

**EOS Member Newsletter**

November 2006

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**Executive Committee**

Roberta Ramponi (President)  
 Theo Tschudi (Secretary)  
 Hans Peter Herzig (President Elect)  
 Joseph Braat (Past President)  
 Daniel Dolfi (Treasurer)  
 Pavel Tomanek (Chairman of the Advisory Committee)  
 Peter Török (Editor General)  
 Klaus Nowitzki (Executive Director)

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**inside EOS**

## Roberta Ramponi becomes new EOS President

**At the Annual General Meeting on 18 October 2006 in Paris, France, the society appointed the new EOS President Roberta Ramponi.**

Following the presentation of the 2006 Board Election results by Election Officer David Briners, the new Board of Directors elected the new Executive Committee of the EOS.



EOS President Roberta Ramponi

The members of the Execom for the term 2006 - 2008 are:

- Roberta Ramponi (President)
- Theo Tschudi (Secretary)
- Hans Peter Herzig (President Elect)
- Joseph Braat (Past President)
- Daniel Dolfi (Treasurer)
- Pavel Tomanek (Chairman of the Advisory Committee)
- Peter Török (Editor General)
- Klaus Nowitzki (Executive Director)

For the sake of a more effective distribution of tasks and in view of the growing importance of the recently launched electronic Journal of the European Optical Society Rapid Publications (JEOS:RP), the Board decided to create the new position of Editor General on the Executive Committee. Former Secretary Peter Török, in his function as Deputy Editor and driving force behind



EOS Past President Joseph Braat

JEOS:RP, was elected to overtake this new position.

After his two-year presidency (2004 - 2006) Joseph Braat automatically became Past President and remains on the Execom for next two years.

On behalf of the board Roberta Ramponi expressed their thanks for Braat's great work during the past two years. The launch of JEOS:RP and the first Scientific Annual Meeting of the EOS were the highlights of Braat's presidency

and represent two important steps in the further development and growth of the EOS.

Following the EOS tradition, Braat now overtakes the chairmanship of the EOS Prize and Fellowship Committee.

The EOS Advisory Committee elected Pavel Tomanek (CSSF) as their new chairman. He will be assisted by his newly elected Deputy Peter Andersen (DOPS).



EOS President Elect Hans Peter Herzig

The key aims of Ramponi's presidency are the increase of the number of EOS Branches, combined with a stronger integration of and cooperation with the Branches and Affiliated Societies.

Equally important challenges are the build-up of the Focus Groups, accompanied and complemented by a strengthening of JEOS:RP and an increased number of EOS Topical Meetings.

**inside EOS**

## New EOS Board inaugurated

**The new Board of Directors for the term 2006 to 2008 was inaugurated in Paris, France, on 17 October 2006.**

2006 was an election year of the EOS. Newly elected to the Board were:



Cornelia Denz (Westfälische Wilhelms-Universität Münster, Germany)



Pierre-Yves Fonjallaz (Kista Photonics Research Centre, Sweden)



Hervé Lefèvre (IXCore S.A.S., France)



Gordon Love (University of Durham, UK)

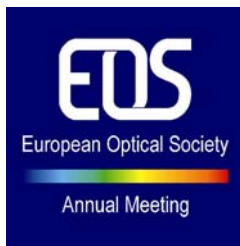


Concita Sibilìa (Università di Roma "La Sapienza", Italy)



Also new on the EOS Board is Ralph Peter Tatam as the designated representative of the IOP Optical Group (United Kingdom).

For the list of all current EOS Board Members, please see [www.myeos.org/about\\_organization.php](http://www.myeos.org/about_organization.php).



## EOS\_events

## EOS Annual Meeting 2006 attracts 670 attendees

The six Topical Meetings of the first Scientific Annual Meeting of the EOS (16-19 October 2006) attracted 570 attendees.

A further 100 participants came to Paris to attend the inauguration meetings of the Focus Groups, the General Assembly and the meetings of the Advisory Committee, Industrial Committee, Board of Directors and the Executive Committee.

The EOS Annual Meeting was held in conjunction with the OPTO exhibition with over 200 exhibitors and more than 4000 visitors, and featured the following six topical meetings:

- TOM 1- Biophotonics and Biomedical Optics
- TOM 2 - Extreme Optics
- TOM 3 - Nanophotonics, Metamaterials and Optical Microcavities
- TOM 4 - Micro-Optics, Diffractive Optics and Optical MEMS
- TOM 5 - Photonic Devices in Space

- TOM 6 - Nonlinear Optics: From Sources to Guided Waves

For the complete programme of the EOS Annual Meeting 2006 please see

[www.myeos.org/paris](http://www.myeos.org/paris).

