FEBRUARY 2007

EOS NEWSLETTER

THE OFFICIAL PUBLICATION OF THE EUROPEAN OPTICAL SOCIETY

# EOS marks 2006 milestones and successes

**2006 was a highly successful year for the EOS.**

Over the last few years, the EOS has become the largest representative of the European optics and photonics community. With eight national societies acting as full branches (France, Germany, Hungary, Italy, Russia, Sweden, Switzerland and the UK) and 10 affiliated societies, the EOS has more than 5000 individual members, 20 educational members, 50 corporate members, and brings together the academic and industrial worlds.

There were two great achievements last year: the launch of *JEOS:RP*, an online journal, in June and the largest EOS annual meeting (featuring six topical meetings), which took place in Paris in October. This meeting was also the venue for the first focus groups on imaging; information optics and micro-optics; metrology; optical fabrication technology and quality management in optics production; terahertz and microwave radiation; training and education; visual optics and colorimetry. These groups will promote networking within the society following strategic guidelines; help scientific co-operation; and organize future topical meetings.

The European Community's interest in photonics has increased. Thanks to a great effort from key industrial and academic players across Europe, the Photonics21 technology platform has established a strategic research agenda for the 7th Framework Programme. This new agenda raises important issues for the future, but also presents us with great responsibilities and challenges.

It is commonly believed that the 21st century will be the century of photonics. Indeed, optics and photonics technologies are used and have the potential to enhance the quality of life in many areas from environmental science and security to medicine and health; from information and telecommunications to consumer technologies. What's more, highly innovative research fields are emerging that will allow photonics to enter the nanoscience and nanotechnology area.

The EOS, thanks to the enthusiastic activity and talents of its members, and to the professional work of its central office, has the potential to become the driving force of initiatives devoted to the development of roadmaps for Europe and can provide a common platform for the academic world, research institutes and industry.

In the near future, we should concentrate our efforts in specific areas to strengthen Europe's influence in the photonics arena.

*Roberta Ramponi is the current president of the EOS.*

- **Education and training:** improving education in optics is the first step that will allow optics and photonics to make a stronger impact in research and production environments. Networking and mobility are key factors in fully exploiting existing teaching and training structures throughout Europe. In this respect the EOS can make an important contribution by collecting up-to-date information and making it available to all.
- **Bridging academia and industry:** one of the main problems when innovative technologies are being developed is closing the gap between academic institutions, where brilliant new ideas are often proposed but research tends to stop as soon as feasibility is demonstrated, and industry where short-term periods are sought between research and production implementation. The EOS can provide a forum where the different players can interact and fill this gap through mutual help. This will also benefit Europe's competitiveness.
- **Knowledge dissemination:** The EOS can make an important contribution to knowledge dissemination through organizing topical meetings and larger events. Increased co-operation with other learned societies and national institutions is of major importance as it will give greater visibility to European activities. Increasing scientific publication activity, mainly through *JEOS:RP*, and trying to attract both European and worldwide contributions, is also of significant importance.

I would like to conclude by wishing all EOS members and photonic-related activities in Europe the best of success in 2007.

**Roberta Ramponi** (e-mail roberta.ramponi@fisi.polimi.it).

# OPERA2015 goes to Helsinki

**Photonics database makes debut at Helsinki event.**

Photonics21 and OPERA2015 had a booth at the ICT showcase event, which was held in Helsinki, Finland, 21–23 November 2006. More than 4000 delegates attended and there were presentations and demonstrations on all areas of ICT technology. OPERA2015 was invited to speak and gave a talk entitled "The photonics information exchange and the IST project OPERA2015", at the Photonic Components and Subsystems conference session. The aim of the session was to present and discuss the strategy and content of the ICT work programme in photonics.

The beta version of the OPERA2015 web-based database on photonics research labs in Europe was demonstrated at the booth and the partner search tool attracted a good deal of interest from the photonics community. More than 400 new contacts were made by photonics researchers all over Europe. Significant steps were taken towards completing the database of European photonics research labs as several key network contacts, especially from Eastern Europe, were identified.

# OPERA2015 gives support to Photonics21

**Photonics21 outlines successes at its annual meeting.**



*Michael Lebby, Alexander von Witzleben (top) and Rosalie Zobel (middle) presenting to a full house (bottom) at Photonics21's annual meeting in December 2006.*

Photonics has been given a firm place in the European Union's (EU) 7th Framework Programme (FP7). The European Commission has created a new unit dedicated to photonics and plans to increase funding for photonics by more than 40% (€90 m) in 2007–2008. These were the positive results that the Photonics21 European Technology Platform (TP) presented at its annual meeting in Brussels in December 2006.

