Organisational Information

Sign up at: [www.ecpe.org/events](http://www.ecpe.org/events)

Registration Deadline:
- 2 July 2020

Participation Fee:
- € 620,–* for industry
- € 490,–* for universities/institutes
- € 165,–* for students/PhD students (limited spaces; copy of students ID required; dinner € 50,– extra)

* plus VAT, ** students seats are limited

The regular participation fee includes dinner, lunches, coffee/soft drinks and handouts. The reduced (PhD) students fee includes all the above except for dinner (can be booked for an extra fee of € 50,–)

Upon receipt of registration confirmation via email you are signed-up for the event. The invoice will be sent via letter post.

25 % discount for participants from ECPE member companies.

10 % discount for participants from ECPE competence centres.

Further information (hotel list and maps) will be provided after registration and can be found on the ECPE web page.

Cancellation policy: Full amount will be refunded in case of cancellation up to 2 weeks prior to the event. After this date and in case of no-show 50 % of the fee is non-refundable (substitutes are accepted anytime).

The number of participants is limited to 35 attendees.

ECPE Tutorial
Power Semiconductor Devices & Technologies

9 - 10 July 2020
Technical University of Denmark
Kongens Lyngby, Denmark
The tutorial is aimed at engineers who are engaged in power electronics and want to improve their knowledge and understanding of power devices including the developments expected in near future.

The course starts with a general overview on required power device properties and a very basic treatment of semiconductor material and device physics. Blocking capability of the devices, unipolar and bipolar current transport and gate control will be discussed. Diodes, MOS transistors (including compensated superjunction MOS) and Insulated Gate Bipolar Transistors (IGBT) will be treated in detail including their dynamical properties, safe operation and temperature limits.

The wide bandgap semiconductor materials silicon carbide and gallium nitride have become important competitors to silicon. Their superior properties for application and the expectations for the next years will be discussed. Also, issues concerning control, packaging and integration will be treated in the corresponding contributions.

The following chapters demonstrate basic principles of power electronic systems and the basics of intelligent IGBT / MOSFET control circuits. MOS transistor and IGBT gate drivers for various fields of application are discussed in detail.

Finally a short overview of hybrid power electronic integration and the most relevant aspects (cooling, reliability and EMC problems) will be presented.

Course Instructors:
- Dr. Anton Mauder, Infineon Technologies (DE)
- Prof. Dr. Nando Kaminski, University of Bremen (DE)
- Dr. Reinhard Herzer, Semikron Elektronik (DE)
- Dr. Peter Tuerkes, Consultant (DE)

All presentations and discussions will be in English.