



# NEWSLETTER

COMMISSION INTERNATIONALE D'OPTIQUE • INTERNATIONAL COMMISSION FOR OPTICS

## ICO-IUPAP OPTISUD meeting in Tunis

**More than 70 speakers, graduate and post-doctoral students from several countries attended the recent ICO & IUPAP-C17 Topical Meeting on OPTics and Applications to SUSTainable Development (OPTISUD) in Carthage, Tunisia.**



Prof. Mourad Zghal, Professor at the Engineering School of Communications of Tunis (Sup'Com) University of Carthage and ICO Vice-president chaired the meeting.

**Organized by the Optical Society of Tunisia** and supported by the ICO, IUPAP, ICTP, OSA, SPIE, the African Laser Centre and several other organizations, the workshop ran from 4 to 7 September 2019. The event was the first joint ICO/IUPAP-C17 meeting. It aimed to provide education and training for graduate students, as well as postdocs and faculty who would like to acquire sufficient knowledge to begin having an impact in research areas based on optics, photonics, laser science and related technologies. The main objective of the workshop was to host an advanced research meeting by bringing together international and African experts and researchers, and giving them a state-of-the-art view of currently important research directions. Attendees shared new breakthroughs in the application of optics to environmental and biological problems and explore collaborations between international and African researchers, with special attention paid to promoting women in the research enterprise. The workshop was also an ideal occasion to help establish joint research projects among different participating institutions and enhance the international visibility and capacity of African science and technology. Students and speakers at this workshop were from Tunisia, Algeria, Morocco, Egypt, Senegal, Cote d'Ivoire, Cameroon, Zimbabwe, Ghana, Uganda, South Africa, Italy, France, Spain, Germany, Russia, Poland, UK, Canada, USA, Japan, India, Saudi Arabia, and Australia. Topics of the conference sessions were dealing with present or future

applications of optics and photonics: Quantum optics, Nonlinear optics, Nanophotonics, Terahertz science, Photonic Metamaterials, Environmental applications, Industrial applications and material processing, Medical/Biomedical applications, Homeland security, Optical communications, applications to education (Active learning)

In addition, some attention was paid to the use of "photonics for economical and sustainable development". Among the invited speakers, Roberta Ramponi (ICO President and Director, Institute of Photonics and Nanotechnology, Italian National Research Council, Politecnico di Milano) gave an overview of ICO activities and presented recent results about femtosecond Laser micromachining for quantum photonics and sensing. Yasuhiko Arakawa (ICO Past President and Tokyo University) spoke on recent progress in quantum dot photonics. Other invited speakers included Tsuneyuki Ozaki (IUPAP C17 chair and INRS Canada), Mohamed-Slim Alouini (King Abdullah Univ. of Science and Technology KAUST, Saudi Arabia), and Malik Maaza (iThemba LABS South Africa). The workshop included a best presentation awards competition sponsored by SPIE and OSA. First prize was awarded to Maha Bouhadida (Institut d'Optique, Univ. Paris-Saclay, France,) while the second prize went to Amor Gueddana (Carthage University, Tunisia).

**Prof. Dr. Mourad Zghal  
ICO elected Vicepresident**

*Group photo of some of the participants in OptiSUD meeting co-organized by ICO and IUPAP-C17 in Carthage (Tunisia) from 4<sup>th</sup> till 7<sup>th</sup> September 2019*





# RIAO-OPTILAS-MOPM 2019 congress in Cancún



Participants at the X Iberian American Optics Meeting and XIII Latin American Meeting on Optics, Lasers and Applications conference organized in Cancun, Mexico, September 23-27, 2019 by the Iberian-American Network for Optics (RIAO) jointly with the Mexican Academy for Optics (AMO).



**Prof. Manuel Costa from Universidade do Minho (Portugal) is the new President of RIAO for the 2019-2022 term.**

The main iconic conference of the Ibero-American community of Optics and Photonics convene every 3 years since 1992 in an Ibero-American country to set the state of the art of the research in Optics in Ibero-America and foresee future developments. 25 years after its second edition held in Guanajuato in 1995, our RIAO-OPTILAS conference was host again by Mexico and collocated with AMO's Mexican Optics and Photonics Meeting 2019, MOPM2019.

Josué Álvarez-Borrego (AMO President 2019-2020), Amalia Martínez-García (AMO President 2015-2016) and Eduardo Tepichin-Rodríguez (AMO Vice-president 2019-2020) acted as co-chairs of the conference that run in the most pleasant and successful way.

