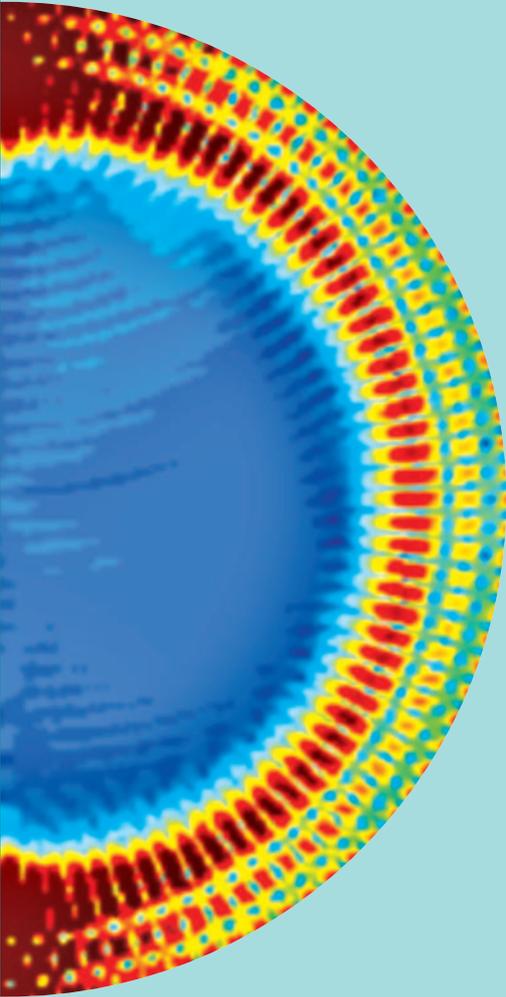


FIRST ANNOUNCEMENT AND
CALL FOR PAPERS

Photon06

The UK's premier conference in optics and photonics

- 
- 4–7 September 2006
University of Manchester
 - www.photon06.org

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

Abstract submissions due by 28 February 2006



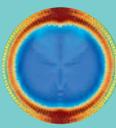
Institute *of* **Physics**



The Rank Prize Funds

Institute *of* **Physics** PUBLISHING





Photon06

Photon06 is the largest optics event in the UK and the third in the series that began in Cardiff with Photon02 in September 2002. Photon06 will be held on 4–7 September 2006 at the University of Manchester.

The meeting will comprise:

- **Optics and Photonics 2006** the biennial conference of the Optics and Photonics Division of the Institute of Physics. The conference includes sessions representing the groups of the division, and from the Fringe Analysis Special Interest Group;
- **QEP-17** the latest in the series of conferences initiated in 1973 by the Quantum Electronics and Photonics Group of the Institute;
- **an Industry Technology Programme** sessions of particular interest to those in the optics industry;
- **an exhibition of the latest optics and photonics technology;**
- **associated courses and workshops**

Contributions to all Photon06 events are welcomed. If you would like to offer a paper, we invite you to submit an abstract by **28 February 2006**.

UKCPO

Photon06 is organised by 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 associations, industry cluster groups and all similar organisations with interests in photonics and optics.

Current members include the Institute of Physics, the Institution of Electrical Engineers, the Scottish Optoelectronics Association, the Welsh Optoelectronics Forum, the Photonics Cluster, BAE Systems (Sowerby research laboratory), 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.

For details on how to become a member please contact the UKCPO Secretary, Chris Gracie
chris.gracie@optoelectronics.org.uk.

Organising Committee

UKCPO President and Chair Photon06

Julian Jones (Heriot-Watt University)

UKCPO Vice-President, Deputy Chair Photon06, Chair QEP-17 and Local Organiser

Allan Boardman (Salford University)

UKCPO Executive Secretary and Exhibition Organiser

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Jasmina Bolfek-Radovani (The Institute of Physics)

ITP Co-ordinator

Dipali Chauhan (The Institute of Physics)

Programme Co-ordinator

Claire Pantlin (The Institute of Physics)

Optics and Photonics 2006

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 Optical, Materials and Characterisation, Instrument Science and Technology groups. A special issue of *Journal of Optics A: Pure and Applied Optics* will be devoted to this conference.

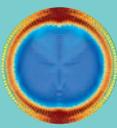
The programme will include focused sessions on:

- photonics and imaging in biology and medicine
- advanced imaging, microscopy and adaptive optics
- optical vortices
- optical tweezers
- diffractive optics
- fibre optic systems
- optical fibre sensors
- EUV and X-ray optics and sources
- structured optical materials
- optical environmental sensing
- optical diagnostic engineering
- instrumentation and measurement
- sensors and actuators
- optical techniques for materials characterisation

Optics and Photonics 2006 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 application to industrial measurement problems. Papers describing research in the following areas are particularly encouraged:

- new measurement and analysis techniques
- phase shifting and phase unwrapping
- high-speed measurements on solids and fluids
- micromasurement techniques and applications
- shape measurement and 3D machine vision.

A special issue of the journal *Optics and Lasers in Engineering* will be devoted to the best papers from the FASIG conference containing previously unpublished work. Authors of the selected extended abstracts will be invited to contribute full papers for this special issue.



QEP-17

This is the 17th meeting of a famous series and is organised by the Quantum Electronics and Photonics Group of the Institute of Physics.