Thierry van der Pyl has headed the new photonics unit since January. "I would like to see that private–public partnerships work in research. This challenge is not only a matter between the EU and the research stakeholders, but also concerns the member states. A comprehensive strategy in Europe is the key," stated van der Pyl while attending his first Photonics21 meeting.

Rosalie Zobel, director of DG Information Society and Media of the European Commission, called on Photonics21 to continue to update its strategic research agenda and to go into more detail. She underlined the importance of photonics as a business area and invited Photonics21 to support the EU and the community to maintain competitiveness with the US and Asia. Zobel added that Photonics21 needs to identify and build a means of developing the photonics area and synergies between national programmes and private investment.

Since its constitution in December 2005, Photonics21 has established a firm foundation for the further development of photonics in Europe. Through the efforts of the TP, the topic has been taken up by eight other units within the Directorate-General for Research and incorporated into areas of great future potential such as the life sciences and manufacturing technology.

The Photonics21 recommendations have two core aspects: higher European and national expenditure on R&D in photonics; and a pan-European strategic approach. One of the first actions by members of the TP, which was supported by leading European companies in the optical technologies industry, was to call for a doubling of EU research expenditure on photonics and a pan-European strategy instead of a fragmented national approach. In view of the concerted investment strategy being pursued by rival markets in the US and Asia, the members of Photonics21 warned that a fragmented approach by the European research community would weaken Europe's ability to compete. The members also announced that they would increase their own research spending by €330 m per year.

The Photonics21 TP also outlined its role with regard to FP7. It will compile information on photonics research topics; structure the collected information; develop research priorities for Europe and provide a common platform for companies and research institutes. The Photonics21 TP will neither review FP7 proposals nor evaluate, assess or recommend FP7 proposals.

"We are very pleased with the results of our work so far. The boost being given to the area by the EU represents a large step forward, in view of the ongoing process of structural change, and will allow photonics-related topics to become firmly anchored in the FP7," declared Alexander von Witzleben, chairman of the executive board of German company Jenoptik AG and president of the Photonics21 TP. "The first essential foundations have been laid, namely a photonics community at the European level and the appropriate funding resources. The next step is to make use of this newly established basis to achieve our planned objectives in a reasonable timescale."

von Witzleben explained that photonics in some member states still has considerable potential to grow. He explained that this year it will be crucial for the community to set up a mirror group composed of representatives from each country with responsibility for photonics. This mirror group will help to improve national support for photonics and align national and European research priorities. The first countries that will be approached are France, the UK, Germany, Sweden, Ireland, Slovenia, the Netherlands, Austria, Poland, Italy, Spain and Finland.

# Norway hosts Northern Optics

**The 2006 Northern Optics conference was held in Bergen in June 2006.**

The Norwegian optics community is grouped within the acoustics and optics section of the Norwegian Physical Society. The section has approximately 100 members, and for practical purposes, it consists of two independent groups. The 80 members who belong to the optics group are associate members of the EOS. Because the optics and physics communities in Norway are small, we have preferred to stay within the Norwegian Physical Society rather than forming a separate optical society.

The main activity of the optics group is to organize the biennial electro-optics meeting. This meeting usually attracts around 100 attendees, including several invited speakers from abroad. The optics group is one of the co-organizers of the Northern Optics conference series, in collaboration with Denmark, Estonia, Finland, Latvia, Lithuania and Sweden.

2006 was Norway's turn to host Northern Optics, which was held in Bergen in western Norway, 14–16 June 2006. The meeting attracted 235 attendees and 17 exhibitors from 18 different nations. The academic programme consisted of five plenary talks, 10 invited talks, 36 contributed talks in two parallel sessions and approximately 100 posters.

The session topics were optics in life sciences; optical metrology and advanced imaging; lasers, nonlinear optics and quantum optics; optical sensors, guided wave optics and surface plasmons; optics in communication and micro-optical devices; and nanophotonics and material optics.


*Delegates at Northern Optics 2006 take a boat trip.*

One of the plenary speakers was Malgorzata Kujawinska who gave a presentation on Photonics21 and the opportunities for optics in the European 7th Framework programme. The research organization Sintef is now working to set up a Norwegian mirror group of Photonics21.

As is customary at the Northern Optics conference, there was a social programme, which included a boat trip and a conference dinner.

The next Northern Optics meeting, which will be the fourth in the series, will be held in 2009. The exact dates and location will be announced later this year.

