

## 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 Michael Lebby and David Cheskis - Conference Chairs

### PIC Packaging: Securing Optimal Integration and Performance

09:00 **Electrooptic Glass Substrates for Photonic Packaging**

*Presented by Andreas Matiss - Corning*

**Industry proven Photonic Wire Bonds and Facet-Attached Micro-Optical Elements: from Telecom/Datacom to Quantum Applications**

09:15

*Presented by Philipp-Immanuel Dietrich - Vanguard Automation*

09:30 **Optimizing Cost and Scaling Efficiency in Swept Wavelength Testing for Alignment and Packaging of PIC**

*Presented by Matt Adams - VIAVI Solutions*

09:45 **Advancing Optical Testing for Photonic Integrated Circuits: From Prototype to Production Scale-Up**

*Presented by Ricardo Arias - Luna Innovations*

10:00 **Towards a Comprehensive, Multiphysics Design Solution for Co-packaged Optics**

*Presented by Ahsan Alam - Ansys Optics*

10:15 **Aligned additive microfabrication for advanced optical packaging**

*Presented by Jochen Zimmer - Nanoscribe*

10:30 Morning Break

11:00 **Breaking the barriers for high frequency packaging**

*Presented by Guillermo Carpintero - LEAPWAVE TECHNOLOGIES*

11:15 **Technology Developments & Equipment Concepts for Scaling Up Photonics Production for Datacenters**

*Presented by Malte Ennen - ficonTEC*

11:30 **As Photonics Applications Multiply, New Ways to Subtract Costs**

*Presented by Scott Jordan - Physik Instrumente*

11:45 **Advances in PIC Manufacturing for Sensing and Datacom Applications – ALL Thanks to Nanoimprint Lithography**

*Presented by Jonas Khan - EV Group*

**AIM Photonics Foundry providing Co-Process and Co-Development to Address Challenges in Photonic Integrated Circuit (PIC) Packaging**

12:00

*Presented by David Harame - AIM Photonics*

12:15 **Impact of PIC device architecture and integration concept on packaging and assembly**

*Presented by Helen Waechter - Helbling Technik Bern AG*

12:30 **Advancing the Frontier of Photonic Integration: Challenges and Innovations in PIC Packaging**

*PHIX, Lightwave Logic Inc, Tyndall National Institute, and POET Technologies*

13:00 Lunch Break

### Hybrid PICs: Pioneering New Frontiers in Photonic Integration

Sponsored by OPTICA

14:15 **Designing high power hybrid integrated tuneable lasers for automotive LiDAR**

*Presented by Ruud Oldenbeuving - imec*

14:30 **Advances in hybrid Silica-Nitride waveguides**

*Presented by Henk Bulthuis - Broadex Technologies*

14:45 **Unlocking the potential of hybrid/heterogeneous PIC design**

*Presented by Martin Fiers - Luceda Photonics*

15:00 **TFLN PIC Platform: Unleashing Monolithic power to Enhance Hybrid/Heterogeneous PICs**

*Presented by Hamed Sattari - CSEM*

**High speed, low power, tiny modulators in a polymer PIC platform are poised to enable 800G/1.6Tbps data communications, driven in part by artificial intelligence.**

15:15

*Presented by Michael Lebby - Lightwave Logic Inc*

15:30 **Advanced Photonic Integrated Circuit Testing: APEX Technologies' solution for High Precision Optical Instrumentation**

*Presented by Tomy Marest - APEX Technologies*

15:45 **BTO-powered PICs for communication and switching**

*Presented by Cyriel Minkenberg - Lumiphase*

16:00 Afternoon Break

16:30 **Heterogeneous integration to capitalize on upcoming markets, the new IPSR-I global roadmap update**

*Presented by Peter van Arkel - PhotonDelta*

**Advancements in Optically Enhanced MEMS Inertial Sensors: Prototyping and Roadmap Challenges for Consumer Markets (Video presentation)**

16:45

*Presented by Lia Li - Zero Point Motion*

17:00 **Augmented Silicon Photonics for demanding Data Center and AI/ML network fabrics**