The success of the first Scientific Annual Meeting of the EOS exceeded all expectations of the organisers. At this point the EOS would like to say thank you to their cooperation partners and sponsors, the EOS Branches and Affiliated Societies and last but not least to the topical meeting chairs and programme committee members as well as to all speakers and participants.

Next year's Annual General Meeting of the EOS will be held in Munich, Germany, in conjunction with the World Photonics Congress 2007 (17 - 22 June 2007) and the Laser World of Photonics exhibition (18-21 June 2007) and features two EOS Conferences (see next page). In view of the great success of the 2006 Annual Meeting, the EOS and the organisers of the OPTO

are keen to continue their cooperation for 2008.

### Meeting Digests

The topical meeting digests are now available in the [EOS online shop](http://EOSonline.shop).

Rates	Members *	Non-members
<b>TOM 1</b>	40 €	50 €
<b>TOM 2</b>	25 €	31.25 €
<b>TOM 3</b>	60 €	75 €
<b>TOM 4</b>	40 €	50 €
<b>TOM 5</b>	25 €	31.25 €
<b>TOM 6</b>	55 €	68.75 €

\* The member rate is available to: full individual, student and corporate members as well as to EOS members through the Branches SFO (France), DGaO (Germany), SIOF (Italy), SSOM (Switzerland), HOS (Hungary), SOS (Sweden), LAS (Russia) and of the IOP Optical Group (United Kingdom).

EOS Associate members are not entitled to the member rate, unless they purchase an upgrade to a full individual membership (12.50 €) through the [EOS online shop](http://EOSonline.shop).

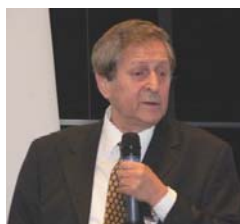
Are you unsure about your membership status? Then please have a look at [www.myeos.org/membership.php](http://www.myeos.org/membership.php) or send an email to [info@myeos.org](mailto:info@myeos.org).



Opening talk by Arnold Migus, Director of the CNRS



EU Commissioner Viviane Reding welcomes the attendees of the EOS Annual Meeting 2006 in her video address.



Plenary Talk by Claude Cohen-Tannoudji (Nobel Prize Winner 1997, ENS, France): Ultracold atoms.

## EOS\_events

## Kick-off meetings of the EOS Focus Groups

Alongside the Annual Meeting six EOS Focus Groups held their kick-off meetings.

The EOS Focus Groups will provide a platform for the communication between experts from science and industry. Aims of the Focus Groups are at:

- helping the EOS to provide the members with specific information about their areas of interest;
- helping all members to easier connect with their peers and to establish new contacts within their area of interest;

- making the working results available to the EOS Photonics21 representatives to be considered for recommendations to the European Commission.

Six Focus Groups held their kick-off meeting alongside the EOS Annual Meeting 2006:

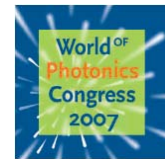
- Training and Education (Chair: Chris Dainty)
- Micro-Optics and Information Optics (Chairs: Jürgen Jahns, Karl-Heinz Brenner)
- Quality Management in Optics Production and Optical Fabrication Technology (Chair: Detlev Ristau, Oliver Föhnle)
- Imaging (Chair: Michael

- Totzeck, Philippe Refrégier)
  - Optical Metrology (Chair: Theo Tschudi)
  - Terahertz and Microwave Radiation (Chair: Paul Planken, Martin Koch)
- Currently, the EOS is preparing the website presence for the Focus Groups. All EOS members will be informed once the Focus Groups website is available .

Would you like to join a Focus Group or are you interested in establishing a Focus Group on your field of competence?

Then send an email to [focus@myeos.org](mailto:focus@myeos.org).

