Registration (Fax Reply)

To: ECPE e.V.
Att.: Ingrid Bollens, Ingrid.bollens@ecpe.org
Please **e-mail** a scanned copy of the completed form or send a fax to: +49 (0)911 / 81 02 88 – 28

Register before **28 September 2011**

Participation fee:
❍ **€ 480,–** * for industry
❍ € **380,–** * for universities/institutes
❍ **€ 150,–** * for students/Ph.D.

The fee includes dinner, lunch, coffee/soft drinks and hand-outs.

With the confirmation of registration you will receive the invoice (*plus VAT). 50 % discount for ECPE Member Companies.
In case of cancellation after 28 September 2011 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

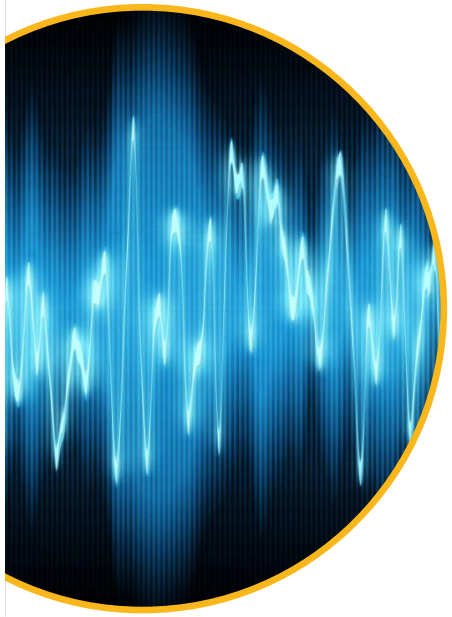
Organiser	ECPE e.V. 90443 Nuremberg, Germany www.ecpe.org
Chairmen:	Dr. Eckart Hoene, Fraunhofer IZM (D) Prof. Dr. Jean-Luc Schanen, INPG-LEG-ENSIEG - G2ELab (F)
Organisation	Ingrid Bollens, ECPE e.V. +49 (0)911 / 81 02 88 – 10 ingrid.bollens@ecpe.org
Venue	Hotel MutterHaus Geschwister-Aufricht-Strasse 1 40489 Dusseldorf, Germany

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 2011
Hotel MutterHaus
Dusseldorf, Germany

ECPE Tutorial

EMC in Power Electronics

5 – 6 October 2011
Dusseldorf, Germany

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 IZM, Germany
- Prof. Dr. Jean-Luc Schanen, Grenoble Institute of Technology (F)
- Fabian Beck, Schaffner EMV AG, Schwitzerland
- Lex de Rijck, Philips Research, Netherlands

All presentations and discussions will be in English

Programme

Wednesday, 5 October 2011

9:30 **Start of Registration**

10:00 **Welcome, Introduction**
T. Harder, ECPE e.V.

10:15 **Introduction**
Warming up with examples
E. Hoene

10:45 **Power Electronics as High Frequency Technology**
L. de Rijck

11:15 **EMC Fundamentals**
J.-L. Schanen

11:45 **Interference Sources and Mechanisms**
J.-L. Schanen

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 **Summary of 1st day**

17:00 **End of 1st Day**

19:30 Dinner

Programme

Thursday, 6 October 2011

09:00 **Open questions from 1st day**

09:15 **Filtering of Common Mode Interference**
E. Hoene

10:00 **EMC-Design for Drive Systems**
E. Hoene

10:30 Coffee Break

11:00 **Return Currents**
L. de Rijck

11:30 **Design Rules for PCBs**
E. Hoene

12:00 **Electric/Hybrid Cars**
E. Hoene

12:30 Lunch

13:30 **Using Stray Elements for Reducing EMC Issues**
J.-L. Schanen

14:15 **Design Methods for Passive Filters**
E. Hoene

14:45 **Wrap up, Final discussion**

15:00 **End of Workshop**