

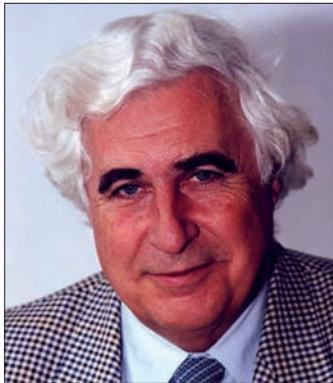


NEWSLETTER

COMMISSION INTERNATIONALE D'OPTIQUE • INTERNATIONAL COMMISSION FOR OPTICS

Past-president addresses all members

The process for the ICO Bureau elections is open for nominations.



Prof. René Dändliker, ICO past-president and chair of the ICO Nominating Committee

Dear Territorial and Bureau Members, This year the ICO Bureau will be reconstituted through elections by territorial member participation. As past-president of the ICO, I assume the chairmanship of the Nominating Committee with three additional members: Anna Consortini, Asher Friesem and Rajpal Sirohi. We will be overseeing the nomination process and the election at ICO-21, the Triennial Congress of the International Commission for Optics "Optics for the 21st Century", which takes place in Sydney, Australia, on 7–10 July 2008.

The nomination and endorsement process for the eight member-elected vice-presidents is now open. With the appointed international organization member vice-presidents (up to eight) and the executive committee, comprising the president, the immediate past-president, the secretary, the associate secretary, and the treasurer, they will make up the ICO Bureau.

The appropriate regulations covering the

nominating process and a description of the eligibility of current members for an additional term are available at the ICO website. It is important that this process is given serious consideration so that we can have quality officers representing the international optics community. I hope that the process will lead to a diverse (especially geographically) bureau. If you have any questions or concerns, I would appreciate hearing from you.

The Nominating Committee is expecting to get names for candidates before 29 February 2008 in good time for our preparations for the elections. However, it should be remembered that nominations for all positions/officers close only 24 hours before the second business meeting of the International Commission for Optics General Assembly in Sydney. E-mail your nominations to me (rene.dandliker@unine.ch).

René Dändliker, chair of the ICO Nominating Committee

Marcos gets ICO prize for visual optics and biophotonics

Research aids an understanding of the complex mechanisms involved in the human visual system.



Susana Marcos, a professor of research at the Spanish National Research Council, Madrid, Spain.

Following the establishment of the ICO Prize (adopted in 1982), to be given annually to an individual who has made a noteworthy contribution to optics, and published or submitted for publication before s/he has reached the age of 40 (as per 31 December 2007), *ICO Newsletter* announces the award for 2007.

This year the ICO Prize goes to Susana Marcos, a professor of research at the Institute of Optics, the Spanish National Research Council (CSIC), Madrid, Spain. The award proposal was unanimously approved by an ICO Bureau meeting held in Accra (Ghana) last November. The citation reads: "The ICO Prize for the year 2007 is given to Prof. Susana Marcos in recognition of her outstanding contributions in the areas of visual optics and biophotonics. These achievements were done as a researcher younger than 40 years old."

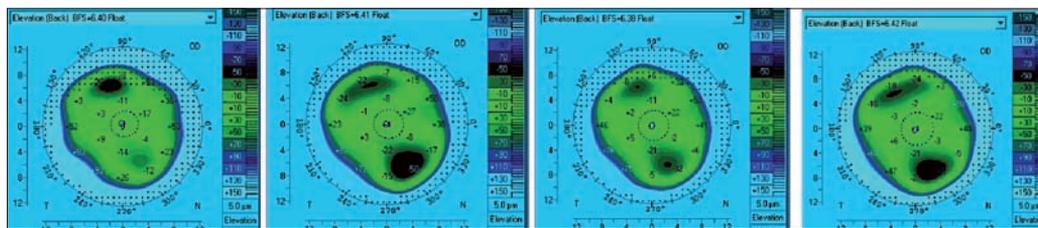
Susana Marcos (born in Salamanca, Spain, 1970) received her MS (1992) and PhD (1996) degrees in physics from the University of Salamanca, Spain. She carried out her predoctoral research at the Instituto de Óptica, Consejo Superior de Investigaciones Científicas (CSIC),



Susana Marcos (fourth from left) with her collaborators from the Visual Optics and Biophotonics Laboratory, at the Hall of the Instituto de Óptica, Madrid, Spain.

Madrid, Spain, in the field of physiological optics, working on a novel technique to resolve the foveal cones *in vivo*. She was a postdoctoral research fellow for three years at Stephen A Burns' lab at the Schepens Eye Research Institute, Harvard University. She was recipient of a Fulbright postdoctoral fellowship and a Human Frontier Science postdoctoral fellowship.

