009



EUROPEAN
POWER
ELECTRONICS
AND
DRIVES



CITCEA

www.epe2009.com



Organization and Venue

The European Power Electronics and Adjustable Speed Drives community will gather in Barcelona, Spain in September 2009 to exchange views on research progresses and technological developments in the various topics described hereunder. The EPE 2009 conference is sponsored by the EPE Association and will be held in the Palau de Congressos / Fira de Barcelona from 8 to 10 September 2009. It is hosted by The Centre of Technological Innovation in Static Converters and Drives (CITCEA) of the Technical University of Catalonia (UPC). Spain has an increasing quantity of windmills and photovoltaic plants. This is because of the well known sunny weather. An ideal place for real application of power electronics.

Aims of Conference

EPE is the place for specialists in power electronics, systems and components, to present papers and attend sessions on state-of-the-art technology in this challenging and evolutionary sector. The conference aims to be a meeting forum for researchers, developers and specialists from the industry. Papers are encouraged on all topics described hereunder for interdisciplinary discussions of new ideas, research, development, applications and the latest advances in the field of power electronics and adjustable speed drives.

Topics

Advances in Energy Conversion and Conditioning Technologies (ECCT), exploiting new power electronic systems, energy conversion devices and system control regimes, are all fundamental and crucial to the development of the clean, efficient and sustainable technology of the future. Over 50 % of the European, Japanese and North-American electric energy consumption passes through electronic conversion and conditioning equipment. This exploitation of ECCT increases steadily. Next to the improved behaviour of systems, the reduced energy consumption is a key factor, helping to achieve the Kyoto requirements and to address key issues related to the reduction of Greenhouse gases and pollutant emissions in industrial processes and transport; to increase the use of renewable energy sources and to allow their integration in the grid. Most of the electricity production based on alternative energy sources must undergo conditioning through ECCT equipment before use. ECCT is also a major means to achieve enhanced competitiveness of all industrial processes. Basic ECCT technologies alone constitute a world market estimated at multi-billion Euro value of which the EU has a 40% share. Significantly, ECCT is a core enabling technology providing the central electrical, control, diagnostic and management systems. The EPE 2009 conference will offer a wide discussion forum on all topics related to these aspects under the special motto "Power Electronics and Adjustable Speed Drives for industrial applications".

The list of topics hereunder holds only the headlines. A detailed list of subtopics is available at: <http://www.epe2009.com>

A. DEVICES, PACKAGING AND SYSTEM INTEGRATION

- Topic 1: Active devices
- Topic 2: Passive components, system integration & packaging
- Topic 3: Power system integration

B. POWER CONVERTERS TOPOLOGIES AND DESIGN

- Topic 4: Soft switching converters and control
- Topic 5: Hard switching converters and control

C. MEASUREMENT AND CONTROL

- Topic 6: Modulation strategies and specific control methods for static converters
- Topic 7: Application of control methods to electrical systems
- Topic 8: Measurements and sensors

D. ELECTRICAL MACHINES AND DRIVE SYSTEMS

- Topic 9: Motion control and robotics, communication in drive systems
- Topic 10: Electrical machines
- Topic 11: Adjustable speed drives
- Topic 12: High performance drives
- Topic 13: Energy saving electrical drives

E. APPLICATIONS OF POWER ELECTRONICS IN GENERATION, TRANSMISSION AND DISTRIBUTION OF ELECTRICAL ENERGY

- Topic 14: Electrical energy generating systems, renewable energy systems
- Topic 15: Transmission and distribution of electrical energy

F. APPLICATIONS OF POWER ELECTRONICS IN USERS DEVICES / PROCESSES

- Topic 16: Power supplies
- Topic 17: Electrical systems in aerospace, space, surface and marine transport
- Topic 18: Operating quality of systems
- Topic 19: Industry specific energy conversion and conditioning technologies
- Topic 20: Energy saving technologies
- Topic 21: Energy conversion and conditioning technologies in physics research and related applications

G. EDUCATION

- Topic 22: Education

Presentation of Papers

Contributions to EPE 2009 must be presented either as a lecture presentation or as a dialogue presentation. A manuscript must be submitted in English in both cases for inclusion in the Conference Proceedings (CD-ROM). Papers for lecture sessions will be strictly limited and selected on the basis of wide audience appeal, ease of understanding and potential stimulation of broad ranging discussion. Dialogue presentation will take place in the afternoon. No lecture session will be organized during the dialogue sessions.

