

FIRST ANNOUNCEMENT AND CALL FOR PAPERS

# Photon 10

The UK's premier conference in optics and photonics



→ 23 – 26 August 2010  
University of Southampton, UK

→ [www.photon.org.uk](http://www.photon.org.uk)

Encompassing the Optics and Photonics Division Conference, the Quantum Electronics and Photonics Conference, an Industry Technology Programme, an exhibition and tutorials

**Abstract deadline: 26 February 2010**



## Photon10

23-26 August 2010

University of Southampton

Conference Chair: Professor Allan Boardman (University of Salford)  
Conference Organiser: Jon Mackew (Institute of Physics)

The Photon conference series are the largest optics conference events in the UK. Photon10 is the fifth in the series; following Photon02 (Cardiff), Photon04 (Glasgow), Photon06 (Manchester) and Photon08 (Edinburgh).

Photon is an umbrella conference series which embraces a number of important and interconnected constituent conferences with fascinating overlaps and a common social programme.

Photon10 will comprise:

- **Optics and Photonics 2010** the biennial conference of the IOP Optics and Photonics Division. The conference includes sessions representing the Groups of the Division, and from the Fringe Analysis Special Interest Group.
- **QEP-19** the latest in the series of conferences initiated in 1973 by the IOP Quantum Electronics and Photonics Group.
- **An Industry Technology Programme:** sessions of particular interest to those in the optics industry.
- **An exhibition of the latest optics and photonics technology**
- **An area dedicated to lasers in celebration of the 50th anniversary of its discovery**
- **Plenary Lectures**
- **Tutorials**

## Plenaries

Each day will begin with one of the following plenaries:

- Professor Michael Leiby (Optoelectronics Industry Development Association (OIDA), USA)  
**Green Photonics**
- Ken Grattan (City University London, UK)  
**Celebratory Lecture**
- Professor Nikolay Zheludev (University of Southampton, UK)  
**Nanostructured Metamaterials as a Platform for Photonic Devices**
- Professor Colin Webb (Oxford Lasers, UK)  
**The Birth of the Laser**

## Tutorials

The following tutorials will be on offer during Photon10:

- **Gentle Introduction to Cloaking** by Allan Boardman,
- **Organic Photonics** by Donal Bradley

We invite you to submit an abstract by **26 February 2010** in the format described at the end of the Announcement.

## Organising Committee

### Photon10 Chair

Allan Boardman, University of Salford

### Photon10 Vice Chair

Gerald Buller, Heriot-Watt University

### QEP-19 Chair

Terence Shepherd, QinetiQ

### Optics and Photonics 2010 Chair

Dave Towers, Leeds University

### Exhibition Organiser

Chris Gracie, Scottish Optoelectronics Association

### Conference Organiser

Jon Mackew, Institute of Physics

### Programme Co-ordinator

Lisa Cornwell, Institute of Physics

### ITP Co-ordinators

John Lincoln, South East Photonics Network

Gail McConnell, University of Strathclyde

## Optics and Photonics 2010

This is the biennial conference of the Optics and Photonics Division (formerly the Applied Optics Division) that brings together researchers in the fields of the following groups of the Institute of Physics: Combustion, Computational Physics, Environmental Physics, Instrument Science and Technology, Optical and Materials and Characterization.

The programme will include focused sessions on:

- Advances in imaging
- Advances in terahertz technology\*
- Biophotonics\*
- Computational photonics
- Diffractive optics
- Fibre optics & waveguides
- Fibre optic sensors
- Optical and quantum metrology\*
- Optical diagnostic engineering
- Optical environmental sensing
- Optical tweezing and micro-manipulation
- Optics and microfluidics
- Polarisation optics
- Singular optics and vortices\*
- X-ray and UV optics

\*denotes joint sessions

Optics and Photonics 2010 will also encompass sessions of the Fringe Analysis Special Interest Group (FASIG). This is the latest in a series of national and international meetings dating back to 1985. It will be devoted to the latest innovations in interferometry, photomechanics and optical metrology including their applications, and include research papers in the following areas:

- new measurement and analysis techniques
- phase shifting and phase unwrapping
- high-speed measurements on solids and fluids
- micrometre measurement techniques and applications
- shape measurement and 3D machine vision
- optical coherence tomography in biomechanics and engineering
- phase-contrast tomographic methods
- phase-contrast microscopy
- digital holography
- optical diffraction tomography

A special issue of Optics and Lasers in Engineering will be devoted to the best papers from the FASIG conference.



## QEP-19

This is the 19th meeting of a famous series and is organised by the IOP Quantum Electronics and Photonics Group.