## EOS events

**Call-for-Papers: EOS Conference on Trends in Optoelectronics****June 17 - 19, 2007**

General Chair: Dieter Jäger, University of Duisburg-Essen, Germany

**June 17: Lighting and Displays****Chair:**

Satoshi Ishihara (OITDA - Optoelectronic Industry and Technology Development Association, Japan)

**Invited speakers:**

Yutaka Ishii (Sharp Corporation, Japan):  
Challenges to High-Performance LC-TVs in Digital Network Era  
Ruediger Müller (Osram OPTO Semiconductors, Germany):  
LED Lighting - Achievements and Challenges from a Manufacturer's Perspective

**Topics:**

- Solid state lighting
- Trends in innovative lighting systems
- White LEDs
- LEDs for signalling and advertising
- LEDs for new applications
- LCD and plasma displays
- OLED displays
- LED projectors
- Flat panel and 3-D displays

**June 18: Optical Methods for Biometrics and Authentication****Chair:**

Chris Gracie (SOA- Scottish Optoelectronics Association, Scotland)

**Invited speakers:** tbd**Topics:**

- Recognition of human characteristics (finger print, face iris, hand geometry)
- Multiple biometrics
- Surveillance & tracking
- Lip reading and behavioural analysis
- Tagging of targets and network implications
- Rapid analysis of video information
- Role of pattern recognition

**June 19: Information and Communication****Chair:**

Michael Leiby (OIDA - Optoelectronics Industry Development Association, USA)

**Invited speakers:**

David Smith (Centre for Integrated Photonics, United Kingdom)

Ed Murphy (JDSU, USA):

Optoelectronic Devices for Optical Communication Systems

**Topics:**

- Broadband optical communication and networks
- Plastic optical fiber (POF) technology
- Light wave communication
- FITH and triple play
- Metro and home networks
- Automotive networks
- Free space laser communication
- Fiber wireless techniques
- Trends in holography
- Optical signal processing
- Optical instrumentation and metrology
- DVDs and blu-ray discs
- Trends in optical memory

**Abstract Submissions**

Abstracts for these two EOS Conferences should be submitted online only via the EOS homepage: [www.myeos.org/munich](http://www.myeos.org/munich).

Authors are requested to submit an abstract covering a minimum of half a page and a maximum of two pages.

**Deadline: 15 December 2006****Contact: [munich@myeos.org](mailto:munich@myeos.org)**

## EOS events

**Call-for-Papers: EOS Conference on Frontiers in Electronic Imaging****June, 18 - 20, 2007**

General Chair: Peter Seitz, CSEM SA and University of Neuchatel (Switzerland)

**June 18: Application Specific Image Sensors****Chairs:**

Abbas El Gamal (Stanford University, USA); Boyd Fowler (Fairchild Imaging Inc. USA)

**Invited speakers:**

Ralph Etienne-Cummings (Johns Hopkins University, USA); Hirofumi Sumi (Sony Corporation, Japan)

**Topics:**

- Physics, design and simulation of novel smart pixels
- Application-specific pixels with record performance
- High-speed image sensing
- High-dynamic-range image sensing
- Charge-domain signal processing with CCD structures
- Architectures for high-performance image sensors
- Electronic circuits for single-chip cameras
- Signal processing algorithms and implementations on seeing chips
- Application examples with record performance

**June 19: High-Performance 3D Imaging****Chair:**

Shoji Kawahito (Shizuoka University, Japan)

**Invited speakers:** Kunihiro Asada (Tokyo University, Japan); Andrea Simoni (CRS, Italy)

**Topics:**

- Custom image sensors for passive triangulation (stereo)
- Custom image sensors for active triangulation (pattern projection)
- Custom image sensors for monochromatic interferometry
- Custom image sensors for optical coherence tomography (OCT)
- Custom image sensors for time-of-flight 3D range imaging
- Lock-in and demodulation pixels
- Time-of-arrival and gating measurement techniques
- Drift-field techniques for high-speed charge domain processing
- Event-driven image sensing
- Application examples with record performance

**June 20: Single-Photon Imaging****Chair:**

Edoardo Charbon (EPFL, Switzerland)

**Invited speakers:**

Takeharu Goji Etoh (Kinki University, Japan); Radivoje Popovic (EPFL, Switzerland)

**Topics:**

- Electron Multiplication Charge Coupled Devices (EMCCD)
- Linear-mode APD pixels and image sensors
- Geiger-mode APD pixels and image sensors
- Smart pixels with noise reduction functionality
- Double-gate field effect transistors (DG-FET) for image sensing
- Charge modulation device (CMD) image sensors
- Charge-averaging techniques with CCD pixels
- Ultra-low-noise CCD and CIS fabrication processes
- Architectures for low-noise CCD and CMOS image sensors
- Application examples with record performance



Hungarian Optical Society  
(HOS)

