

Registration (Fax Reply)

To: ECPE e.V.
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Register before **23 March 2009**

Participation fee:

€530,- * for industry

€395,- * for university members

The fee includes dinner, lunch, coffee/soft drinks and a CD with the seminar presentations. A printed version of the seminar handouts is available on request (€42,- *).

€120,- * for students (shortened seminar package)

With the confirmation of seminar registration you will receive the invoice. (* plus 19 % VAT)

In case of cancellation after 23 March 2009 or non-attendance 50 % of the participation fee are payable.

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.
90443 Nuremberg, Germany
www.ecpe.org

Chairs of seminar: Prof. Dr. Hans-Georg Herzog
Technical University of Munich
Prof. Dr.-Ing. Rainer Marquardt
University of Bundeswehr Munich

Organisation: Ingrid Bollens, ECPE e.V.
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Place of seminar: Maritim Hotel Munich
Goethestrasse 7
80336 Munich, Germany



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



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

ECPE Seminar

More Electric Vehicles

**Commercial Vehicles for On-Road
and Off-Road Applications,
More Electric Aircraft and Ship**

**30 - 31 March 2009
Maritim Hotel
Munich, Germany**



Introduction

ECPE Seminar More Electric Vehicles Commercial Vehicles for On-Road and Off-Road Applications, More Electric Aircraft and Ship

30 - 31 March 2009
Munich, Germany

The electrification of vehicles in the drivetrain and in auxiliaries is not only a hot topic in the field of passenger cars but also in commercial vehicles. Apart from the improvement of energy efficiency one often gets additional benefits in these commercial applications, e.g. more flexibility and better control of auxiliary equipment or the availability of a power socket on-site.

But the challenging requirements in automotive applications like harsh and high temperature environments and high reliability get even worse. Additionally, a very long lifetime of 10-20 years is required in many commercial applications in construction, agriculture and forestry.

The seminar focuses on more electric commercial vehicles in various applications:

- On-road: bus, light & heavy truck, collection vehicle
- Off-road: construction, agriculture and forestry
- More electric aircraft
- More electric ship

The seminar is chaired by Prof. Dr. H.-G. Herzog (TU Munich) and Prof. Dr. R. Marquardt (UniBW Munich) together with Thomas Harder and Jochen Koszescha (ECPE). All presentations and discussions will be in English.

Programme

Monday, 30 March 2009

- 9:30 *Start of Registration*
- 10:00 **Welcome, Opening**
T. Harder, ECPE e.V.
- 10:15 **More Electric Vehicles – Automotive (EVs, PHEVs, V2G) and Commercial Vehicles**
M. Hofmann, Daimler

Components of Vehicle Electrification

- 10:45 **Drives**
State of the Art, Potentials and Trends
H.-G. Herzog, Tech. Univ. Munich
- 11:15 **Power Electronics**
State of the Art, Potentials and Trends
R. Marquardt, Univ. of Bundeswehr Munich
- 11:45 **Energy Storage**
State of the Art, Potentials and Trends
H. Schuh, Saft Batteries

12:15 *Lunch*

MEV: On-Road Applications

- 13:30 **Power Electronics for Hybrid Busses**
M. Helsper, Siemens LD
- 14:00 **Electric Drive for FC Sprinter**
Y. Tadros, ECPE e.V.
- 14:30 **Drive Cycles of Delivery Vans (HyTrans)**
P. Miller, Ricardo
- 15:00 *Coffee Break*
- 15:30 **Power Supercapacitors: Application for Start-Stop-Booster and Traction Braking Energy Management (Reliability & Lifetime)**
G. Coquery, INRETS
- 16:00 **System Lifetime Requirements in Commercial Construction Agriculture Vehicles**
P. Luniewski, InfineonTechnologies
- 16:30 **Panel Discussion:**
Synergies in Electrification of Automotive and Commercial Vehicles

17:15 **End of 1st Day**

19:30 *Dinner*

Programme

Tuesday, 31 March 2009

MEV: Off-Road Applications

- 09:00 **System Integration and Benefits of Electrical Solutions in Mobile Working Machines**
Th. Herlitzius, TU Dresden
- 09:30 **Hybrid Powertrain of Mobile Working Machines**
D. Schrägle, Sensor-Technik Wiedermann
- 10:00 **Power Electronic System for Auxiliaries in Agriculture and Forestry Vehicles**
K. Backhaus, Semikron
- 10:30 *Coffee Break*
- 11:00 **Diesel-Electric Trucks with Drive Power in the MW Range**
O. Fenker, Liebherr Biberach
- 11:30 **Hybrid Drive Systems for Industrial Applications**
F. Böhler, Heinzmann
- 12:00 **Electric Hybrid Drives in Military Vehicles**
P. Ehrhart, L-3 Communications Magnet-Motor

12:30 *Lunch*

More Electric Aircraft

- 13:45 **Technology and trends in More Electrical Aircraft**
L. Faleiro, Liebherr Aerospace
- 14:15 **Power Electronic Systems in Aircraft**
A. Tardy, Thales Aerospace Division

More Electric Ship

- 14:45 **Electric Drives in marine applications a wide range from winches to redundant main propulsion systems**
M. Beuermann, Siemens LD
- 15:15 **Powertrain, On-Board Network, Power Supply**
- 15:45 *Wrap up, Final discussions*
- 16:00 *Optional lab tour (1 hour) at Technical University Munich, Institute of Energy Conversion Technology*