



NEWSLETTER

COMMISSION INTERNATIONALE D'OPTIQUE • INTERNATIONAL COMMISSION FOR OPTICS

ICO Topical Meeting 2013 to be held in Tokyo

The Microoptics Conference (MOC'13) to be held in Tokyo will host the ICO Bureau meeting.



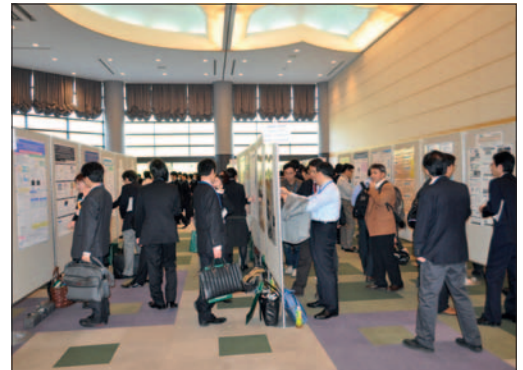
Kenichi Iga, considered by many to be the father of microoptics.

The 18th Microoptics Conference (MOC'13) will be held from 27–30 October, at Tokyo Institute of Technology in Tokyo, Japan. The conference has been chosen to be the ICO Topical Meeting 2013. The series of Microoptics Conferences (MOC) started in 1987, sponsored by the Japan Society of Applied Physics (JSAP) and organized by the Microoptics Group of the Optical Society of Japan (OSJ). The Microoptics Group was founded in 1980 primarily by Kenichi Iga, the inventor of the vertical-cavity surface-emitting laser (VCSEL), and Emeritus Professor of the Tokyo Institute of Technology.

Kenichi Iga was one of the primary pioneers in the field of microoptics, one of the leading technologies that has brought worldwide innovations to the information society. Currently, it plays an important role in optoelectronics. A large number of devices has been developed based on microoptics technologies, between them: light emitting devices such as quantum-dot semiconductor lasers, VCSELs and LEDs; functional devices such as modulators; passive devices such as microlenses, lens arrays, waveguides used in various common devices such as digital cameras and camera phone and planar lightwave circuits. These devices constitute the building blocks of various optical systems for optical communications, optical storages, optical information processing, displays, and sensing, and are gaining much attention currently for novel optical systems used in environmental optics for a sustainable society and biomedical optics for human healthcare.

MOC was first held, and until 2003, every two years in Japan. In 2004 it became annual but was only held in Japan every other year. The 17th MOC was held in 2011 in Sendai where the Great East Japan earthquake caused much damage. The conference was the first international event after the earthquake and contributed to encouraging the restoration from the academic viewpoint.

The MOC series aims to support the continuous and diversified growth of the microoptics field and stimulating broad discussion on microoptics theory, design, materials, measurement, active and passive devices, integration technology and novelty applications.



Poster Session (MOC'11), Sendai, Japan, 2011.

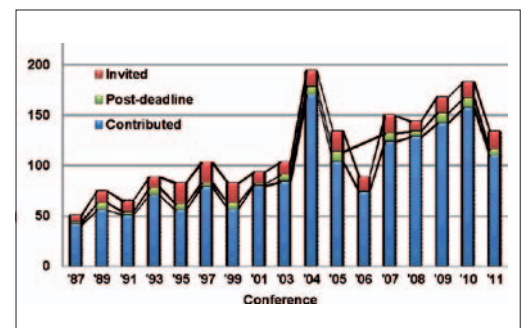


Fig. 1: Historical data track of the number of papers presented at MOC over the years.

At least 250 worldwide participants regularly attend MOC each year, with 150 oral and poster contributions presented in single-session style (see figure 1).

A Bräuer, C Doerr, and M Nakazawa are plenary speakers at MOC'13 (www.comemoc.com/moc13/). ICO's president Duncan T Moore is invited to give a special talk on ICO's present and future activities, along with another 10 invited speakers from various microoptics fields who will present interesting talks in general sessions. A special session on "Green Photonics" will be one of the highlights of the conference, with contributions from five invited speakers. Tutorial lectures will offer young researchers and beginners the chance to acquire a basic understanding of microoptics, which will be valuable for their future research and development.