In an enjoyable atmosphere the four hundred participants from 31 countries all across Ibero-America and abroad presented and discussed enthusiastically the 328 work effectively presented at the conference. 393 papers were submitted for review of the Scientific Committee of RIAO-OPTILAS-MOM 2019. Of those, 138 papers were presented by Ibero-American students illustrating the growth potential of Optics and Photonics in Ibero-America in the years to come.

Highly distinguished plenary speakers participated, among those: Roberta Ramponi, 2017-2020 ICO President; John E. Greivenkamp, 2019 SPIE President-Elect; Ursula Gibson, 2019 OSA President; Pramod Rastogi, Professor in the École Polytechnique Federale de Lausanne, Switzerland; Philip Rusell, founding Director of the Max-Planck Institute for the Science of Light; Zeev Zalevsky,

2008 ICO Prize recipient; Enrique Tajahuerce, 2018' IEEE Donald G. Fink Prize, Universitat Jaume I, Castelló, Spain; and Guillermo H. Kaufmann, Universidad Nacional de Rosario, Argentina, ICO Galileo Galilei Award 2016, who received the medal and diploma during this conference.

Worth of notice is also the discussion panel on the participation of women in the field of optics and photonics, with the participation of ICO president Ramponi; María Josefa Yzuel Giménez, former SPIE president, active member of several ICO bureau and Professor in the Autonomous University of Barcelona; Ursula Gibson, OSA president and Professor in the Norwegian University of Science and Technology; Krisinda Plenkovich, SPIE Director for Education and Community Services; Kari Apter, OSA Senior Director for Research & Program Development; and María Sagrario Millán, President-Elect of the Spanish Optical Society and Professor in the Universitat Politècnica de Catalunya.

The General Assembly of RIAO, by unanimity and acclamation, approved the incorporation of Argentina into the Iberian-American Network for Optics, RIAO, and the election of Prof. Manuel F. Costa, President of the Portuguese Society for Optics and Photonics, SPOF, and member of the council of RIAO, as the President of the *Red(e) Iberoamericana de Optica* for the 2019-2022 term, replacing Prof. Efraín Solarte.

**Amalia Martínez-García (co-chair)  
Eric Rosas (ICO Vice-President)  
Manuel Costa (RIAO President)**

# 2019 Correlation Optics conference in Ukraine

**A financial donation from ICO provided accommodation for some of the students and researchers attending the meeting**



Prof. Oleg Angelsky, from the Technical and Computer Sciences Institute of Yuriy Fedcovich Chernivtsi National University in Chernivtsi (Ukraine) was the chair of CorrOpt'19.

## **The 14th International Conference on Correlation Optics**

has been held in Chernivtsi, Ukraine, from 16<sup>th</sup> till 19<sup>th</sup> September, 2019. The purpose of the conference is to provide a discussion of novel approaches and advances connected with optical correlation techniques for measurements of random optical fields, and object diagnostics in diverse applications. Optical correlation techniques constitute promising and avalanche-like developed area of optical information technology. Such techniques serve for solving diverse applied problems ranging from industrial quality control to modern telecommunications and life sciences. Therefore, this conference represents a unique possibility to highlight novel concepts and developments related to the optical correlation data processing and to discuss recent progress in applications of them. This conference continues the chain of international conferences on Correlation Optics celebrated every two years since 1993. An important novelty, in comparison with previous meetings on correlation optics has been to merge the congress with the International Conference on Singular Optics (Optical Vortices) that was traditionally held in Crimea since 1997. Therefore, singular optics has constituted an important separate topic and the session on singular optics achieved the special status of 'conference into the conference'.

Reports were presented by about 120 researchers from 14 countries: UK, Germany, France, Denmark, Japan, Australia, Poland, Romania,

Norway, Czech Republic, China, Spain, South Korea and Ukraine.

Amongst the topics that were raised during the conference the most relevant were: singular optics; informative content of statistical optical fields, including optical chaos, polarization optics and coherence; optical correlation devices based on diffractive optical elements, including optical and digital holography, fractal optics, optical sensors, optical correlation diagnostics, interferometry and microscopy of rough surfaces and random media; new applications of correlation optics in biology and medicine, advanced materials, nanomaterials and devices for optics and optoelectronics. Important speakers attended the meeting like: Prof Jung-Young Son (Korea), Prof S. Hanson (Denmark), Prof Prof Sumio Yano (Japan), Prof K. Bliokh (Japan), Prof Xinzhen Zhang (China), Prof Albert Ferrando (Spain), Prof Yoko MIYAMOTO (Japan), Prof S. Odoulov (Ukraine), Prof Wei Wang (UK) among many others. More than 50 graduate, post-graduate and PhD students took part in the conference, and the special session for young scientists out of the official conference program was carried out. There are the Invited Speakers for this session: Alexander Demchenko (Taiwan/Ukraine), Alexander Bekshaev (Ukraine), and Igor Mokhun (Ukraine).