The programme will include focused sessions on:

- Advances in laser science
- Advances in terahertz technology\*
- Atom-photon interactions
- Biophotonics\*
- Metamaterials and cloaking
- Nanophotonics and plasmonics
- Optical and quantum metrology\*
- Quantum coherent control
- Quantum dots
- Quantum information
- Quantum optics
- Silicon and carbon photonics
- Singular optics and vortices\*
- Slow light
- Structured optical materials
- Trapping and manipulation

*\*denotes joint sessions*

QEP-19 is supported by the IOP Quantum Optics, Quantum Information and Quantum Control (QQQ) and Semiconductor Physics Groups

## Industry Technology Programme

The ITP programme will be based on the TSB Technology Programme and Photonics KTN roadmapping which will have interest for both industry and academia. The ITP will be synchronised with the Academic Programme to allow participants attending Photon10 to attend the ITP programme.

## Exhibition

### Tuesday 24 August – Wednesday 25 August 2010

This exhibition is an integral and valuable part of the conference programme. It provides an opportunity for researchers, developers, engineers, entrepreneurs, systems integrators and managers to mix. The Photon10 conference infrastructure and the special location of the exhibition will ensure that the exhibition is a pivotal experience for the conference participants, so that old acquaintances can be renewed and new contacts created.

If you are interested in exhibiting at Photon10, please e-mail [chris.gracie@optoelectronics.org.uk](mailto:chris.gracie@optoelectronics.org.uk)

## Location

Southampton dates back to Roman times, and has a rich maritime history: today it is a vibrant and lively city, situated at the heart of the South Coast of England with convenient ferry links across the Solent to the Isle of Wight and to the Continent.

It is a major European port and a centre for industry and commerce: while London is only just over an hour away by train, Southampton is also within easy reach of many areas of great natural beauty - such as the New Forest, the ancient cathedral cities of Salisbury and Winchester, and the beaches of Bournemouth and other holiday centres.

## Venue

The conference and exhibition will take place at the University of Southampton's Highfield Campus. En-suite accommodation will also be provided in the campus halls of residence. Further details will be available online in due course.

## Social Events

Photon10 offers a rich social programme of events. There will be informal receptions on Sunday 22, Monday 23 and Tuesday 24 August. The gala dinner will be held at The Guildhall on Wednesday 25 August and will include a pre-dinner drinks reception. The Photon10 social programme provides participants the opportunity to network whilst encompassing some of Southampton's sites.

## UKCPO

Photon10 is organised by the Institute of Physics and the UK Consortium for Photonics and Optics – the UKCPO. The UKCPO is the organisation that represents the national photonics and optics community: manufacturers, researchers, industry, universities and government. Membership is open to all professional bodies, learned societies, trade organisations, industry cluster groups and all similar organisations with interests in photonics and optics. Current members include the Institute of Physics, the Institution of Engineering and Technology, the Scottish Optoelectronics Association, the Welsh Optoelectronics Forum, the Photonics Cluster, the Fibreoptic Industry Association, the UK Industrial Vision Association, the Association of Industrial Lasers Users, EPSRC and the DTI.

To find out more about UKCPO and their activities, please visit [www.ukcpo.org](http://www.ukcpo.org).

For details on how to become a member please contact UKCPO Secretary, Chris Gracie [chris.gracie@optoelectronics.org.uk](mailto:chris.gracie@optoelectronics.org.uk).



## Optics and Photonics Committee 2010

Dave Towers - Chair (University of Leeds)  
Andy Augousti (Kingston University)  
Martin Booth (Oxford University)  
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Patricia Scully (University of Manchester)  
Ralph Tatam (Cranfield University)  
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## QEP-19 Committee

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Claire Bedrock – Deputy Chair (IOP Publishing)  
Dave Binks (University of Manchester)  
Peter Blood (Cardiff University)  
Gerald Buller (Heriot-Watt University)  
Allan Boardman (University of Salford)  
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Peter Woods (National Physical Laboratory, UK)  
Ewan Wright (Optical Sciences Center, USA)

## Abstract Submission

Contributions of 250 words for oral and poster presentations are invited for Optics and Photonics 2010 and QEP-19. Abstracts should be submitted on-line at [www.photon.org.uk](http://www.photon.org.uk) to the appropriate conference and session.

The abstract deadline is **26 February 2010**.

If you are unable to submit your abstract on-line or have any programme enquiries, please contact [lisa.cornwell@iop.org](mailto:lisa.cornwell@iop.org)

## Further Information

Updated information about Photon10 is published at [www.photon.org.uk](http://www.photon.org.uk) and [www.ukcpo.org](http://www.ukcpo.org)

### For more details about Photon10, please contact:

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