

## Day 1 - Monday 7th April 2025

18:00      Pre-conference networking drinks reception

## Day 2 - Tuesday 8th April 2025

08:00 Registration and welcome refreshments

08:50 Housekeeping by Conference Chair

### Artificial Intelligence in Power Electronics: Optimizing Performance

09:00 **Artificial Intelligence-assisted Predictive Maintenance for Power Electronics**

*Presented by Shuai Zhao - Aalborg University*

09:20 **How AI-algorithms and AI-hardware Accelerate the Design Process in Power Electronics**

*Presented by Andreas Roskopf - Fraunhofer IISB*

09:40 **Artificial Intelligence in Power Electronics: Challenges and Trends**

*Presented by Wilmar Martinez - KU Leuven - EnergyVille*

10:00 **How AI will Drive Growth in Power Semiconductors, from the (Data) Center to the Edge**

*Presented by Callum Middleton - Omdia*

10:20 Morning Break

11:00 **SiC-Based Power Solutions for AI: Enabling Next-Generation Server Power Supplies with Unparalleled Efficiency and Reliability**

*Presented by Aleksei Cherkasov - Infineon*

11:20 **Navitas GaN and SiC Technologies to Enable Next-Gen AI Power Delivery**

*Presented by Llewellyn Vaughan-Edmunds - Navitas*

11:40 **AI-based Controllers for Power Electronics Converters**

*Presented by Hani Vahedi - Delft University of Technology*

### Energy Harvesting and Wireless Power Transfer: Enabling Autonomous Systems

12:00 **Growing Adoption of Wireless Power Across Sectors, including Industrial and Automotive**

*Presented by Dinesh Kithany - Wired & Wireless Technologies (WAWT)*

12:20 Lunch Break

### Sustainable Power Conversion Technologies: Eco-Friendly Solutions

13:50 **A Soft-switching based Inverter Topology for Automotive Traction Applications**

*Presented by Ajay Poonjal Pai - Sanan*

14:10 **Power Semiconductors – The Silent Heroes in the Transition of the Power Grid**

*Presented by Tobias Keller - Hitachi Energy*

14:30 **Contribution of Wide Band Gap Semiconductors to a More Sustainable Energy Landscape**

*Presented by Peter Friedrichs - Infineon*

14:50 **Price-competitive GaN Power Devices make Power Systems Eco-friendly by Reducing Energy Waste while Shrinking their Size**

*Presented by Denis Marcon - Innoscience Europe BV*

15:10 Afternoon Break

15:50 **Innovations in Power Semiconductor Technology for Power Grid Applications**

*Presented by Sajad Ansari - Dynex Semiconductor*

16:10 **The Unification of Digitalization and Electrification with Digital WBG Solutions**

*Presented by Faraz Ali - Wise Integration*

16:30 **Innovative Deposition Processing for Power Semiconductor manufacturing - Recent Progresses in Process development and Associated Precursors Chemistry**

*Presented by Christian Dussarrat - Air Liquide*

### Power Electronics for Electric Mobility: Accelerating Electrification

16:50 **Saving Battery Costs by Optimizing the Inverter's Control Strategy for an Efficient Powertrain**

*Presented by Michael Seeger - AVL SET GmbH*

17:10 Closing Remarks

18:00 Networking Drinks / Dinner Reception

# Day 3 - Wednesday 9th April 2025

08:00 Registration and welcome refreshments

08:50 Housekeeping by Conference Chair

## Power Electronics for Electric Mobility: Accelerating Electrification

09:00 **How the Evolving EV Landscape Impacts Growth Prospects for Different Power Semiconductor Technologies**  
*Presented by Callum Middleton - Omdia*

09:20 **SiC and Si Hybrid for EV Inverter Applications, from Powertrain to Inverter to Module and Discrete**  
*Presented by Yu Yang - Yole Group*

09:40 **Silicon Carbide: The Game Changer in Power Electronics for Sustainable Electric Mobility**  
*Presented by Simone Rascunà - STMicroelectronics*

10:00 **Vacuum Soldering with Integrated Volatile Capture and Soft Cooling Technologies**  
*Presented by Thomas Krebs - PINK GmbH Thermosysteme*

10:20 Morning Break

11:20 **Solving the Challenges in Monolithic Power Conversion in GaN**  
*Presented by Jef Thoné - MinDCet*

11:40 **Power System Architecture approach in Automotive X-in-1 Reference Design**  
*Presented by Pietro Scalia - Renesas*

12:00 **Hot Die Pre-bonding Using Ultrasonic Technology for Power Module Manufacturing**  
*Presented by Tomoyuki Sonoda - Panasonic Connect*

12:20 **Enabling Interconnect and Final Assembly Technologies for EV Power Module Manufacturing**  
*Presented by Huub Claassen - Boschman Advanced Packaging Technology / Powertrim Technologies*

12:40 **GaN as a Missing Link in the Evolution of Efficient Mobility**  
*Presented by Tamara Baksh - VisIC*

13:00 Lunch Break

## Next-Generation Semiconductor Materials: Beyond SiC and GaN

14:30 **Vertical GaN Transistors: A Future Path for Wide-Bandgap Semiconductors in the Automotive World**  
*Presented by Klaus Heyers - Bosch*

14:50 **Zero-Flux Residue Solder Paste for Power Devices Using Formic Acid Reflow**  
*Presented by Shantanu Joshi - KOKI Solder America Inc.*

15:20 **Precision Measurement Solutions to drive Transformation**  
*Presented by Thomas Rottach - Siglent*

15:40 **Ultrawide Bandgap Semiconductors for Next Generation Power Electronics**  
*Presented by Martin Kuball - University of Bristol*

16:00 **Advancing Power Electronics with Aluminum Scandium Nitride**  
*Presented by Ali Yassine - University Freiburg*

16:20 Closing Remarks



# NOTES

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