

Registration (Fax Reply)

To: ECPE e.V.
Att.: Ingrid Bollens

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Register before **28 September 2010**

Participation fee:

- €480,- for industry
- €380,- for universities
- €150,- for students/Ph.D.

The fee includes the dinner, lunch, coffee/soft drinks and handouts.

With the confirmation of registration you will receive the invoice. A discount of 50 % is given to ECPE Member Companies.

In case of cancellation after 28 September 2010 or non-attendance 50 % of the participation fee are payable.

The number of participants is limited to 35 attendees.

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

Course instructors: Dr. Eckart Hoene,
Fraunhofer Institute IZM (D)
Prof. Dr. Jean-Luc Schanen,
INPG-LEG-ENSIEG - G2ELab (F)

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

Place of tutorial: Park Inn Hotel Zurich Airport
Flughofstraße 75
8153 Ruemlang/Zurich, Switzerland



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



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

ECPE Tutorial

EMC in Power Electronics

**5 - 6 October 2010
Park Inn Hotel Zurich Airport
Zurich, Switzerland**

Introduction

ECPE Tutorial “EMC in Power Electronics”

5 - 6 October 2010
Zurich, Switzerland

Advantages in semiconductor technology drive power electronics to higher efficiencies and compact systems designs. This progress comes along with increasing effort to comply with EMC requirements. Integration as a response to the market demands intensifies the challenges. With dense placement electromagnetic coupling between components raises influence on system behavior. The design becomes more complex and leads to significantly higher development costs.

The EMC in Power Electronics tutorial is a response to the increasing importance of EMC. It provides an overview on EMC phenomena and introduces methodologies to handle EMC questions. The tutorial is a supplement to the EMC seminar and intended for the training of young engineers and engineers from neighboring disciplines.

Course instructors of the EMC tutorial are Dr. Eckart Hoene, Fraunhofer Institute IZM, Germany Prof. Dr. Jean-Luc Schanen, Grenoble Institute of Technology (F), Fabian Beck, Schaffner EMV AG, Switzerland. All presentations and discussions will be in English.

Programme

Tuesday, 5 October 2010

- 9:30 *Begin of registration / Welcome coffee*
- 10:00 Welcome, Opening**
T. Harder, ECPE
- 10:15 Introduction**
Warming up with examples
E. Hoene
- 11:00 EMC fundamentals**
Conducted EMI, coupling path, standard measurement
J.-L. Schanen
- 11:45 Interference sources and mechanisms**
J.-L. Schanen
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- 12:15 *Lunch*
-
- 13:15 Handling interference: filtering or shielding**
E. Hoene
- 14:00 Interference simulation**
J.-L. Schanen
-
- 14:45 *Coffee break*
-
- 15:15 Filter components and their properties**
J.-L. Schanen
- 16:00 Practical EMI Solutions**
F. Beck
- 16:45 Wrap up 1st day
- 17:00 End
- 19:30 Dinner

Programme Part 1

Wednesday, 6 October 2010

- 9:00 Open questions from 1st day
- 9:15 Filtering of common mode interference**
E. Hoene
-
- 10:15 *Coffee*
-
- 10:45 Filtering of differential mode interference**
E. Hoene
- 11:15 EMC-Design for drive Systems**
E. Hoene
- 11:45 Electric/hybrid cars**
E. Hoene
-
- 12:15 *Lunch*
-
- 13:15 Using stray elements for reducing EMC issues**
J.-L. Schanen
- 14:00 Design methods for passive filters**
E. Hoene
- 14:45 Wrap up tutorial
- 15:00 End