Images from a recent study of LASIK-induced posterior corneal changes, which validated Marcos' corneal's model. From left to right: pre-LASIK; post one day; post one week; post one month. After L Sawides, J Merayo and S Marcos, ARVO 2007, program Nr. 3531.



At the Instituto de Óptica in Madrid, Prof. Marcos leads several research grants on visual optics and biophotonics, funded by national and international agencies, as well as international companies. She is the director of the Visual Optics and Biophotonics Laboratory, and supervises the work of several PhD students.

She has pioneered research in novel techniques to assess the optical properties of the ocular optics and the human retina. Among her most active research paths, she and her group undertake pioneering studies in optical aberrations and myopia, intraocular lens evaluation and design, mono- and multifocal contact lenses, adaptive optics in vision, and the microscopic detection of ocular pathogens. She also does research into the design and development of a new instrument for laser ray tracing, a Hartmann–Shack wavefront sensor, a Purkinje imaging system and gradient index LRT.

Prof. Marcos has published more than 50 peer-reviewed publications (with more than 1200 citations) and has been invited to lecture at more than 100 international conferences and research centres. Her work has been recognized with several national and international awards, including the Adolph Lomb Medal, by the Optical Society of America, and the European Young Investigator Award by EURHORCS-ESF. Some of her findings have been reported

in newspapers in Spain and the US.

She served as chair of the Applications of Visual Science Technical Group at the Optical Society of America, and she is president of the Visual Sciences Committee at the Spanish Optical Society and an elected fellow of the European Optical Society. Prof. Marcos is a topical editor in the journal *Vision Research*, she has been a member of the organizing committee for several international meetings and she has served on panels for several funding agencies and other organizations.

Prof. Marcos will deliver an invited plenary lecture at one of the major ICO meetings, where the award ceremony will also take place. This event will be publicized on the ICO website.

The ICO Prize committee, chaired by Dr B Y Kim and comprising Prof. S Bagayev (Russia), Prof. A Friesem (Israel), Prof. G Jin (People's Republic of China) and Prof. J Love (Australia), is now seeking nominations for the 2008 ICO Prize. Nominators are asked to follow the instructions given on the ICO website. These should be sent by 15 April 2008 to Dr B Y Kim, Chair of the Committee, Novera Optics, KT Second Research Center, 463-1 Jeonmin-dong, Yuseong-gu, Daejeon 305-811 Korea (fax 82 42 602 3799; yoon.kim@noveraoptics.co.kr).

M L Calvo

Angelsky receives the Galileo Galilei Award for 2007

A recognition of optics and photonics activities in Ukraine

At the ICO Bureau meeting held in Accra, Ghana, on 17–18 November, the proposal to give the ICO Galileo Galilei Award 2007 to Prof. Oleg V Angelsky of Chernivtsi University, Ukraine, was approved. The citation reads: “For his outstanding contributions in the field of optical correlation, speckle interferometry and holography in diffuse optical fields achieved under comparatively unfavorable conditions.” The “conditions” refer to difficult economic/social conditions, and a lack of access to scientific/technical facilities and information.

Prof. Angelsky (born 5 May 1957, Ukraine) is a professor in the Correlation Optics Department at Chernivtsi University. He received a PhD from the Institute of Physics, Kiev, Ukraine in 1983 and a Dr. Sci. from Saratove State University, Russia, in 1990. He then became professor of Chernivtsi University in 1991.

He was a postgraduate student at Chernivtsi

State University in 1979–1982, assistant professor in 1979–1982 and associate professor in the Department of Optics in 1985–1988. Since 1988 he has been head of the Department of Correlation Optics. Since 1997 he has also been Dean of the Engineering Faculty, Chernivtsi National University.

Prof. Angelsky's main research interests are rough surface characterization, fractal optics, holography, light scattering by random phase objects and singular optics, on which he has published more than 100 peer-reviewed papers and for which he holds 18 patents.

As for his contributions to academic societies and professional activities, since 1993 he has chaired the International Conferences series on “Holography, Correlation Optics and Recording Materials” and “Correlation Optics”, held twice a year in Chernivtsi with the support of SPIE, the ICO and the EOS. This is an international



Oleg V Angelsky, a professor at Chernivtsi University, Chernivtsi, Ukraine, the recipient of the ICO Galileo Galilei Award 2007.



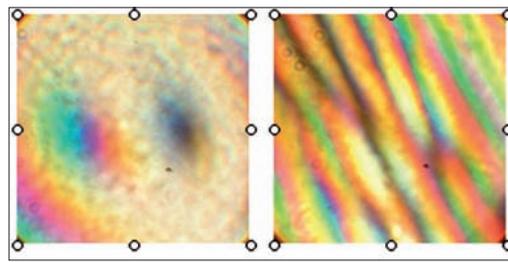
Oleg V Angyelsky and students at one of the graduation ceremonies at Chernivtsi University, Ukraine.

meeting series in which scientists from many countries from all over the world take part as participants and lecturers.