*Presented by Yannick Paillard - SCINTIL Photonics*

- 17:15**     **Silicon-organic hybrid electro-optic modulators for next generation optical interconnects**  
*Presented by Adrian Mertens - SilOrix*
- 17:30**     **Heterogeneous Integration of Photonic Devices on Silicon**  
*Presented by Jonathan Klamkin - UCSB (University of California Santa Barbara)*
- 17:45**     **Photonic Integrated Circuits: Surface Coupling Lasers using InP as an integration platform**  
*Presented by Bill Ring - Vector Photonics*
- 18:00**     **Sputter deposited Al<sub>2</sub>O<sub>3</sub>: an ultra-low loss integrated photonic platform for broadband operation from the UV till the mid-IR**  
*Presented by Sonia M. Garcia-Blanco - ALUVIA Photonics*
- 18:15**     **Closing Remarks**
- 18:20**     **Networking Drinks / Dinner Reception**

# Day 3 - Wednesday 17th April 2024

08:00 Registration and welcome refreshments

08:50 Housekeeping by Michael Lebby and David Cheskis - Conference Chairs

## Rapid Scaling: Foundries Fuelling PICs' Mass Production

- 09:00 **A view from the Foundry: Silicon Photonics**  
*Presented by Anthony Yu - GlobalFoundries*
- 09:15 **Low Loss Photonic Integrated Circuits: From Prototype to Volume**  
*Presented by Michael Geiselmann - LIGENTEC*
- 09:30 **Silicon photonics for AI/HPC Optical Interconnects**  
*Presented by Philippe Absil - imec*

## Power Efficiency: Minimizing Consumption in PICs

- 09:45 **The evolving role of optics in AI Clusters**  
*Presented by Vlad Kozlov - LightCounting*

## PIC Size and Simulation: Enhancing Design Efficiency

- 10:00 **A perspective on recent trends in inverse design of integrated photonic devices and circuits**  
*Presented by Wolfer Peelaers - Hewlett Packard Enterprise*
- 10:15 **Efficient design techniques for custom PDKs protecting your IP**  
*Presented by Andrzej Pożatynski - VPIphotonics*

10:30 Morning Break

## Accelerating PIC Adoption in Established Markets

Sponsored by LioniX International

- 11:10 **Design to Device: Accelerating PIC adoption by lowering entry barriers to turnkey photonic solutions**  
*Presented by Amitesh Singh - LioniX*
- 11:25 **Transforming point-of-care diagnostics: The power of silicon plasmonic biosensors in the battle against acute infections**  
*Presented by Dimitris Tsiokos - bialoom*
- 11:40 **Is integrated optics a perfect fit for next generation of Access Networks?**  
*Presented by Prof. Dr. Antonio Teixeira - PICadvanced*
- 11:55 **Innovate with Confidence: Strategies for reliable PIC design**  
*Presented by Ronald Broeke - Bright Photonics*
- 12:10 **Scaling photonic integration and packaging of hybrid multi-chip assemblies using 3D lithography**  
*Presented by Dr. Laura Horan - Vanguard Automation*
- 12:25 **Opportunities for Photonics in Datacenter and High-Performance Computing (HPC) Infrastructure**  
*Presented by Remco Stoffer - Synopsys*
- 12:40 Lunch Break
- 13:55 **Silicon Photonics Market and Applications: from Optical Transceivers to Emerging Uses**  
*Presented by Eric Mounier - Yole Group*
- 14:10 **Semiconductorization of Photonics using Silicon Optical Interposer**  
*Presented by Raju Kankipati - POET Technologies*
- 14:25 **Efficient Test of PICs for High-Performance Computing Applications**  
*Presented by Daria Lavrova - Keysight Technologies*
- 14:40 **Revolutionizing Architecture and Components for New Generation Energy-Efficient High-Density Photonic Integrated Coherent Transceivers**  
*Presented by Tomoyuki Akiyama - PETRA/Fujitsu*
- 14:55 **Opportunities and Challenges for Optics in AI Factories**  
*Presented by Yannick De Koninck - NVIDIA*
- 15:10 **PIC Solutions for Established and Novel Optical Communication Applications**  
*Presented by Mehrdad Ziari - Infinera*
- 15:25 **Opportunities for Silicon Photonics: Developments and Applications**  
*Presented by James Falkiner - IDTechEx*
- 15:45 Closing Remarks

# NOTES

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