

www.ecio2010.eu
will provide further details including:

Registration - Accommodation - Paper submission

A Technical Exhibition is collocated with ECIO 2010. Conference delegates will have free access to the Exhibition. Information for exhibitors is available by visiting the website or contact: info@ecio2010.eu

The Social Programme includes a Reception on 7 April and a Conference Dinner to be held in the magnificent Dining Hall at Queens' College, Cambridge on 8 April.

The 18th International Workshop on Optical Waveguide Theory (OWTNM 2010) will be collocated on 9 and 10 April. For further details contact Trevor Benson: trevor.benson@nottingham.ac.uk

The 2nd International Workshop on Focused Ion Beam (FIB) technology will take place on 6 and 7 April. For further details contact Martin Cryan: m.cryan@bristol.ac.uk or visit the link: www.bris.ac.uk/eeng/research/pho/fib4photonics.html

The 2nd European Photonic Integration Forum, organized by the ePIXnet platforms, will take place on 6 April. For further details please contact Meint Smit: m.k.smit@tue.nl, Roel Baets: baets@intec.ugent.be or Mike Wale: mike.wale@oclaro.com

ECIO Steering Committee

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Co-sponsors:



Cambridge is a unique community with a strong mix of cultural and social diversity, intellectual vitality and technological innovation.

It offers excellent access by plane (Stansted, Luton, London City, Heathrow and Gatwick), train and car. All London airports are readily accessible by regular rail, coach and bus services.

ECIO 2010 will be located at the University of Cambridge, Computer Laboratory, William Gates Building, Cambridge, CB3 0FD, United Kingdom.
Website: www.cl.cam.ac.uk/contact/directions/

Conference contact details

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ECIO 2010 CAMBRIDGE

15th European Conference
on Integrated Optics
and Technical Exhibition

7 - 9 APRIL 2010



Paper submission deadline:
Monday 18 January 2010

7 - 9 APRIL 2010**Conference Venue:**Computer Laboratory, William Gates Building
JJ Thomson Avenue, Cambridge UK**Organised in conjunction with:**

OWTNM 2010, Workshop on Optical Waveguide Theory
and Numerical Modelling 9 - 10 April 2010
FIB for Photonics 2010, International Workshop on Focused
Ion Beam Technology 6 - 7 April 2010
2nd European Photonic Integration Forum, organized by
the ePIXnet platforms, 6 April 2010

SCOPE

The aim of ECIO 2010 is to provide a forum where experts from both industrial and academic communities within integrated optics and nanophotonics can exchange their new ideas and latest findings.

ECIO covers research in all aspects of photonic integration including: modelling, design, fabrication, packaging, and applications of Photonics ICs. It includes research on new and existing materials, devices, sub-systems and systems and addresses a broad range of applications, including communications, signal processing, bio-medicine, sensors, instrumentation, lighting and displays.

ECIO 2010 is organised by:
The University of Cambridge, Department of Engineering
Co-chaired by Ian White and Richard Penty

CALL FOR PAPERS
CONFERENCE TOPICS*Photonic ICs: design, fabrication, packaging, testing and application, from small to large scale**Passive waveguide devices, switches and modulators, sources and detectors**Hybrid or monolithic integrated active photonic circuits: integrated active components such as laser diodes, amplifiers, modulators and detectors, energy efficient operation**Electro-, acousto-, thermo-, and magneto-optical devices**Nonlinear devices: wavelength converters, frequency mixers, signal regenerators, ultrafast optical switches**Polymer photonics including OLEDs**Nanophotonics, photonic crystal materials and devices, metamaterials**Plasmonic waveguides and devices**Materials and fabrication technologies for waveguide devices and quantum optical or opto-electronic structures**Quantum dots, wires and wells**Modelling, theory and simulation of active and passive guided wave devices and quantum optical or opto-electronic structures**Characterization and testing of integrated circuits, devices, waveguides and materials**Hybrid integration for packaging: flip-chip and bonding techniques, novel pigtailling and packaging technologies, micro-optic benches**Application of integrated optics: telecom and datacom, quantum communication, biophotonics, instrumentation and sensors, microwave applications, data storage, lighting and displays**Production technologies, foundry concepts and industrial exploitation***Speakers**

Ortwin Hess, University of Surrey, UK
Slow light in nanophotonic materials
Katsunari Okamoto, UC Davis, USA
Evolution of planar waveguide devices: communication & sensing applications
Meint Smit, TU Eindhoven, The Netherlands
Moore's law in photonics

Ed Linfield, University of Leeds, UK
Terahertz quantum cascade lasers
Masataka Nakazawa, Tohoku University, Japan
Device requirements for next generation optical transmission technology
Meir Orenstein, Technion, Haifa, Israel
Nanoplasmonic waveguiding
Martin Wegener, University of Karlsruhe, Germany
The meaning of metamaterials

Shigehisa Arai, Tokyo Institute of Technology, Japan
InP-based membrane-type semiconductor lasers
Toshihiko Baba, Yokohama National University, Japan
Tunable slow light in photonic nanostructures
Connie Chang-Hasnain, UC Berkeley, USA
High contrast gratings: a new platform for integrated optics
Stephanie Cheylan, ICFO - Institute of Photonic Sciences, Spain
Organic devices for photonics
Alexander Colmann, University of Karlsruhe, Germany
Semi-transparent all-organic polymer solar cells
Pieter Dumon, IMEC, Belgium
Foundry processes for silicon photonics
Hiroshi Ishikawa, AIST, Japan
All-optical phase modulation in InGaAs/AlAsSb quantum wells
Frank Koppens, Harvard University, USA
Near field electrical detection of optical plasmons & single plasmon sources
Thomas F Krauss, University of St Andrews, UK
Photonic crystal switches & modulators
Laura Lechuga, CSIC-ICN, Spain
Using integrated optics for advanced point-of-care diagnostic devices
Xaveer Leijtens, TU Eindhoven, The Netherlands
JePIX: the platform for InP-based photonics
John H Marsh, University of Glasgow and Intense Ltd, UK
Parallel integration of high power laser arrays – technology & applications
Andrea Melloni, Politecnico di Milano, Italy
Simulation and design of IO filters
Geert Morthier, University of Gent, Belgium
Digital photonics using microdisk lasers heterogeneously integrated in SOI
Graham Reed, University of Surrey, UK
Optical modulators in silicon
Abderrahim Ramdane, CNRS LPN, France
Quantum dot based mode locked lasers: performance & applications
Takuo Tanaka, RIKEN, Metamaterials Laboratory, Japan
Two-photon reduction, technique for isotropic metamaterials
Rupert Ursin, IQOQI, Austria
Space-QUEST: satellites based quantum communication
James Wilkinson, University of Southampton, UK
Integrated microsphere planar lightwave circuits
Anatoly V Zayats, IRCEP, Queen's University of Belfast, UK
Plasmonic components for integrated nanophotonic circuits

**Papers to be
published on IEEE Xplore**