Prof. Angelsky has been the editor of various SPIE Proceedings for the aforementioned conferences. He was also guest editor of the special issue of *Optical Engineering* (vol. 34, issue 4, 1995) subtitled "Optics in Ukraine".

His academic and scientific merits have been recognized with various honours: fellow of the Institute of Physics (UK; 1999, 2004), chartered physicist of the Institute of Physics, (UK; 1999), chartered scientist of the Institute of Physics (UK; 2005), and fellow of SPIE (2001) and OSA (2003). In addition, he is a member of the Academy of Science of University of Ukraine (1997), recipient of the Rozhdestvensky Russian Optical Society Medal, Russia (1995), recipient of the Yaroslav Mudry Medal of the Academy of Science of Universities of Ukraine (1998) and recipient of the title of Honoured Worker of Science and Engineering of Ukraine.

The main achievement of Prof. Angelsky during the period of serious economic problems in Ukraine (1990–2000) was the establishment and development of the Scientific School on Correlation Optics at the Department of Optics of Chernovtsi University.



Singularity obtained in a white light beam passing a double-axial crystal placed between a matched polarizer and analyser, without a reference wave (left) and with a reference wave (right). After O V Angelsky et al. 2005 *Optics Express* **13**(20) 8179.

Prof. Angelsky will deliver an invited plenary lecture at one of the major ICO meetings, where the award ceremony will also take place. This event will be publicized on the ICO website.

The ICO Galileo Galilei Award committee comprises the chair, Ichirou Yamaguchi (Japan), and members, S Bagayev (Russia), Z Ben Lakhdar (Tunisia), A Consortini (Italy), N Gaggioli (Argentina) and V Vlad (Romania). The call for the 2008 award is now open for nominations. All of the related information is available at <http://www.ico-optics.org/Awards>.

M L Calvo

ETOP 2007 attracts delegates from around the globe

More than half of the conference budget supported attendees from less-fortunate circumstances.



Marc Nantel, ETOP conference chair; Minella Alarcon, plenary speaker; Brian Wilson, plenary speaker; Stephen Pompea, keynote speaker.

The 10th International Topical Meeting on Education and Training in Optics and Photonics (ETOP) was held on 3–5 June 2007 at the Conference Centre in Ottawa, Canada. More than 100 representatives from 24 countries met to exchange best practice in the varied field of photonics and optics education, through oral presentations, posters and networking receptions. ETOP 2007 was co-located with Photonics North and its industrial trade show. Dr Marc Nantel, director of business development at the Ontario Centers of Excellence (OCE), was conference chair and the late Prof. Roger Lessard from Université Laval was co-chair. The event was sponsored by SPIE, the OSA, the Institute for Electrical and Electronics Engineers' Laser and Electro-Optics Society, the ICO, the National Academies of Science and OCE.

The conference opened on Sunday afternoon with a plenary address by Minella Alarcon from UNESCO on the Active Learning in Optics and Photonics project. This was followed by three sets of parallel sessions on Programs, Fundamentals and Larger Issues, and K-12 Education. The first day was capped by a welcome reception and poster session in the evening, where all could mingle and reconnect with their colleagues from around the world. SPIE's vice-president, Maria Yzuel, took the opportunity to present some of the society's education and outreach grants and student scholarships.

The next day began in style with a plenary session shared with Photonics North and featuring industry champion Stan Lumish from JDS-Uniphase. A parallel session on International Collaborations, Experiments and Instruments, and more K-12 (an obviously important and popular subject), followed. The post-lunch keynote speaker was Stephen Pompea from the National Optical Astronomy Observatory, talking about hands-on optics. The afternoon parallel sessions touched on colleges, more experiments and instruments, and teaching methods. There was also a special OPTEC panel discussing progress of this programme aimed at technical education in optics and photonics. In the evening there was a joint ETOP/Photonics North reception where all 800+ participants to both conferences could interact.

The final day kicked off with a double-dose ETOP/Photonics North plenary by Prof. Brian Wilson from the University Health Network, Toronto, who spoke about biophotonics, and Hugo Thienpont, who presented on micro-optics science and technology in Europe. Parallel sessions that day were on biophotonics, nanotechnology, more experiments and instruments, courses, simulations, and multidisciplinary programmes. The first of two special sessions, entitled Interactive Demonstrations and Optics Magic, was anchored by David Sokoloff and Joe Lones. The other was A Tribute to Art Guen-

Contacts

International Commission for Optics (www.ico-optics.org).

