

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