Institute of Physics



### Affiliated Societies

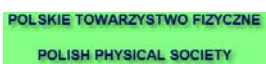
Comité Belge d'Optique  
CBO - BCO Belgisch  
Comite voor Optica

Czech and Slovak Society  
for Photonics (CSSF)



FINNISH OPTICAL  
SOCIETY (FOS)

Nederlandse Vereniging voor Fotonica



ROMANIAN  
OPTOELECTRONICS  
SOCIETY (ROS)

SOCIEDAD  
ESPAÑOLA DE  
OPTICA (SEDO)

### eos co-sponsored events

**Upcoming EOS co-sponsored events**

1st International Optence  
Workshop on Silicon Photonics  
10 Nov. 2006, Mainz,  
Germany

ODF '06 [more]  
6 - 8 Dec. 2006, Nara, Japan  
PSIP 2007 [more]  
31 Jan. - 2 Feb. 2007, Mul-  
house, France

Adaptive Optics for Industry  
and Medicine [more]  
12 - 15 Jun. 2007, Galway,  
Ireland  
See also: [EOS event calendar](#)

### JEOS:RP publications

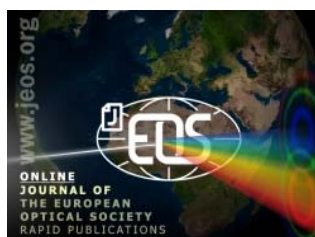
## New publications in JEOS:RP

Several new papers were recently published in JEOS:RP, the electronic Journal of the European Optical Society Rapid Publications.

JEOS:RP is an open-access journal. To read the full papers, please click on the links:

Influence of the Raman depolarisation ratio on far-field radiation patterns in coherent anti-Stokes Raman scattering (CARS) microscopy  
*H. Rigneault, D. Gachet, N. Sandeau* [06013]

Switching and instabilities of optical vortices in nonlinear dual-core photonic crystal fibre couplers  
*J. R. Salgueiro, H. Michinel, A. Ferrando, Y. Kivshar* [06014]



Effective spectral optical functions of lamellar gratings  
*M. Foldyna, K. Postava, R. Ossikovski, A. De Martino, E. Garcia-Caurel* [06015]

Interference or not: analysis of Young's experiment for a single-cycle pulse  
*G. Girieud, S. F. Pereira* [06016]

Transverse magneto-optical Kerr effect measured using phase modulation  
*K. Postava, A. Maziewski, A. Stupakiewicz, A. Wawro, L. T.*

*Baczewski, S. Visnovsky, T. Yamaguchi* [06017]

Temporal Lau effect: Noncoherent regeneration of periodic pulse trains

*J. Lancis, C. M. Gómez-Sarabia, J. Ojeda-Castañeda, C. R. Fernández-Pousa, P. Andrés Bou* [06018]

Mesoscopic magnetism in dielectric photonic crystal meta materials: topology and inhomogeneous broadening  
*N. A. Mortensen, S. Xiao, D. Felbacq* [06019]

**Publication rates**  
EOS Member rate: 350 €  
Non-member rate: 400 €

**Contact**  
Peter Török (Deputy Editor),  
Email: [torok@myeos.org](mailto:torok@myeos.org)  
[www.jeos.org](http://www.jeos.org)

### spotlight\_europe

## NEMO Survey: Careers in Optics and Photonics

**What are the obstacles and incentives in scientific careers in optics/ photonics?**

Many young talented researchers don't opt for a scientific career, others drop-out after a few years.

The International Survey on Careers in Optics and Photonics tries to understand the obstacles and incentives in careers in optics/photonics. Optics and photonics are key technologies at the heart of the contemporary knowledge society.

Results of the survey will be used to develop projects that will serve to limit the drop-out of talented researchers and attract gifted students into scientific careers.

Special attention will be given to gender issues. The results will be available in March 2007.

You can participate by completing the online survey on <https://alnapc9.vub.ac.be/index.php?sid=3>. This will take approximately 15 minutes.



**NEMO is funded under the 6th Framework Programme of the European Commission.**

**Contact**  
Elke van den Brandt  
(Project Officer for International Survey on Careers in Optics and Photonics)  
Email: [evdbrandt@vub.ac.be](mailto:evdbrandt@vub.ac.be)

spotlight europe

## OPERA2015 supports the Photonics21 Annual Meeting 2006

The Photonics21 Annual Meeting 2006 will take place in Brussels on 4th and 5th December in Brussels.