This year, a microconcert by the Machida Phil-

harmony Baroque Ensemble organized by Kenichi Iga is planned as a social event. They also performed, as a charity event, at MOC'11.

A conference party will be held as customary, so that the participants from various fields and countries of origin can establish new collaborations and friendships. Thus, the MOC gives researchers the opportunity not only to present and discuss the latest research results on the microoptics field during technical sessions, but also to establish closer relationships with each other during the social events.

A big attendance is expected at MOC'13 to continue its mission of promoting future research and development in various microoptics fields, and hopefully to new breakthroughs in optics.

The annual meeting of the ICO Bureau will take place at the conference along with a meeting of the ICO Strategic Planning Committee that will serve to continue the planning process led under the leadership of ICO's president



The microconcert at Sendai that was performed by Machida Philharmony Baroque Ensemble as a charity event during MOC'11.

Duncan T Moore. ICO expects ICO Territories to become involved in the process.

Shoichi Ozawa
General Chair of MCO'2013,
Furukawa Electric, Tokyo, Japan

ICO award ceremony during SPIE Optics and Optoelectronics

In collaboration with SPIE, ICO organized an award ceremony at the SPIE Optics and Optoelectronics 2013 Symposium in Prague.

In May, three distinguished scientists were presented ICO awards recognizing significant research in quantum optics, metamaterials and plasmonics, and nanoscale optical manipulation during the SPIE Optics and Optoelectronics 2013 Symposium in Prague. SPIE, the international society for optics and photonics, one of the International Society Members of ICO, hosted the Award Ceremony with great dignity.

The Czech Scientist Jan Peřina of Palacký University was presented with the 2011 ICO Galileo Galilei Award, for his results, achieved under comparatively unfavorable circumstances, on quantum optics and coherence regarding non-classical states. Presenters of the Galileo Galilei Medal, donated by the Società Italiana di Ottica e Fotonica (SIOF), were Ivo Rendina, SIOF past-president and general chair of optics and optoelectronics, and Francesco Baldini, SIOF vice-president. Professor Peřina's Galileo Galilei lecture was on "Quasidistributions in nonlinear quantum optics".

Shuang Zhang of the University of Birmingham was awarded the 2010 IUPAP Young Scientist Prize in Optics, made annually to a scientist who has made noteworthy contributions to applied optics and photonics during a maximum of eight years of research experience after having earned a PhD degree. ICO secretary Angela Guzmán presented Dr Zhang with the IUPAP Young Scientist Medal and Diploma. Zhang's award recognizes his work in metamaterials and plasmonics, particularly for the first demonstration of the double-fishnet structure, and achievements in the realization of the first 3D optical negative-index metamaterials. His IUPAP awardee lecture was on "Controlling light with bulk



Francesco Baldini (left), SIOF vice-president and Ivo Rendina (right), SIOF past-president and general chair of optics and optoelectronics, present the Galileo Galilei Medal, donated by the Società Italiana di Ottica e Fotonica (SIOF), to the 2011 ICO Galileo Galilei Award winner Jan Peřina (center).

and surface metamaterials".

Romain Quidant of ICFO (Institut de Ciències Fotòniques) was presented with the 2012 ICO Prize for his accomplishments in nanoscale optical manipulation, particularly for his studies into the optical properties of metallic nanostructures. The concept has uses in technologies such as single-photon sources, sensing, and enhanced spectroscopy, offering the ability to control both light and heat for applications such as point-of-care diagnostics and cancer therapies.

Quidant, the leader of the research group on plasmon nano-optics at the ICFO, received the Ernst Abbe Glass Award donated by the Carl Zeiss Foundation from ICO vice-president Frank Höller. He presented the Ernst Abbe Lecture on "Plasmon nano-optics: taming light on the nanometre scale".

The ICO prize is presented annually to a per-



Romain Quidant (top) and Shuang Zhang (bottom), with their awards.