**The EOS names fellows, and small branches elect board members.**

## The EOS fellows 2006

The EOS named its fellows for 2006 at its annual meeting in Paris in October. All fellows are judged to have made a remarkable contribution to the European optics and photonics community, and are regarded as a driving force of the EOS. The 2006 fellows are:

- **Mario Bertolotti**

Mario Bertolotti is a professor of physics at Universitá di Roma "La Sapienza" in Italy. He serves on the advisory committee of the EOS and is the first editor of *JEOS:RP*. He has made outstanding contributions to the understanding of coherence, lasers and nonlinear optics.

- **Susana Marcos**

Susana Marcos works at Instituto de Optica "Daza de Valdéz", CSIC in Madrid, Spain. She is currently president of the vision sciences committee of the Spanish Optical Society. She has made outstanding contributions to the understanding of the optical properties of the eye.

- **Giancarlo Righini**

Giancarlo Righini is professor and research director at Nello Carrara Institute of Applied Physics, CNR Laboratory of Optoelectronic Technologies, Florence, Italy. He is a founding member of the EOS and a co-founder of the Italian Society of Optics and Photonics. He has made outstanding contributions to optoelectronics, fibre and integrated optics.

- **Maria Yzuel**

Maria Yzuel is a professor of physics at Universidad Autónoma de Barcelona, Spain. She is a founding member of the EOS and was secretary from 1996 to 1998. She has contributed significantly to the development of optics in Spain and has made outstanding contributions to optical information processing.

## Fellows nominations for 2007

Any EOS member can elect a person as a fellow of the society. The 2007 nominations of excellent scientists, researchers and engineers in optics and photonics to the EOS fellow status closes on 14 February. For more information on the procedure, please see www.myeos.org/members_fellows.php.

## Small branch and affiliated societies

The small branches and affiliated societies of the EOS have elected their representatives to the EOS board. Prof. Peter Seitz (Switzerland) will represent the affairs of the small branches (Hungary, Italy, Russia, Sweden and Switzerland) while Prof. Concepción Domingo Maroto (Spain) will look after the affairs of the affiliated societies.

# Calendar

| DATE | EVENT | LOCATION |
|---|---|---|
| 13–16 March | 2nd International Exhibition for Laser and Optical Industries | Moscow, Russia |
| 3–8 June | Optical Interference Coatings (OIC 2007) | Tucson, US |
| 12–15 June | Adaptive Optics for Industry and Medicine | Galway, Ireland |
| 17–19 June | EOS Conference on Trends in Optoelectronics | Munich, Germany |
| 18–20 June | EOS Conference on Frontiers in Electronic Imaging | Munich, Germany |
| 11–14 September | 8th International Conference on Correlation Optics | Chernivtsi, Ukraine |
| 12–14 September | 3rd EOS Topical Meeting on Advanced Optical Imaging Techniques | Lille, France |
| 30 September – 3 October | Topical Meeting on Optical Microsystems | Capri, Italy |

For more information on any of these events, please visit **www.myeos.org**.

# Are you a member of the EOS?

## Look at the benefits

**Individual members are eligible for:**

- reduced fees for *JEOS:RP* at www.jeos.org;
- a regular *EOS Newsletter* e-mail;
- reduced conference fees;
- reduced prices for EOS journals;
- free subscription to *Optics & Laser Europe*;
- and, for those living outside Germany, a 50% discount on a subscription to the German-language journal *Photonik*, published by AT-Fachverlag.

**Additional benefits for corporate members:**

- a company profile in the EOS directory;
- a presence on the EOS website;
- free advertisements for jobs in the EOS market;
- reduced conference fees for all employees.

### EOS 2007 membership fees

**Individual members** (who do not belong to a branch or affiliated society of the EOS): **€40**
**Students** (who do not belong to a branch or affiliated society of the EOS): **€10**
**Corporate members** (regardless of the number of employees of the company or members of the institute): **€200**

Individual members of the branches SFO (France), DgaO (Germany), HOS (Hungary), SIOF (Italy), LAS (Russia), SOS (Sweden), SSOM (Switzerland) and the Optical Group IOP (UK) are automatically full individual members of the EOS. Individual members of the affiliated societies Promoptica and CBO-BCO (Belgium), CSSF (Czech and Slovak Republic), DOPS (Denmark), FOS (Finland), the Optics Division of the Norwegian Physical Society (Norway), the Optics Division of the Polish Physical Society (Poland), ROS (Romania) and SEDO (Spain) are automatically associate members of the EOS.

### Membership information

To find out more about joining the EOS, contact Klaus Nowitzki, executive director, Hollerithallee 8, D-30419 Hanover, Germany (tel +49 (0)511 2788 115; e-mail info@myeos.org; web **www.myeos.org**).

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