The Photonics 21 Executive Board and the Board of Stakeholders will recapitulate the activities and achievements in 2006 and present the Photonics21 draft action plan for 2007.

A special session in cooperation with the European Commission will be dedicated to

photonics in FP7. Representatives from different units within the European Commission will give detailed up-to-date information on the first calls with relevance to Photonics. OPERA2015 is again supporting Photonics21 by providing capabilities to prepare and conduct the meeting.

For more information please visit [www.photonics21.org](http://www.photonics21.org)

Registration fee: 130 €

### AGENDA

**4 December 19.00 - 22.00**  
Reception

**5 December 08.45 - 17.15**

Plenary Session:  
Welcome, View from abroad Photonics Research in the US, Annual Report, Information session on Photonics Calls in FP7 (2007 - 2008)

Parallel Working Group Sessions

Plenary Session:  
Reports from the Working Groups, Conclusions

### LOCATION

Crowne Plaza Brussels City Centre  
Rue Gineste 3  
B-1210 Brussels, Belgium

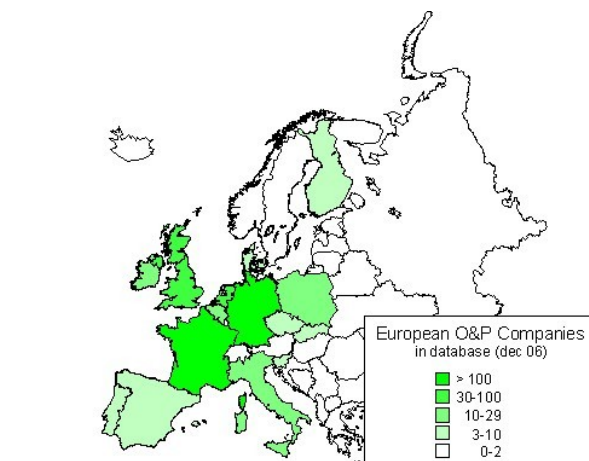
spotlight europe

## Inventory of European optics and photonics companies

The OPERA2015 consortium compiled an inventory of the current European optics and photonics companies

The information for this inventory comes from

- Internet search using terms like optics, photonics, lasers, detectors etc. in combination with industry and EU country.
- Consulting professional experts in the optics / photonics field and experts of national agencies initiating research programs.
- Databases of (inter)national research programs and networks, by selecting information on OP industrial participants.
- EU Sixth Framework Programme (FP6) and EUREKA Programme; identification of OP research projects and industrial participants.
- National research programmes in EU countries, e.g. IOP-Photonic Devices.
- European Networks and Clusters in the optics / photonics field, like OPTICON, PhotonicNet, Photonics 21, Photonics Cluster UK.



- Conferences in the optics / photonics field: e.g. SPIE, EOS.
- Magazines: e.g. Optics & Laser Europe, Photonics Spectra, Europhotonics.

The geographical distribution of the number of companies found so far, is given in this map:

For the analysis in WP 3 the companies are classified with respect to their R&D capabilities in the following categories:

- Initial R&D Performer
- Emerging High Performer
- Continuing High Performer

- High Potential Start Up

More than 650 companies have been added in the last 6 months. The total number of companies in the field of optics and photonics in Europe is estimated to range from 1000 to 3000.

### Contact

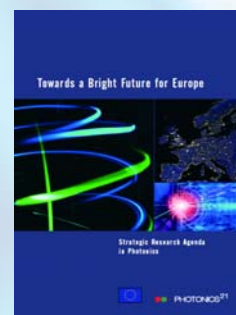
All Optics & Photonics companies are invited to send their basic information to:

Bart Snijders TNO (NL)  
(Work package leader)  
Email: [bart.snijders@tno.nl](mailto:bart.snijders@tno.nl)



... is a strategic project funded within the 6th Framework Programme of the EU and is dedicated to developing a joint strategy for optics and photonics in Europe.

The EOS is a member of the OPERA2015 consortium.  
[www.opera2015.org](http://www.opera2015.org)



The first Photonics Strategic Research Agenda "Towards a Bright Future for Europe" was finalised in April 2006.

Download: [Photonics SRA](#) (pdf-file; 4.55 MB)



... is a Technology Platform for all stakeholders in photonics and has more than 400 members from all over Europe and beyond.

The EOS is a member of Photonics21 and is represented in the Executive Board by the former EOS President Chris Dainty (National University of Galway, Ireland).

[www.photonics21.org](http://www.photonics21.org)