Programme at a Glance

Wednesday 24th August 2022
Power Modules and Manufacturing Processes

Time	Session
0830 – 0930:	*Packaging, Integration and Fast switching: what has been achieved and what´s next?* **Eckart Hoene, Fraunhofer**
0930 – 1030:	*Paving the Way to Automotive GaN: The Importance of Packaging* **Tamara Baksht, ViSiC**
1030 – 1100:	*Networking Break*
1100 – 1300:	**Power Modules**
1300 – 1400:	*Lunch*
1400 – 1600:	**Manufacturing Processes**
1600 – 1830:	**Poster Session**
1830 – 2000:	**Welcome Reception**

Thursday 25th August 2022
Dielectrics/Insulation and System Integration

Time	Session
0830 – 0930:	*Insulation Materials and Systems for Power Modules: Challenges and Future* **Mona Ghassemi, Virginia Tech**
0930 – 1030:	*Environmental Trends and Challenges on Power Packaging* **Chris Genthe, Rockwell Automation**
1030 – 1100:	*Networking Break*
1100 – 1300:	**Dielectrics and Insulation**
1300 – 1400:	*Lunch*
1400 – 1600:	**System Integration**
1730 – 2030:	*Dinner*

Friday 26th August 2022
EMI, Control and Thermal/Reliability

Time	Session
0830 – 1030:	*Electromagnetic Interference in Power Electronic Systems* **Aaron Brovont, PC Krausse Associates**
0930 – 1030:	*Reliability Trends in Power Electronics* **Frede Blaabjerg and Francesco Iannuzzo, Aalborg University**
1030 – 1100:	*Networking Break*
1100 – 1300:	**Thermal Issues and Reliability**
1300 – 1400:	*Lunch*
1400 – 1600:	**EMI and Control**

End of Workshop

Session Speakers

Power Modules

High Voltage Packaging for Diodes
Cyril Buttay, Laboratoire Ampère CNRS

Protecting Power Semiconductors from H2S Gases
Bjoern Rentemeister, Infineon

History of Power Module Design 1980s – 2020s (Virtual)
Reinhold Bayerer, Physics of Power Electronics Consulting

Manufacturing Processes

Liquid Metal Interconnections for Power Electronics
Nick Baker, University of Alabama

Insights into the Layout of Power Semiconductor Chips
Peter Friedrichs, Infineon

Dielectrics and Insulation

Development of Varnished Busbars
Michael Wingard, Amphenol

Electric Field Grading in HV Integrated Systems: State-of-the-Art and Future Prospects
Sombel Diaham, Université de Toulouse

System Integration

Series Connected SiC MOSFETs Voltage Balancing: Two Methods with Adaptive Delays
Cedric Mathieu De Vienne, SuperGrid Institute

Thermal and Reliability

Thermo-Mechanical Constraints for Packaging of Diamond Components
Institute of Micro Electronics of Barcelona (IMB-CNM)

On-Chip Junction Temperature Measurement using FBG Sensors
Sinisa Durovic, University of Manchester

Mechanical Lifetime Testing of Wire-bonds vs. Power Cycling
Golta Khatibi, TU Wien

Modular and Double-Sided Air-Cooled Power Module with Paralleled Switching Cells
Yvan Avenas, G2ELab

EMI and Control

Auxiliary Circuit Design for 10kV SiC MOSFET Modules (Virtual)
Jun Wang, University of Nebraska-Lincoln

Packaging Design for Low EMI Generation of Power Modules
Pierre-Olivier Jeannin, G2ELab