ICO presenters and prize winners and SPIE Optics + Optoelectronics (SPIE OO) organizers included (from left) SPIE OO general chair and SIOF past-president Ivo Rendina, 2010 IUPAP Young Scientist Prize in Optics winner Shuang Zhang, ICO past-vice-president and SPIE president-elect Philip Stahl, ICO secretary Angela Guzmán, SPIE OO steering committee member Pavel Tomanek, SPIE OO conference chair Mario Bertolotti, SPIE vice-president Toyohiko Yatagai, 2012 ICO Prize winner Romain Quidant, and ICO vice-president Frank Höller.



son who has made a noteworthy contribution to optics before reaching the age of 40. The Ernst Abbe Glass Award was a 3D laser-sculpted rendition of Ernst Abbe's head, that replaced the former Ernst Abbe medal.

ICO plays an important role in promoting optics in international forums, is a scientific affiliate of the International Council for Science (ICSU), and supports the IUPAP mission to assist in the worldwide development of physics, foster co-operation in the field, and aids in

its application towards solving problems of concern to humanity.

ICO members are organizations representing optics researchers and institutes through 53 territorial committees all over the world, and several international societies including SPIE that share the mission of advancing optics and photonics.

Amy Nelson
Public relations manager, SPIE, amy@spie.org,
[@SPIEtweets](https://twitter.com/SPIEtweets)

ABOUT SPIE

SPIE is the international society for optics and photonics, a not-for-profit organization founded in 1955 to advance light-based technologies.

The Society serves nearly 225,000 constituents from approximately 150 countries, offering conferences, continuing

education, books, journals, and a digital library in support of interdisciplinary information exchange, professional networking, and patent precedent. SPIE provided over \$3.2 million in support of education and outreach programs in 2012.

News from the European Optical Society

The office of the EOS is being reorganized and a new Industrial Advisory Board has been created.



Paul Urbach, EOS president.

For some years EOS had been implementing for some years a rather ambitious growth program that has caused financial stress to the society. Approximately two years ago, the support office of the EOS was transferred to the company "EOS Events and Services GmbH" of which the EOS is the sole shareholder, with Klaus Nowitzki acting both as CEO of the company and as executive director of EOS. The company consisted of an office located at the Laser Zentrum Hannover (LZH) with approximately a fourth of the staff including the CEO being employed by LZH and the rest under temporary contracts.

By the beginning of this year the executive committee concluded that because of financial issues there was the need to reduce the size of the office despite the high-quality work that all staff members were performing. Being overloaded and having difficulties to combine his work at LZH with his work for EOS, Klaus Nowitzki resigned as executive director of EOS last March. In May, the EOS Board decided to reorganize the EOS office and appoint Jyrki Saarinen as a new part-

time executive-director. Klaus Nowitzki will however continue as CEO of EOS Events and Services GmbH.

Jyrki Saarinen is professor in Photonic Applications and Commercialization at the University of Eastern Finland (UEF). He is the founder of the Finnish company Heptagon, which grew to over 1000 employees. He was also involved in the founding and organization of the Finnish Optical Society. He plans to establish a new support office employing a need-based and flexible approach for hiring temporary services either of the former EOS office in Hanover or working at UEF. His plan was accepted by the EOS General Assembly and is expected to achieve the reduction of EOS operation costs.

The next EOS annual meeting will be held in Berlin in September 2014; its local organizer committee will be chaired by Professor Dr G Tränkle of the Technical University of Berlin.

In order to improve its impact on the European Photonics Industry, the EOS has installed a new Industrial Advisory Board (IAB), which



Jyrki Saarinen, new EOS executive-director.

will serve as interlocutor with the industry, and will facilitate large involvement of the industry in the decision-making processes within EOS. Willi Ulrich, senior director of Optical Design of Carl Zeiss AG has been elected as the chairman of the IAB for the period 2013–2016. Other current members of the EOS IAB are Sven Kiontke (Aspericon, DE), Reinhard Völkel (Suess MicroOptics, CH), Andy Wood (Qioptic, UK), Wilbert Ijzerman (Philips Lighting, NL), Wolfgang Vollrath (KLA-Tencor, DE), Oliver Fähnle (Fisba, CH), Julius Muschaweck (Osram, DE), Mike Wale (Oclaro, UK), Michael Spieweck (Cassidian, DE), Bo Bangtsson (Bäcken Industrifysik, SWE), Ruben Mohedano (LPI Europe, ES), Jyrki Kimmel (Nokia, FI), Stefan Bäumer (TNO, NL). This distinguished list of members will increase with the members of countries not yet represented in the IAB, including countries

from Eastern Europe.

