

## Day 1 - Monday 15th April 2024

18:30 Pre-conference networking drinks reception

## Day 2 - Tuesday 16th April 2024

08:00 Registration and welcome refreshments

09:10 Housekeeping by Rob Harper - Conference Chair for the morning session

### Technology Developments in WBG: SiC, GaN and Beyond

Sponsored by SCREEN Semiconductor Solutions Co., Ltd.

09:20 **Aluminum Scandium Nitride (AlScN) a novel material for power electronic applications**

*Presented by Ali Yassine - University Freiburg*

09:40 **Facing SiC Challenges Thanks to UV Laser Annealing Products from SCREEN**

*Presented by Louis Thuries - SCREEN SPE*

10:00 **Cost-effective SiC substrate manufacturing for power devices enabled by oxide-free wafer bonding**

*Presented by Dr. Bernd Dielacher - EV Group*

10:20 Morning Break

11:00 **SuperGaN's Performance Advantages Challenging SiC's Long-Term Use**

*Presented by Philip Zuk - Transphorm*

11:20 **Exploring WBG's technical advances with a glimpse into next UWBG**

*Presented by Taha Ayari - Yole Group*

11:40 **Electronic Packaging Materials for SiC Power Modules**

*Presented by Dr. Michael Joerger - Heraeus Electronics*

12:00 **Gallium Oxide – Taking over from SiC?**

*Presented by Martin Kuball - University of Bristol*

12:20 Lunch Break

13:35 Ezgi Dogmus - Conference Chair for afternoon session

13:35 **PowerElec – new metrological tools for quality control of wide bandgap semiconductors**

*Presented by Sebastian Wood - NPL*

13:55 **Novel interconnect and packaging technologies for power module manufacturing**

*Presented by Huub Claassen - Boschman Advanced Packaging Technology*

14:15 **SiC technology optimisation using advanced modelling tools**

*Presented by Ahmed Nejim - Silvaco*

14:35 **Advanced Lapping and polishing processes for SiC Wafers for sustainable and cost effective wafers**

*Presented by Dr. Ravi Bollina - Pureon AG*

14:55 Afternoon Break

### Silicon MOSFETs and IGBTs: Evolving for the Future

15:35 **High voltage power switch: continuous silicon development as contributor to the green transition**

*Presented by Antonino Gaito - STMicroelectronics*

15:55 **Future developments within IGBTs, and how they may coexist with SiC**

*Presented by Callum Middleton - Omdia*

16:15 Closing Remarks

16:20 Networking Drinks / Dinner Reception

## Day 3 - Wednesday 17th April 2024

08:00 Registration and welcome refreshments

09:10 Housekeeping by Denis Marcon - Conference Chair for morning session

### System Reliability - Testing Times

09:20 **SCREEN's Sustainable Cost-of-Ownership (CoO) Portfolio for Thickness Measurement and Wafer Inspection in Power Devices, Automotive, and IoT Applications**

*Presented by Alessandro Rossi - SCREEN SPE*

09:40 **Enabling Test Automation in Power Electronics Reliability**

*Presented by Andrea Vinci - Tektronix*

10:00 **How to Correctly Select a High Definition Oscilloscope and Probe for SiC and GaN Power Device Measurement Accuracy**

*Presented by Maurizio Mastrofini - Teledyne LeCroy*

### Capacity Across the Supply Chain

10:20 **The Power Play : Unveiling Capacity Challenges in SiC and GaN Industries**

*Presented by Ezgi Dogmus - Yole Group*

10:40 Morning Break

### GaN - Widening the Application Space

11:20 **How to unleash the power savings of GaN in high power, high voltage applications**

*Presented by Rupert Baines - QPT*

11:40 **New Opportunities for Gallium Nitride in Power, Sensing and RF**

*Presented by Rob Harper - Compound Semiconductor Centre*

12:00 **Activating GaN's Full Potential with Digital Control for Enhanced Performance Across All Electronics Sectors**

*Presented by Thierry Bouchet - Wise Integration*

12:20 **Price competitive GaN power devices to enhance performances, shrinking size and lowering cost of power conversion solutions**

*Presented by Denis Marcon - Innoscience Europe BV*

12:40 **GaN is widening the applications field in power electronics**

*Presented by Eric Moreau - STMicroelectronics*

13:00 **Bi-directional circuits open up new opportunities in off-grid applications**

*Presented by Alfred Hesener - Navitas*

13:20 Lunch Break

### Upgrading the GRID – The Role of Power Electronics (inc. Energy Waste and Efficiency)

14:35 Peter Friedrichs - Conference Chair for afternoon session

14:35 **High-Voltage Silicon Carbide Enables an Omnidirectional Grid**

*Presented by Kevin Speer - Microchip*

14:55 **The grid of the future and how SiC power devices will enable the transition towards zero CO2**

*Presented by Peter Friedrichs - Infineon*

15:15 **3.3 kV SiC MOSFETs Accelerate Grid-Connected Energy Storage**

*Presented by Ranbir Singh - Navitas*

15:35 Closing Remarks

