



## Invitation to EPE 2005 in Dresden (Germany)

**11th International European Power Electronics Conference  
(September 11-14, 2005)**

On behalf of the EPE Conference Committee I would like to welcome you to the 11th International European Power Electronics Conference and Exhibition in Dresden. The EPE provides a bi-annual international forum for comprehensive technical discussions in all areas of power electronics for the new era. This conference has grown to become the most prestigious and influential important international conference in this field. Following the successful 10th EPE in Toulouse, the conference returns for the second time to Germany this year.

The development of power electronics systems is very much market and technology driven. The needs to use renewable and clean energy, the worldwide liberalization of the electric energy market, improved mass transport systems and electric / hybrid cars for individual mobility are examples of the demand new requirements on power electronics systems. Power Semiconductor elements are the key components of power electronic systems- despite of the fact that their costs are in many systems minimal relatively to the total costs for the whole system. Improving their characteristics thus allows to build the overall system cheaper, better and more efficient and opens the opportunities for new application segments. New system trends are going towards high switching frequency e.g. series connected inverter modules with staggered switching, designing or eliminating of bulky transformers, other magnetics and capacitances as well as soft switching technologies to reduce losses and harmonics even at an increasing switching frequency. Power electronics is the key enabling technology in modern power conversion systems.

The new era of power electronic system should fulfill the key conditions of low cost, miniaturization, reliability as well as the environmental requirements given by Kyoto protocol in terms of energy saving, recyclable environmental friendly materials for mobile systems and all industrial applications. In order to achieve this, a close cooperation among the semiconductor engineers, power electronics system experts and end user running the overall process are highly essential. Along these ideas, the EPE 05 has special tailored sessions of top industrial expert presentations and round table meetings to discuss in depth. These outperforming industry sessions with follow up round table discussions focus on future semiconductor development, next generation of high power motor drives and power electronics roadmaps for this decade electric / hybrid cars are lead by high level experts from worldwide leading companies.

Keynote papers for EPE 05 covering the trends in semiconductor development, system integration for high operating frequencies, active filters for power conditioning, high power converters and integration of renewable energies in the power supply systems are collected. Authors are experts from industry and academia from USA, Japan and Europe with worldwide reputation and outstanding records have accepted the invitation. More than 730 papers from 68 countries were accepted – carefully selected by the conference committee team – organized in 5 parallel tracks to show the latest results of power electronic research and future directions. Many industry companies and research centers will exhibit their newest research results via demonstrators. Specialists from the individual participating parties will be available for discussions from September 11<sup>th</sup> -14<sup>th</sup>. Ten professional education seminars on September 12 are organized to give a complete coverage of Power Electronic for EPE 05.

Dresden's highlights, the Saxon capital include the magnificent palatial buildings around the Theaterplatz and the Brühl Terraces, and the many art treasures at the state museums. Today, Dresden offers a unique blend of stunning architecture, world-famous art collections and living traditions in both music and the fine arts – plus the great natural beauty of the countryside along the Elbe river, dotted with wonderful castles and villas. The 800 years old Baroque town at the river Elbe and its surrounding is offering a wide variety of different sightseeing tours. Dresden has always been a home for science and education, to technology and industrial progress. The city is considered an excellent economic and research location with a strong power of attraction. The most famous Dresden University of technology with more than 30,000 students was founded in 1828 - celebrated its 175<sup>th</sup> anniversary in 2003. Dresden has a competitive advantage over its locality and it could be easily reach via planes, trains or roads.

The EPE 05 offers you a unique opportunity to meet power electronic specialists from all over the world, a comprehension and outstanding technical program with high level social events. Sign up now and reserve your place at this top event. Looking forward to seeing you at the EPE 05.

Yours Sincerely,

Leo Lorenz  
General Chairman  
EPE 2005