**Prof. Dr. Oleg Angelsky**  
**Chair of CorrOpt '19**



*The congress program has included 16 invited talks, 22 regular orals and 84 posters, as well as 3 Invited lectures for students.*



# ICO Bureau approves 2019 awards

**The ICO Bureau met in Carthage (Tunisia) during the celebration of OptiSUD congress.**



The ICO Bureau met during OptiSUD in Carthage last September. Among other issues, the ICO awards for 2019 were approved. This ICO prize committee, chaired by Prof. Seung-Han Park recommended Dr. Manuel Guizar-Sicarios from the Paul Scherrer Institute (Switzerland) as a recipient of the ICO Prize 2019 due to his seminal contributions to method and algorithm development, and application of coherent lensless imaging, ptychography, x-ray nanotomography, and scanning small-angle x-ray scattering".

The committee of the ICO-IUPAP prize Young Scientist Prize in Optics, chaired by Prof. Adrian Podoleanu decided to give the 2019 award to Dr. Chao-Yang Lu from Univ. of Science & Technology of China "for significant contributions to optical quantum sciences".

Finally, the committee for the Galileo Galilei Medal 2019, chaired by Prof. Nataliya Kundikova nominated Prof. Malik Maaza, as the recipient of the award "for extensive contributions to the frontiers of interdisciplinary research that involved both theoretical and experimental developments in the fundamental aspects of femtosecond laser-matter interactions under comparatively difficult circumstances".

It was also informed that the call is now open for the Gallieno Denardo award and that its deadline is 1<sup>st</sup> December. For all the other ICO awards the deadline is traditionally 15<sup>th</sup> April each year.

**Humberto Michinel**  
**ICO Secretary General**

## Contacts

International Commission for Optics (<http://e-ico.org>).

### Bureau members (2017–2020)

**President** R Ramponi  
**Secretary** H. Michinel,  
Escola de Enx. Aeroespacial  
Universidade de Vigo, Campus  
de Ourense (Spain)  
e-mail: [hmichinel@uvigo.es](mailto:hmichinel@uvigo.es)  
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University, K Baldwin, Australian  
National University, Australia;  
J Dudley, Université Franche-  
Comté, France



## Forthcoming events with ICO participation

Below is a list of 2019/20 upcoming events with ICO participation. For further information, visit the ICO website <http://e-ico.org>

### 19-22 October 2019

#### ICOL 2019: International conference on Optics and Electro-Optics

Dehradun, India  
Contact: Sh. Sudhir Khare  
[info@icol2019.com](mailto:info@icol2019.com)  
<http://icol2019.com>

### 31 August–04 September 2020

#### ICO-25: 25<sup>th</sup> General Meeting of the International Commission for Optics

Dresden, Germany  
Contact: Janet Hanel  
[ico-office@mailbox.tu-dresden.de](mailto:ico-office@mailbox.tu-dresden.de)  
<http://ico25.org>

### 31 August–04 September 2020

#### 16<sup>th</sup> Conference of the International Society on Optics within Life Sciences

Dresden, Germany  
Contact: Janet Hanel  
[ico-office@mailbox.tu-dresden.de](mailto:ico-office@mailbox.tu-dresden.de)  
<http://ico25.org>

### 07–11 September 2020

#### EOSAM-2020: Annual Meeting of the European Optical Society

Porto, Portugal  
Contact: Elina Koistinen  
[elina@europeanoptics.org](mailto:elina@europeanoptics.org)  
<http://eosam2020.org>

Responsibility for the correctness of the information on this page rests with the International Commission for Optics (ICO); <http://www.e-ico.org/>. **President:** Prof. Roberta Ramponi, Director IFN-CNR, Politecnico di Milano, Italy; [roberta.ramponi@polimi.it](mailto:roberta.ramponi@polimi.it). **Treasurer:** Prof. Joseph Niemela, International Center for Theoretical Physics, Italy; [niemela@ictp.it](mailto:niemela@ictp.it). **Secretary:** Prof. Humberto Michinel, Universidade de Vigo, Spain; [hmichinel@uvigo.es](mailto:hmichinel@uvigo.es). **Associate Secretary:** Dr. Frank Höller, Carl Zeiss AG, Germany; [frank.hoeller@zeiss.com](mailto:frank.hoeller@zeiss.com)