

Invitation to a Danish-German PE-Region Platform seminar

NEW MATERIALS AND DEVICES IN POWER ELECTRONICS

The increasing electrification of the energy systems taking place in response to the global climate challenges stimulates development of the markets for power electronics components and systems. Along with digitalization, applications of new active and passive materials technologies are leading parameters in the innovation processes within power electronics.

This seminar provides an overview of wide-bandgap semiconductors and new passive materials for power electronics. We will present insights in the present research work as to application of new materials and share experiences.

PROGRAMME

- 10:30 Welcome /Introduction to the seminar and PE-Region Platform
[Thomas Ebel, SDU/Gustav Nebel, Sønderborg Vækstråd /Jan Cornils, WTSH]
- 10:40 Overview of new active and passive materials technology for application within power electronics
[Frank Osterwald, Danfoss Silicon Power GmbH /Niels Gade, Danfoss Drives]
- 11:10 Wide-bandgap semiconductors in power electronics – SiC/GaN comparison, status and prospects
[Mietek Bakowski, RISE ACREO]
- 11:40 Coffee break
- 11:50 New aluminum polymer electrolytic capacitors for power electronics – status and example of high-temperature capacitors
[Thomas Ebel]
- 12:10 Thermal management in power modules
[Ronald Eisele, FH Kiel]
- 12:30 Coffee break
- 12:40 Inorganic encapsulation for power modules/the pump-out-effect, impact and reduction
[Stefan Behrendt, Danfoss /Stefan Söhl, FH Kiel]
- 13:20 Closing remarks, conclusions and future perspectives
[Thomas Ebel, SDU-CIE]

TIME AND PLACE

Tuesday 8 December 2020

Online at 10:30 – 13:30

<https://syddanskuni.zoom.us/j/61011598732?pwd=QU50QTRhVWVpOGNOaWUzVnRzTStWUT09>

REGISTRATION

Participation is free of charge. Please accept the Outlook invitation or email secretary Charlotte Bolding Andersen chba@sdu.dk by 3 December.

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The seminar is organized in cooperation between the PE-Region Platform project partners:



Christian-Albrechts-Universität zu Kiel