The programme will include focused sessions on following subjects:

- dilute nitride semiconductors
- optical properties of nanostructures
- ultrafast processes in semiconductors
- semiconductor optoelectronics
- quantum information processing
- quantum degenerate gases
- coherent atom manipulation
- nonlinear optics
- computational physics
- metamaterials
- nanophotonics and plasmonics
- microstructured photonic materials
- advances in laser science
- quantum optics

Industry Technology Programme

The theme of the Photon06 Industrial Technology Programme will be 'Connecting emerging Optoelectronic technologies with future markets'. The programme will showcase the most recent technological advances, illustrate innovative industrial applications and identify emerging future markets. Bridging the divide between academia and industry, the programme will consist of a number of technology-industry focussed sessions. Two examples are:

'Innovative Industrial Laser Processing Technologies for Next Generation Manufacture'

Organised by the Association of Industrial Laser Users (AILU), this should be of interest to both academic and industrial delegates at Photon 06. It will concentrate on innovations in laser materials processing in two areas: power photonic sources (from high power CW fibre to table top femto-second lasers) and industrial technologies with a high potential future impact (from nanotechnology to rapid manufacturing).

'Optoelectronic Chemical Sensing'

Organised by the UK Optoelectronic Chemical Sensing Network (OptoCem.Net), a DTI Knowledge Transfer Network established to promote the development of gas and chemical sensing using optoelectronics. Presentations will focus on the needs of the oil/gas and water/environment industries and on the emerging technologies which can address these needs. Reference will be made to the results of a Roadmapping exercise conducted in the first half of 2006.

For further details about the programme, please e-mail dipali.chauhan@iop.org.

Exhibition

Monday 4 September – Tuesday 5 September 2005

The 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 Photon06 conference

infrastructure and the special location of the exhibition will ensure that the exhibition is a pivotal experience for the conference delegates, so that old acquaintances can be renewed and new contacts created.

If you are interested in exhibiting at Photon06, please e-mail chris.gracie@optoelectronics.org.uk.

Location

Situated centrally in mainland Britain, the city of Manchester has recently undergone one of the most ambitious urban regeneration projects ever undertaken in Britain. Its innovative new buildings have won the acclaim of architects world-wide. Manchester has a dynamic cultural life that is the envy of both UK and other European cities and has always been famous for its friendliness and warmth.

Manchester is ideally situated as a centre for visiting other parts of Britain. The region adjoins the spectacular scenery of the Lake District and Chester, York, Scotland and Shakespeare's Stratford are just a short journey away.

Manchester has a large and busy international airport, about 10 miles (16km) south of the city, 30 minutes from the University and only 20 minutes from the city centre. The Airport serves 175 worldwide destinations directly and offers flights from 22 British and Irish destinations. There are 28 daily flights from London, 29 daily flights from Scotland and 26 daily flights from Ireland.

From the airport's railway station six trains each hour make the 20-minute journey into the heart of Manchester.

Trains from city centre stations into the rest of the UK, connect London and Manchester with a journey of 2 ½ hours, as well as travelling directly to a wide range of cities including tourist attractions such as Chester, York, Scotland and Stratford.

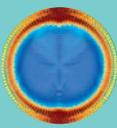
Half of Britain's motorway network passes through Manchester with approximate journey times of 2 hours to Birmingham, 3 ½ hours to London and 4 hours to Edinburgh by car allowing easy road access for delegates from the UK.

Venue

The conference and the exhibition will take place in the Reynold building located on the University of Manchester campus. The University is located close to both Piccadilly main line station and Oxford Road train station, with Victoria train station a little further away. Further details about directions to the venue will be available in due course.

Social events

Photon06 offers a rich social programme of events. There will be an informal reception on Sunday evening. A civic reception at the Manchester Town Hall will be organised on Monday evening. On Tuesday evening participants will be able to attend an optional get-together evening aimed at facilitating networking opportunities between academics and industry representatives. The Tuesday evening reception is being sponsored by the Journal in Modern Optics. The conference dinner will take place on Wednesday evening at the Manchester United stadium.



International Advisory Committee

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Peter Snowton (University College of Wales, Cardiff)
Terence Shepherd (Qinetiq)
Nikolay Zheludev (University of Southampton)
Ian Walmsley (University of Oxford)

Abstract submission

Oral and poster presentations are welcome for Optics and Photonics 2006 and QEP-17. Please submit a 250 word abstract (figure and references are not permitted) to the appropriate website following the instructions carefully by 28 February 2006. If you are unable to submit your abstract on-line, please send a copy to claire.pantlin@iop.org.

Submission of Abstracts

- For Optics and Photonics 2006 please go to www.photon06.co.uk
- For QEP-17 please go to http://groups.iop.org/QE/news_photon06.html

Authors will receive confirmation that their abstract has been submitted successfully together with a reference number which should be quoted when making subsequent enquiries.

Please direct any enquiries with regards to the programme to claire.pantlin@iop.org

Bursaries

The Optics and Photonics Division and the Quantum Electronics Group will each offer a limited number of bursaries to support the attendance of graduate students at the meeting. A number of student bursaries will also be available from the Rank Prize Funds.

In addition, the University of Manchester Photon Science Institute will offer a limited number of bursaries to fund the conference attendance.

For further details about the above, please visit the conference website at www.photon06.org or contact Jasmina Bolfe-Radovani at the Institute of Physics (see details below).

Further Information

Updated information about Photon06 is published at www.photon06.org and www.ukcipo.org

For more details about Photon06, please contact:

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