

## Organisational Information

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

Registration Deadline:

**02 October 2024**

Participation Fee:

- € 720,- \* for industry
  - € 525,- \* for universities/institutes
  - € 180,- \* for students/PhD student  
(limited spaces; copy of students ID required)
- \* plus VAT

- The on site participation fee includes dinner, lunches, coffee/soft drinks and digital proceedings. The reduced (PhD) students fee includes all except for dinner (can be booked for an extra fee of € 50,-\*)
- The online participation includes remote access via the meeting software Webex and digital proceedings.
- Digital proceedings will be provided by download link latest one day before start of the event. A printed handout is available on request.
- Upon receipt of registration confirmation via email you are signed-up for the event. The invoice will be sent via email.
- Three participants from each ECPE member company free of charge. Allocation in sequence of registration.
- 10% discount on university/institute fee 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 upon to 2 weeks prior to the event. After this date 50 % of the fee is non-refundable (replacement is possible).

06/05/24

## Organisational Information

<b>Organiser</b>	ECPE e.V. Ostendstrasse 181 90482 Nuremberg, Germany <a href="http://www.ecpe.org">www.ecpe.org</a>
<b>Technical Chair</b>	Karl-Friedrich Becker Fraunhofer IZM, Germany Shiori Idaka Mitsubishi Electric Europe, Germany
<b>Technical Contact</b>	Gudrun Feix, ECPE e.V. +49 911 81 02 88 – 15 <a href="mailto:gudrun.feix@ecpe.org">gudrun.feix@ecpe.org</a>
<b>Organisation</b>	Ingrid Bollens, ECPE e.V. +49 911 81 02 88 – 10 <a href="mailto:ingrid.bollens@ecpe.org">ingrid.bollens@ecpe.org</a>
<b>Venue</b>	Best Western Premier Hotel Villa Stokkum Steinheimer Vorstadt 70 63456 Hanau-Steinheim



Source: Best Western Premier Hotel Villa Stokkum  
Source graph front page:



European Center for  
Power Electronics e.V.

## Hybrid Event

### Announcement

### ECPE Workshop

## Materials Innovations for Advanced Power Packaging – Substrate, Interconnection and Encapsulation

09 - 10 October 2024  
Hanau, Germany  
hybrid



in cooperation with



## ECPE Hybrid Workshop

# Materials Innovations for Advanced Power Packaging – Substrate, Interconnection and Encapsulation

09 - 10 October 2024  
Frankfurt, Germany / hybrid

Power electronics packaging is a dynamic and multidisciplinary field. On the one side it enables full performance of power semiconductors, and on the other side it determines the performance of a power converter.

Power semiconductors with a wide bandgap become commercialized more and more. They offer not only a higher breakdown voltage, but also higher operating temperature and faster switching. Packaging concepts and materials need to be adapted to these needs. Processability for new packaging concepts, low dielectric losses or high breakdown voltage are only some characteristics, materials for power packaging must provide.

In this ECPE workshop, we will have a look at new developments and trends in materials needed for building power electronic discrettes, modules and converters. We will cover trends in interconnection technologies for chips and large areas, we will discuss developments in potting and encapsulation, and take a look at new substrates as basis for many modules.

Embedding power electronic semiconductors or passives into PCBs finds its way into commercial products step by step, so we will as well look at ongoing activities in this field, especially the development of FR4 and other PCB materials especially suited for power electronics with its need for high temperature stability and low CTE.

Material characterization and inspection methods will be introduced. An overview over existing and upcoming EU regulations on materials will complete the programme.

### The workshop is chaired by:

Karl-Friedrich Becker, Fraunhofer IZM (D)  
Shiori Idaka, Mitsubishi Electric Europe (D)

All presentations and discussions will be in English.

## List of Topics

- Interconnection Technologies
- Substrates
- Embedding
- Potting / Encapsulation
- Materials characterization
- Inspection Methods
- Regulations

## Schedule

### Wednesday, 09 October 2024

09:00 Registration / Webex started

09:30 Welcome, Opening

12:30 Lunch Break

16:30 End of 1<sup>st</sup> Workshop Day

19:30 Dinner

### Thursday, 10 October 2024

08:30 Start of 2<sup>nd</sup> Workshop Day

12:30 Lunch Break

15:45 Final Discussion

16:00 End of Workshop