Tutorials - Call for Proposals

Several tutorials will be held prior to the conference. Authors willing to propose a tutorial at EPE 2009 are invited to send a proposal to the scientific secretariat (EPE Association, c/o VUB-IrW-ETEC, Pleinlaan 2, B-1050 Brussels, Belgium, e-mail: epe-association@vub.ac.be) before January 15, 2009. The proposal will consist of a three-page summary including tutorial title, name and affiliation of the lecturer(s), tutorial objectives and audience, topical outline and provisional schedule of the tutorial. The tutorials will be organized on Monday September 7th, 2009. The location where the tutorials will take place will be communicated later on via the website www.epe2009.com

Tutorial proposals are particularly welcome in the following topics, although other topics may be proposed as well:

- New Devices for Sustainable Energy Applications
- Understanding the Electrical Grid Behaviour and Management
- Building and Connecting Wind Energy Sources
- Building and Connecting PV Energy Sources
- Connecting Fuel Cells to the Electrical Applications
- Power Electronics and Adjustable Speed Drives for Clean Road Transport
- Application of Drives
- New Topologies for Sustainable Energy Applications
- Storage of Electrical Energy in the Electrical Grid
- Storage of Electrical Energy for Transport Applications
- Education issues, and more...

Content of Synopses

The synopses should consist of:

- a 2 to 3 pages **summary**, including an **abstract** with no more than 50 words; topic number and indication of the preference for dialogue or lecture presentation. These must be clearly mentioned;
- key diagrams;
- a references list.

The synopses will be submitted using the host of the conference on the internet. A link to the site will be available from <http://www.epe2009.com>, a link from <http://www.epe-association.org> will be available as well. Detailed information and guidelines can be downloaded from the site to help you preparing the needed material for submitting a synopsis. The site will be open for upload from 1 September 2008 onwards.

Authors of papers provisionally selected for presentation will receive a notification and can download the instructions for preparing the dialogue papers and/or the lecture papers from the internet site. Final selection will be based on the full paper. The paper will only be included in the Conference Proceedings after receipt of one full registration fee per paper in due terms. Student registration fee is only valid for student participants, not for authors. One single author may not present more than two (2) papers. In that case, the fee to present the two papers will be 150% of the registration fee.

A selection of outstanding conference papers will be published afterwards in the EPE Journal, which is an ISI registered journal. The conference papers will also be registered in IEEEExplore.

Deadlines

Intending authors should note the following deadlines:

Receipt of synopses	3 rd of Novembre 2008
Notification of provisional acceptance	18 th of March 2009
Receipt of full typescript for final review	11 th of May 2009

Working Language

The working language of the conference is English, which will be used for all printed material, presentations and discussion.

Programme and Registration

The provisional programme and registration form will be available from the Internet site a few months before the conference.

Access to the full papers will be given with password to all registered participants, 1 or 2 weeks before the conference to allow attendees to prepare their participation.

Additional information: <http://www.epe2009.com>

Exhibition

There will be an exhibition integrated in the conference. If you would like to know more details please go to <http://www.epe2009.com> or contact us via e-mail: epe2009@pacifico-meetings.com or epe-association@vub.ac.be

Venue

The venue is Barcelona, the capital of Catalonia. The city is located on the coast and bounded by the Collserola ridge and the rivers Besòs and Llobregat. The city is less than 150 kilometres from the Pyrenees. Barcelona's location on the shores of the Mediterranean means that it enjoys a warm, welcoming climate and pleasant temperatures all year round. Rainfall tends to concentrate in the so-called "cold drop" period, from September to November, and is occasionally heavy, with levels around 1,000mm per year. This helps to maintain the many green areas around the city. <http://www.barcelonaturisme.com>

Secretariat

EPE secretariat

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