The EOS Execom is also planning to reorganize the EOS focus groups. A focus group is a platform intended to facilitate networking for experts from science and industry within their area of interest with the aim of collaborative work and dissemination of results. A focus group will have 2–4 co-ordinators, who are expected to serve for at least four years and organize during that period two topical meetings (TOM) in their field of interest. One of those TOMs could be part of the ESOAM.

EOS is welcoming prospective co-ordinators. Those interested can contact the EOS president (h.p.urbach@tudelft.nl) or the EOS secretary (pfeffer@hs-lweingarten.de).

Paul Urbach
President of the EOS, the Netherlands, TU, Delft

Contacts

International Commission for Optics (e-ico.org).

Bureau members (2011–2014)

President D T Moore
Past-president M L Calvo
Treasurer J A Harrington
Secretary A M Guzmán, CREOL, The College of Optics and Photonics, University of Central Florida, e-mail angela.guzman@creol.ucf.edu
Associate secretary G von Bally
Vice-presidents, elected Y Arakawa, Z Ben Lakhdar, Z Bingkun, F Höller, H Michinel, M Oron, R Ramponi, T Szoplik
Vice-presidents, appointed A Diaspro, Y J Ding, U Gibson, H P Herzig, A Wagué, M J Yzuel
IUPAP Council representative C Cisneros

Editor in chief A M Guzmán
Editorial committee W T Rhodes, Florida Atlantic University, K Baldwin, Australian National University, Australia; J Dudley, Université de Franche-Comté, France

Forthcoming events with ICO participation

Below is a list of 2013 events with ICO participation. For further information, visit the new ICO webpage at <http://e-ico.org/node/103>.

22–26 July
8th Iberoamerican Optics Meeting/11th Latinamerican Meeting on Optics, Lasers and Applications (RIA/OPTILAS 2013)
Porto, Portugal
Contact: Manuel Filipe P C Martins Costa, tel 00351967642732, mfcosta@fisica.uminho.pt <http://riaoptilas2013.inescporto.pt>

23–26 July
Education in Optics and Photonics “ETOP 2013”
Porto, Portugal
Contact: Manuel Filipe P C Martins Costa, tel 00351967642732, mfcosta@fisica.uminho.pt www.optica.pt/etop2013/

1–13 September
First African Summer School on Optics and Applications to Sustainable Development
Tunis, Tunisia
Contact: Mourad Zghal tel (+216) 71857000, fax (+216) 71856829, mourad.zghal@supcom.rnu.tn www.sto-tn.org

16–19 September
Information Photonics 2013
Warsaw, Poland
Contact: Marian Marciniak tel +48 22 5128715, fax +48 22 5128715, marian.marciniak@ieee.org

18–21 September
The Eleventh International Conference on Correlation Optics “Correlation Optics’13”
Chernivtsi, Ukraine
Contact: Oleg V Angelsky tel (380-3722)44730, fax (380-3722)44730, angelsky@itf.cv.ua www.itf.cv.ua/corrupt13/

27–30 October
ICO Topical Meeting: 18th Microoptics Conference (MOC’13)
Tokyo, Japan
Contact: Tomoyuki Miyamoto tel +81-45-924-5059; fax: +81-45-924-5059, tmiyamot@pi.titech.ac.jp www.comemoc.com/moc13/

5–8 March 2014
Int. Conference on Optics and Optoelectronics (ICOL 2014)
Dehradun, India
Contact: Amitava Ghosh, tel +911352787167; fax +911352787128, aghosh@irde.drdo.in



Responsibility for the correctness of the information on this page rests with ICO, the International Commission for Optics; <http://www.ico-optics.org/>. *President:* Prof. Duncan T Moore, Biomedical Engineering and Business Administration, University of Rochester, USA; moore@optics.rochester.edu. *Associate secretary:* Prof. Gert von Bally, Centrum für Biomedizinische Optik und Photonik, Universitätsklinikum Münster, Robert-Koch-Straße 45, 48149 Münster, Germany; bally@uni-muenster.de.