



Workshop on Hybrid PICs at ECOC 2019 in Dublin, 22.09.2019 (2:00pm-5:30pm).

Organized by

- Hercules Avramopoulos, ICCS/NTUA, Greece.
- Norbert Keil, Fraunhofer HHI, Germany.

Abstract:

Hybrid Photonic Integrated Circuits (Hybrid PICs) are complex and cost-effective at the same time. This half-day workshop will cover all topics of Hybrid PICs from materials to integration technologies, enabling platforms and modelling tools towards their use in different fields of applications such as communications, quantum technologies, and sensing.

Agenda:

**Materials and Technologies
(02:00pm – 03:30pm)**

- Michael Lebbby, Lightwave Logic Inc., USA.
Polymer modulators enable the next generation of speeds and low power in optical networks
- Arne Schleunitz, micro resist technology GmbH, Germany.
Advanced hybrid polymers for optical building blocks in PICs
- Hideyuki Nawata, Nissan Chemical Industries Ltd., Japan.
Organic-inorganic hybrid materials for co-package
- Takaaki Ishigure, Keio University, Japan.
Polymer optical waveguide for high-density optical packaging with PICs
- Douwe Geuzebroek, LioniX International BV, Netherlands.
Hybrid integration of silicon nitride: technology and scaling
- Ignazio Piacentini, ficonTEC GmbH, Germany.
Automating complex hybrid assembly processes for the PolyBoard requirements

**Coffee Break
(03:30pm – 04:00pm)**



Platforms and Applications
(04:00pm – 05:30pm)

- André Richter, VPIphotonics GmbH, Germany.
PDK-enabled layout-aware circuit design and system validation
- Christos Kouloumentas, ICCS/NTUA, Greece.
Hybrid PolyBoard-on-TriPleX platform for remote ranging and sensing applications
- Hannes Hübel, AIT Austrian Institute of Technology GmbH, Austria.
Quantum Labs on the Chip
- Christian Koos, Vanguard Photonics GmbH, Germany
Hybrid silicon photonics and plasmonics: From optical communications to THz signal processing
- Guillermo Carpintero, Universidad Carlos III de Madrid, Spain.
Integrated Microwave Photonics: Advantages of a hybrid integration approach based on polymer
- Paraskevas Bakopoulos, Mellanox Technologies Ltd., Israel.
Scaling short-reach interconnects with hybrid PICs