

Day 1 - Monday 17th April 2023

18:30 Pre-conference networking drinks reception sponsored by EPIC

Day 2 - Tuesday 18th April 2023

08:00 Registration and welcome refreshments.

08:50 Housekeeping by Chris Meadows, Conference Chair

Taking the power from silicon

09:00 **Ge substrates for photonics applications – MOCVD growth, cost advantages of Ge recycling and new device possibilities**
Presented by Ivan Zyulkov - Umicore

09:15 **Will wide bandgap power electronics market hit \$10 billion and beyond?**
Presented by Callum Middleton - Omdia

09:30 **Characterization of Thin Films and Critical Dimensions in Silicon Carbide and Gallium Nitride Process**
Presented by Aseem Srivastava - Onto Innovation

09:45 **Streamlining SiC Boule Fabrication – Hardinge's BoulePro 200 Invents Low-Cost Boule Shaping**
Presented by Jeff Gum - Hardinge

10:00 **Tight process control for GaN-based power devices: The Potential of connected metrology in semiconductor device production**
Presented by Kolja Haberland - LayTec AG

10:15 **Mass volume manufacturing of 8-inch GaN-on-Si discrete and Integrated power devices: bringing efficiency and operating frequency to the next level**
Presented by Denis Marcon - Innoscience Europe BV

10:30 **Silicon carbide enabling true mass electrification**
Presented by Manuel Gärtner - STMicroelectronics

10:45 Morning Break - Sponsored by Lightwave Logic Inc.

11:20 **High throughput Epitaxy Solution for Compound Semiconductors**
Presented by Nicolas Muesgens - Aixtron

11:35 **Plasma-Polish Dry Etch: Smoothing solution to prepare Epi-Ready SiC for Power Applications**
Presented by Amandev Singh - Oxford Instruments

11:50 **The BelGaN Innovation Factory & GaN Valley: Building a Wide Bandgap Semiconductor Innovation Ecosystem in Europe**
Presented by Marnix Tack - BelGaN

12:05 **Accelerating Adoption of Wide-Bandgap Power Semiconductors through Better Epitaxy of GaN and SiC Technologies**
Presented by Javier Banos - Veeco

12:20 **Complex device design using predictive modelling**
Presented by Ahmed Nejim - Silvaco

12:35 **Speeding up XRT Defect Recognition for SiC**
Presented by Christian Kranert - Fraunhofer IISB

12:50 Lunch Break - Sponsored by Lightwave Logic Inc.

Making headway with the microLED - Sponsored by Precision Fabricators Ltd

14:15 **Fast-ALD Solutions to Enable MicroLED Adoption**
Presented by Matt Weimer - Forge Nano

14:30 **Optimising the process for making microLEDs**
Presented by Steven DenBaars - University of California Santa Barbara (UCSB)

14:45 **Thin film layers for the upcoming micro-LED displays – the race never stops!**
Presented by Franz Xavier Lenherr - Evatec AG

15:00 **Wafer bonding: technology that enables microLED microdisplays**
Presented by Anton Alexeev - EV Group

15:15 Afternoon Break - Sponsored by Lightwave Logic Inc.

15:50 **"NEXT LEVEL EPITAXY" - First state-of-the-art high performance production epitaxy system**
Presented by Ghassan Barbar - Element3-5 GmbH

16:05 **Exploiting the Benefits of DynamicPixelTuning® for MicroLEDs**
Presented by Tongtong Zhu - Porotech

Ultrafast communication: New Generations and higher efficiencies

16:20 **High Volume Manufacturing engineered GaN material solutions for high-efficiency RF & Power devices**
Presented by Marianne Germain - Soitec

16:35 **A growing Telecom Infrastructure Market for GaN RF as opportunities for GaN-on-Si**
Presented by Aymen Ghorbel - Yole Group

16:50 **Taking 100-V RF GaN to New Heights**
Presented by Sebastian Krause - Fraunhofer IAF

17:05 Closing Remarks

Day 3 - Wednesday 19th April 2023

08:00 Registration and welcome refreshments.

08:50 Housekeeping by Chris Meadows, Conference Chair

New vectors for the VCSEL

09:00 **Extending the spectral range with InP tunnel-junction VCSELS**

Presented by Christian Neumeyr - Vertilas

09:15 **New Trends in VCSEL Technology**

Presented by Roman Koerner - TRUMPF

09:30 **Consumer applications: A sweet spot for SWIR VCSELS**

Presented by Ali Jaffal - Yole Group

09:45 **Capability Advancement of Production MBE for Next Generation Compound Semiconductors**

Presented by Paul Pinsukanjana - Intelligent Epitaxy Technology, Inc. (on behalf of Riber)

10:00 Morning Break - Sponsored by Lightwave Logic Inc.

10:45 **Plasma Dicing of GaAs VCSELS**

Presented by James Weber - Panasonic Connect

11:00 **Building VCSELS on silicon**

Presented by Leah Espenhahn - UIUC

Taking the power from silicon

11:15 **New workflows for resolving compound semiconductor defectivity issues using destructive and non-destructive electron microscopy techniques**

Presented by Micah Ledoux - Thermo Fisher Scientific

11:30 **Bruker X-ray solutions for GaN power device metrology**

Presented by John Mallows - Bruker

11:45 **Total solutions for Silicon Carbide from wafer making to device making**

Presented by Gerald Klug - DISCO HI-TEC EUROPE GmbH

12:00 Lunch Break - Sponsored by Lightwave Logic Inc.

13:15 **Powerful metrology use cases - Addressing compound material industry needs**

Presented by Gábor Szendrei - Semilab

13:30 **Scaling Manufacture of Compound Semiconductor Devices**

Presented by Brian Stickney - C & D Semiconductor

Ultra-wide band gap devices: The ultimate solution?

13:45 **Advanced Process Control for Rapid Scaling of Next Generation Materials**

Presented by Julie Orlando - Nanotronics

14:00 **Gallium Oxide – The next revolution in power electronics**

Presented by Martin Kuball - Bristol University

14:15 Afternoon break - Sponsored by Lightwave Logic Inc.

15:00 **Underpinning the growth of gallium oxide devices**

Presented by Akito Kuramata - Novel Crystal Technology

15:15 **Cost Advantage of Wide Band Gap Semiconductors**

Presented by Oluwasayo Loto - Yole Group

15:30 **Building better gallium oxide devices via HVPE**

Presented by Heather Splawn - Kyma Technologies

15:45 Closing Remarks