Bureau members (2005–2008)

President A T Friberg

Past-president R Dändliker

Treasurer A Sawchuk

Secretary M L Calvo,

Departamento de Óptica,

Universidad Complutense,

28040 Madrid, Spain.

mlcalvo@fis.ucm.es.

Associate secretary G von Bally

Vice-presidents, elected

S N Bagayev, A M Guzmán,

G F Jin, B Y Kim,

M Kujawinska, H Lefèvre,

J Love, I Yamaguchi

Vice-presidents, appointed

J Braat, M Gu, I C Khoo,

G Sincerbox, P Stahl,

A Wagué

Senior adviser (ad personam)

P Chavel

IUPAP Council representative

Y Petroff

ther and Roger Lessard, two ETOP champions and giants who have left us in the past year.

From all feedback received, the conference was a great success. In all, 106 oral presentations and 22 posters were featured in the 25 sessions. There were 51 papers included in the on-site ETOP Proceedings CD, but a second edition will be published to accommodate late arrivals. The ETOP 2007 Proceedings will be available online soon at the SPIE's ETOP Proceedings page (<http://spie.org/etop/>). One of the best attributes of ETOP is that it is an international conference that strives to be as inclusive as possible, especially when it comes to worthy participants who may not have the means to attend. For ETOP 2007, more than half of the conference's budget – almost C\$45 000 – was

made available in waived registration fees and travel grants to participants in less-fortunate circumstance. This presumably explains the wide representation from around the globe.

On a personal note, it was my privilege and honour to be given the opportunity to serve as conference chair. I strongly believe in giving back to the community, and I hope that with my involvement in ETOP 2007 I have at least started to repay my colleagues for the strong inclusion, support, encouragement and friendship that I have received from them since 2000 when I started playing in this field. Thanks go to all who helped to organize ETOP 2007 and make it what it was, and I hope to see you all again in 2009.

Marc Nantel, Chair, ETOP 2007

Forthcoming events with ICO participation

For further information about any of these events, see www.ico-optics.org/events.html.

11–22 February 2008

ICTP Winter College on Micro and Nano Photonics for Life Sciences

Trieste, Italy.

Contact: J Niemela, tel +39 040 2240 607, smr1932@ictp.it, http://cdsagenda5.ictp.trieste.it/full_display.php?smr=0&ida=a07140

7–10 July 2008

ICO-21, Triennial Congress of the International Commission for Optics

Sydney, Australia

Contact: Prof. John Love, tel +61 2 6125 4691, fax +61 2 6125 8588, jd124@rsphysse.anu.edu.au, www.iceaustralia.com/ICO2008/

12–15 May 2008

2nd International Topical Meeting on Optical Sensing and Artificial Vision OSAV'2008

St Petersburg, Russia

Contact: Prof. Igor Gurov, tel +7 (812) 571 6532, fax +7 (812) 315 7534, gurov@mail.ifmo.ru, <http://osav.spb.ru>

15–18 September 2008

Topical Meeting on Optoinformatics 2008

St Petersburg Russia

Contact: Alexander V Pavlov, tel +7 812 328 1467, fax +7 812 328 1467, pavlov@ysa.ifmo.ru, <http://ysa.ifmo.ru/tmo2008>

9–11 June 2008

6th International Conference on Optics-Photonics Design and Fabrication ODF'08

Taipei, Taiwan

Contact: Tsuyoshi Hayashi, tel +81 78 366 5050, fax +81 78 366 5051, hayashi@pac.ne.jp, www.odf08.tw

15–20 September 2008

Fourth International Conference on Singular Optics (Optical Vortices): Fundamentals and Applications SO'2008

Alushta, Crimea, Ukraine

Contact: Prof. Alexander V Volyar, tel +380 (652) 230 248, fax +380 (652) 63 75 89, volyar@crimea.edu, www.vortex.crimea.edu/so2008

2–4 July 2008

Optics Within Life Sciences (OWLS) 10: Biophotonics Asia 2008/Satellite Meeting to ICO-21

Singapore

Contact: Dr Anil Kishen, tel +65 6516 4624, fax +65 6774 5701, rsdak@nus.edu.sg, www.owls10.org

16–20 November 2008

International Topical Meeting on Information Photonics 2008

Awaji, Hyogo, Japan

Contact: Jun Tanida, anida@ist.osaka-u.ac.jp, <http://ip2008.i-photonics.jp/>



IOP

Responsibility for the accuracy of this information rests with ICO. President: Ari T Friberg, Royal Institute of Technology, Optics, Electrum 229, SE-164 40 Kista, Sweden; ari.friberg@imit.kth.se. Associate secretary: Gert von Bally, Laboratory of Biophysics, Medical Centre, University of Münster, Robert-Koch-Str. 45, D-48129 Münster, Germany; lbiophys@uni-muenster.de.