

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

08:50 Housekeeping by Chris Meadows and Tim Bettles - Conference Chairs

Ensuring SiC's phenomenal success

09:00 Silicon Carbide: a game changer in power electronics

Presented by Mario Saggio - STMicroelectronics

09:15 Supporting SiC Success Stories Through Technical Innovation

Presented by David Liese - htt Group, and Michael Köppl - htt Group

09:30 Next-Generation Factory Inspection: Improving Performance by Synthesizing Intelligent Microscopy

Presented by Marius Fischer - Nanotronics

09:45 Challenges in HVM Amidst Evolving Device Architectures and Requirements for Compound Semiconductor based Power Devices

Presented by Nick Keller - Onto Innovation

10:00 Sharpening SiC Wafer specs and Frontend Performance by Crystal Orientation Metrology

Presented by Lars Grieger - Malvern Panalytical

10:15 Sample preparation and TEM imaging techniques for advanced power device analysis

Presented by Antonio Mani - Thermo Fisher Scientific

10:30 Morning Break

11:10 Giving SiC a superjunction

Presented by Reza Ghandi - GE Aerospace

11:25 The Unspoken Impacts of SiC Power Packaging

Presented by Kevin Speer - Microchip

11:40 Challenges and solutions in new generation SiC metrology

Presented by Dr. Eszter Najbauer - Semilab

11:55 Accelerating semiconductor technologies for the green revolution

Presented by Shiva Rai - Applied Materials

12:10 A Hybrid Defect Inspection System for SiC substrate and Epi applications

Presented by Aris Ma - AK Optics Technology Co. Ltd

12:25 Capital Efficient Systems for SiC Manufacturing Expansion and R&D

Presented by Brian Stickney - C & D Semiconductor

12:40 Lunch Break

13:55 Enabling Low Cost SiC Boule Fabrication – The BoulePro 200AX is the New Process Of Record

Presented by Jeff Gum - Usach

14:10 Industry ready detection of TSDs and BPDs in SiC wafers

Presented by Dr.-Ing. Christian Reimann - Rigaku

14:25 Cutting-edge SiC Manufacturing: Beyond Chemical-Mechanical Constraints

Presented by Philipp Böttger - scia Systems GmbH

14:40 Modernizing Industrial Low Voltage Motor Drives with Silicon Carbide

Presented by Pranjal Srivastava - Wolfspeed

14:55 PulseForge and Teikoku Taping Systems Announce Novel Fully Automated Photonic Debonding Platform

Presented by Vahid Akhavan - PulseForge (in association with Teikoku Taping Systems Inc)

15:10 Coating at its best - Spraying graphite parts with tantalum carbide cuts the cost of producing SiC crystals

Presented by Dr.-Ing. Matthias Trempa - Fraunhofer IISB

15:25 Powering the SiC Revolution with Vertical Integration

Presented by Ajay Poonjal Pai - Sanan

15:40 Afternoon Break

Taking power from the photon

16:20 Record-breaking solar cells

Presented by Dr. Oliver Höhn - Fraunhofer ISE

16:35 Integrated storage unlocks CPV's full potential

Presented by Kira Rundel - RayGen

16:50 Germanium Substrates for Photonics and PV: Ensuring Supply Security, Advancing Recycling and Enabling CMOS integration

Presented by Ivan Zyulkov - Umicore

17:05 Lattice-matched III-V solar cells. Progress and application opportunities

Presented by Prof. Mircea Guina - Tampere University

New frontiers for the LED

- 17:20** **Development of far-UVC LEDs for sensing and skin tolerant antisepsis**
Presented by Sven Einfeldt - FBH Berlin
- 17:35** **Heterogenous Integration of Compound Semiconductors by W2W and D2W Bonding**
Presented by Dr. Bernd Dielacher - EV Group
- 17:50** **Making monolithic RGB displays with InGaN**
Presented by WonTaeg Lim - Soft-Epi
- 18:05** **Closing Remarks**
- 18:10** **Networking Drinks / Dinner Reception**

Day 3 - Wednesday 17th April 2024

08:00 Registration and welcome refreshments

08:50 Housekeeping by Chris Meadows and Tim Bettles - Conference Chairs

Accelerating the growth of GaN

Sponsored by Precision Fabricators

09:00 Where will GaN Power Semiconductors find their greatest success in the 2020s?

Presented by Richard Eden - Omdia

09:15 The strengths of IC enhancement-mode GaN

Presented by Andrea Bricconi - Cambridge GaN Devices

09:30 Presentation Title to be Confirmed

09:45 Harnessing the Power of RF GaN-on-Si Technology for Next Generation Connectivity

Presented by Nadine Collaert - imec

10:00 Accelerating the Growth of GaN-based Power Electronics Via Adoption of 300mm Technology

Presented by Rudy Parekh - Veeco

10:15 Next Level Epitaxy: Revolutionizing Mass Production of Wide Bandgap Semiconductors

Presented by Dr. Yilmaz Dikme

10:30 Morning Break

11:10 Considerations for Tool-To-Tool Matching Across a Fleet of Metrology Tools

Presented by Tamzin Lafford - Bruker UK

11:25 Connected metrology – Full 2D characterization of HEMT device structure epi-wafers

Presented by Johannes Zettler - LayTec AG

11:40 Emerging Growth Opportunities for MBE in GaN

Presented by Brian Miller - Riber

11:55 Commercialization of buffer-free GaN on SiC materials for defense, space, telecom markets and beyond

Presented by Jr-Tai Chen - SweGaN

12:10 Numerical design propels RF and power GaN technology

Presented by Ahmed Nejim - Silvaco

12:25 Solving the EMC and thermal issues of driving GaN at high speed

Presented by Rupert Baines - QPT

12:40 GaN: Delivering on the Net-Zero Economics of an AI-Enabled Future

Presented by Peter Rabbeni - IQE

12:55 Lunch Break

Expanding horizons for surface emitters

14:10 VCSELs: Driving Innovations in 3D Sensing and Data Communication

Presented by Ali Jaffal - Yole Group

14:25 Vertilas InP VCSELs to address fast growing and novel applications at and beyond 1.3 μm

Presented by Christian Neumeyr - Vertilas

14:40 Expanding the scope of VCSELs through wavelength extension, added functionality and high power density

Presented by Julien Boucart - Coherent

14:55 Speeding VCSEL feedback

Presented by Jack Baker - ICS

15:10 Building, powerful, blue-surface-emitting SLEDs

Presented by Juan Morales - iSLight

15:25 Novel high-power VCSEL laser modules for Battery Manufacturing

Presented by Roman Koerner - TRUMPF

15:40 Placing photonic crystal nano-lasers to silicon

Presented by Mingchu Tang - University College London

15:55 Closing Remarks

