



*From Nano to Micro Power Electronics
And Packaging Workshop
November 24th, 2022
Tours, France
14th Edition*



TECHNICAL PROGRAMME

Technical Committee:

Daniel ALQUIER	TOURS University	France	Co-chairman
Laurent BARREAU	ST Microelectronics Tours	France	Chairman
Lars BOETTCHER	FRAUNHOFER Institute	Germany	
Cyril BUTTAY	AMPERE Laboratory	France	
Guillaume CALLERANT	SONCEBOZ	Switzerland	
Jean-Luc DIOT	PRIVATE	France	
Franck DOSSEUL	MODULEUS	France	Co-chairman
Guo-Quan LU	VIRGINIA TECH	USA	
Jürgen SCHUDERER	ABB Corporate Research	Switzerland	
Stéphane BELLENGER	ST Microelectronics Grenoble	France	Co-chairman

8 h 30 Workshop package and badge distribution

9 h 00 Welcome and workshop program presentation

9 h 15 Keynote: Power electronics trends for the automotive powertrain
Bradford Factor – ASE Europe, Belgium

10 h 05 Session 1: Design & Applications

10 h 05 From power module qualification to power module to system integration - how to convert equipment for inverter to one for power modules - Alessandro Tumminia – STMicroelectronics Catania, Italy

10 h 30 Coffee break / Table Top Exhibition and presentation

11 h 00 Session 1: Design & Applications con't

11 h 00 Understanding probing requirements when measuring dynamic power module parameters – Michael Zimmerman – Keysight Technologies, Germany

11 h 25 Power electronics modules health-state by scattering parameter characterization – A. Gopishetti – Université de Pau et Pays de l'Adour, France

11 h 50 Novel method for modeling the local electro-thermal behavior of discrete power diode using Verilog-A in a standard CAD environment – Achraf Kaid – ST Microelectronics Tours, France

12 h 15 Design of an embedded current sensor and the use of its measurement for a health monitoring of Power Electronics module – Paul-Etienne Vidal – ENIT Tarbes, France

12 h 40 Table Top Exhibition visit and Lunch (Buffet)

13 h 50 Keynote 2 : The technological and training challenges of microelectronics in the current global context of digital development and its associated energy consumption
Olivier Bonnaud – GIP-CNFM (National Coordination for Education in Microelectronics and Nanotechnologies), France

14 h 40 Session 2 : Materials, Processes and Technologies

14 h 40 Heraeus Ag free AMB and die top system for advanced packaging solutions – Andre Schwöbel – Heraeus Deutschland, Germany

15 h 05 HFBP as a new and better approach for DFN/QFN – Mark Azzopardi - JCET, China

15 h 30 Coffee break / Table Top Exhibition

15 h 55 Session 2: Materials, Processes and Technologies

15 h 55 Copper sintering pastes for die bonding and bonding between cooling plate and ceramic wiring board – Hideo Nakako – Showa Denko, Japan

16 h 20 New potting resin for power electronics application : Protavic PTE 30001A/B – Laurent Schaepelynck - Protavic International, France

16 h 45 Innovative tacking agent to reduce tool & fixture complexity for solder preforms in power module assembly – Karthik Vijay – Indium Corporation, United Kingdom

17 h 10 End of session

Next to the workshop sessions of Thursday, November the 24th, an exceptional event will be organized to close the workshop day for which you need to register if you wish to attend:

- **A visit of a specific Touraine place. Departure from Greman's institute at 17h40**
- **A dinner in a gastronomic restaurant around 20h00**



Sponsors:

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