

## 20th European Conference on Integrated Optics – Valencia - 2018

The 2018 European Conference on Integrated Optics (ECIO 2018, [www.ecio-2018.org](http://www.ecio-2018.org)) will celebrate its 20th anniversary in Valencia from the 30th May to the 1st June 2018. The conference focuses on leading edge research on integrated optics, optoelectronics and nanophotonics and gathers experts from academia and industry to show their latest technical results, and showcase their products and services. The application scope is broad and it ranges from tele/datacom communications, optical interconnects, and (bio) optical sensing applications to more disruptive areas as quantum computing and mid-IR photonics. In the 2017 edition, which took place in Eindhoven, the conference featured more than two hundred attendees.



Figure 1. Conference venue (left) and city beach (right).

Conference topics cover waveguide technology and platforms, devices and materials, integrated circuits and applications of photonic integrated circuits (PICs). The most recent advances in photonic integration technologies, such as silicon photonics and III-V optoelectronics, is one of the main features of the conference. Assembly, packaging and hybrid integration techniques are also present. In addition, the conference aims to discuss novel concepts on materials with unique properties such as graphene, 2D materials or phase change materials.

The conference has two technical tracks running in parallel and a poster session. Furthermore, several singular events will be organized. The special session “Women in Integrated Optics” chaired by Prof. Laura Lechuga (ICN2, Spain) and Prof. Sonia García Blanco (Univ. Twente, The Netherlands), aims at bringing together the most relevant scientist and professional women in the field. A workshop on “Integrated Photonic Technologies and Applications from Visible to Mid-Infrared” will be also organized by the European Photonics Industry Consortium (EPIC), and chaired by Dr. José Pozo (EPIC).

The industrial exhibitors will showcase their latest products and services, and will be sponsoring young researchers at an early stage of their careers, through best paper and poster awards.

A selected list of invited worldwide speakers from academia and industry have confirmed their presence:

- Will Green (IBM), “Silicon photonics trace gas sensors for methane detection”
- Gloria Hoefler (Infinera), “Large scale InP photonic integrated circuits (PICs)”
- Jie Sun (Intel Corporation), “Silicon photonics phased arrays”
- Charles Baudot (STMicroelectronics), “High-speed Si transceiver for datacom applications”

- Alan Scott (Honeywell), “A Compressive Sensing Integrated Fourier Raman Spectrometer”
- Milan Mashanovitch (Freedom Photonics), “Novel high-performance lasers in InP”
- Mark Wade (Ayar Labs), “Zero-change photonic integration for co-integration with CMOS electronics”
- Michal Lipson (Columbia Univ.), “Next generation Silicon Photonics”
- Delphine Marris-Morini (Univ. Paris-Sud), “Chip-scale integrated photonics for the mid-infrared”
- Caterina Ciminelli (Polit. Bari), “Silicon photonics biosensors”
- Tobias Kippenberg (EPFL), “Optical frequency combs: technologies for generation and applications”
- Wim Bogaerts (Univ. Gent), “Programmable photonic integrated circuits”
- Jens Schmid (National Research Council, Canada), “Silicon photonics and subwavelength photonic structures/metamaterials”
- Yasuhiko Arakawa (Univ. of Tokyo), “Quantum nanostructures and photonic devices”
- Joyce Poon (Univ. Toronto), “Silicon photonics integration, VO<sub>2</sub> photonics and neurophotonics”
- Brian Corbett (Tyndall Institute), “Micro-transfer printing for advanced scalable hybrid photonic integration”
- Weidong Zhou (Univ. Texas Arlington), “Printed active hybrid photonic crystal devices for 3D integrated photonics”
- Marc Sorel (Glasgow University), “Integrated orbital angular momentum devices”
- Daoxin Dan (Zhejiang University), “Mode division multiplexing”
- Pierre Berini (Univ. Ottawa), “Plasmonics for Integrated Optics”
- Carsten Schuck (Univ. Munster), “Integrated quantum photonics”
- Tomohiro Amemiya (Tokyo Institute of Technology), “Semiconductor membrane lasers”
- Tin Komljenovic (UCSB), “Heterogeneous large-scale photonic integration for communications and beyond”

The conference venue will be at the Universitat Politècnica de València campus, located at ten minutes walking distance from the coast line, with magnificent beaches, restaurants and nightlife clubs. Valencia is the third-largest city in Spain and is located on the east Mediterranean coast, which offers a combination of avant-garde style, culture and Mediterranean spirit, bound to captivate any visitor. There are thousands of things to discover, but we would like to suggest reasons why you just have to come and see it for yourself: 300 days of sunshine, Mediterranean cuisine, beaches, lifestyle, festivals and traditions, green spaces, 2000 years of history, cutting-edge architecture, unique nooks and crannies ... The city has a wonderful weather and an excellent gastronomy famous by its *Valencian paella* (rice with vegetables and meat) and *horchata* (popular soft drink made of water, sugar and tiger nut). Attendants will have the opportunity to taste this and more typical Spanish food during the conference luncheons and social events.

See you in Valencia.

Pascual Muñoz and Pablo Sanchis

Co-chairs of ECIO 2018