

Registration (Fax Reply)

To: European Center for Power Electronics e.V.
Att.: Ingrid Bollens

Fax: +49 (0)911 / 81 02 88 – 28

Register before **7 September, 2005**

Participation fee: €480,-- * plus 16 % VAT
€380,-- for university members
The fee includes dinner, lunch
and coffee/soft drinks, seminar
handouts. With the confirmation
of seminar registration you will
receive the invoice.

* Three participants from each ECPE member company free of charge.
Allocation in sequence of registration.

Sender:

title, given name, name

company, department

full address

phone, fax

e-mail

date, signature

Organisational information

Organiser: ECPE e.V.
D-90443 Nuremberg
www.ecpe.org

Chair of seminar: Prof. J. W. Kolar, ETH Zurich
Thomas Harder, ECPE

Organisation: Ingrid Bollens, ECPE
+49 (0)911 / 81 02 88 – 10
ingrid.bollens@ecpe.org

Place of seminar: Technical University Dresden
Dresden, Germany



**European Center for
Power Electronics e.V.**

Power Supplies

**15 – 16 September 2005
at TU Dresden,
Dresden, Germany**

**ECPE Seminar
in cooperation with
ETH Zurich**

Further information (hotel list and maps) will be provided
after registration.

Introduction

ECPE Power Supplies Seminar

15 – 16 September 2005
Dresden, Germany

The application area of power supplies ranges widely from powering IT, telecom and control systems to medical diagnostics and surgical equipment, audio systems, lighting applications, home appliances etc. to industrial process technology like electric welding, laser systems and induction heating. In the future also power supplies for automotive systems and more-electric aircraft as well as utility interfaces for renewable energy, fuel-cell power and micro turbines will gain significant importance. Compared to the state-of-the-art in all fields a higher functionality, higher power density and higher energy conversion efficiency will be required at reduced costs.

This ECPE Seminar will focus on the future challenges and discuss advanced technologies for key applications of power supplies. An overview of recent activities of the European industry and of new technologies emerging from European university research will be presented including. The Seminar will be opened with a tutorial from Dr. F.C. Lee, Director of the CPES (Center for Power Electronics Systems, USA), on the vision and technical realization of an integrated system approach via integrated active and passive power electronics modules (IPEMs). The Seminar is practically oriented and aims to convey specific technical information to the participants.

Prof. Johann W. Kolar (ETH Zurich, CH) will chair the seminar together with Mr. Thomas Harder (ECPE). All presentations and discussion will be in English

.

Program

Thursday, 15 September 2005

- 11:00 Venue and Registration
- 12:00 *Lunch*
- 13:00 Opening/Welcome adress
L. Lorenz/T. Harder (ECPE)

Welcome address host organization
(TU Dresden)

Introduction to the seminar
J.W. Kolar (ETH Zurich)
- 13:30 [Power Supply of next generation microprocessors and DSP architecture technologies](#)
F.C. Lee, (Center for Power Electronics Systems, Virginia Tech, USA)
- 15:00 *Coffee break*
- 15:30 [Magnetic integration for high density and high efficiency application](#)
I.D. Jitaru, (Delta Energy Systems, USA)
- 16:05 [Hybrid EMI filters](#)
J. Biela, J.W. Kolar
(ETH Zürich, Switzerland)
- 16:40 [Switch-mode audio power amplifiers - technologies and challenges](#)
M. A. E. Andersen
(Technical University of Denmark)
- 17:15 *End*

19:30 *Dinner*

Program

Friday 16 September, 2005

- 08:30 [Introduction of European Power Supply Manufacturers Association](#)
M. Towers
(EPSMA Secretariat, United Kingdom)
- 08:45 [Trends in power supplies – UPM perspective](#)
J. A. Cobos,
(Universidad Politécnica de Madrid, Spain)
- 09:20 [Requirements and design constraints for power supplies in medical x-ray applications](#)
B. Wagner
(Philips Medical Systems, Germany)
- 09:55 [Reviewing the use of resonant topologies for high power applications](#)
G. Deboy (Infineon Technologies, Austria)
- 10:30 *Coffee break*
- 11:00 [Miniaturisation of low power SMPS](#)
M. Bothe
(CEAG AG/Friwo Group, Germany)
- 11:35
(Alcatel, France)
- 12:10 [Passivity- and flatness-based control of power electronic converters](#)
H. Güldner, A. Gensior, J. Weber
(TU Dresden, Germany)
- 12:45 *Lunch*
- 13:45 [Lab tour at TU Dresden](#)
- 14:45 *End*