



## EPE-PEMC 2004, Riga, Latvia

### 11<sup>th</sup> International Power Electronics and Motion Control Conference (September 2 – 4, 2004)

The 11<sup>th</sup> EPE – PEMC Conference in Riga in 2004 will follow the success of conferences that were held in Warsaw, Budapest, Prague, Kosice, Dubrovnik and the EPE conferences that took place in Brussels, Grenoble, Aachen, Florence, Brighton, Seville, Trondheim, Lausanne, Graz and Toulouse.

The established high quality of the EPE and EPE-PEMC conferences and the record number of synopsis received with a significant increase from industries, make each of these conferences the most important meeting point for interaction between specialists in the field. Certainly EPE-PEMC 2004 in Riga will confirm this world-wide reputation.

There is a major influence on the development of technology in all fields of Power Engineering, Power Electronics and it is applied in all stages of Energy flow, from Power Generation to Power Distribution and further to Power Use.

Power Electronics owes its high technical and economic significance to the fact that it is a key technology: for variable-speed drives from a few watts to the 40-50 Megawatt range which is a range of more than six orders of magnitude; for power supply systems, from the small mains adapter rated at a few watts to the HVDC transmission systems and FACTS at 1000 MW.

The event draws regularly the foremost technical contributors from industry and academia worldwide. A large panel of activities is offered during the conference: tutorials, keynotes in plenary sessions, dialogue and lecture sessions, special sessions, technical visits and workshops. Three tutorials are programmed on September 1 on several subjects:

- Review, design and comparison of control systems for three-phase PWM boost rectifiers, by Prof. Marian Kazmierkowski, Warsaw University of Technology, Poland;
- Non linear analysis of switching power converters, by Prof. Sudip K. Mazumder, University of Illinois, Chicago, USA;
- General problems of electromechanical energy conversion and oscillating electrical machines, by Prof. Sigita Kudarauskas, Klaipeda University, Lithuania.

The keynotes will be given at the plenary sessions by famous specialists at the beginning of each conference day. The opening session will be started by the President of the Latvian Academy of Sciences Juris Ekmanis. Two keynotes “High Power Medium Voltage Drives – State of the Art, Challenges and Trends” by Dr. Rolf Klug (Siemens AG) and “Field Weakening of Permanent Magnet Electric Motors: A Review” by Prof. Thomas Lipo will be given on Thursday, September 2. Keynotes “New Concepts for High-Power BIMOS Devices” by Prof. Rick De Doncker and “Development of Bearingless Motors” by Prof. Tadashi Fukao will be given on Friday, September 3. On Saturday, September 4, Prof. Asif Sabanovic will present a keynote “Sliding Modes Application in Power Electronics and Motion Control” and Prof. Thomas G.Habetler will present a keynote “Complete Current – Based Condition Monitoring of AC Machines: Stator, Rotor and Overload Protection”.

About 660 synopses have been received and 500 of them were accepted and will be presented in the lecture and dialogue sessions. Due to the large number of the good papers, four parallel lecture sessions will be held.

During all afternoons, the dialogue sessions (about 150 papers each day) will be held in the same halls where the industrial exhibition is. After the dialogue sessions, several round tables will be organized as forums on some special subjects: Education of Power Electronics, Power Electronics and DER, Energy Storage and others.

During the final day on Sunday, September 5 the Technical visit is planned: River Daugava Hydro Power Plants Cascade. The full programme is available from <http://www.rtu.lv/epe-pemc2004>

EPE-PEMC 2004 Conference is not only a scientific event but also a meeting with pleasant moments: a Welcome Party (September 2) and Gala Dinner (September 3).

Founded in 1201 on the banks of the Daugava River, Riga is known as the ancient hanseatic city. Till 1856 fortification wall and earthen ramparts surrounded Riga. Since then the town changed greatly and in early thirties acquired the name of “The small Paris”. There are numerous tourist attractions preserved and renovated in the Old Town.

It is very easy to go to Riga, the hearth of the Baltics, by plane (1.5-3 hours flight from European capitals), by train (from Lithuania, Russia), by bus (from largest European cities), by ferry (from Lübeck and Stockholm) or by car (through Poland and Lithuania).

The nearby Latvian countryside offers relaxing and different possibilities for vacation and recreation - natural, even somewhat primitive, setting with comfortable homes, convivial hosts, invigorating sauna, on horseback or fishing you will experience something unusual and memorable.

Beyond the scientific aspects of the Conference, we will do our best to organize EPE-PEMC 2004 in Riga. I am looking forward to seeing you at the EPE-PEMC 2004 in Riga and I hope you will enjoy the Conference and the Riga City!

Leonids Ribickis  
General Chairman  
EPE-PEMC 2004