



Secretariat

The International Commission for Optics



Report of Affiliated Commission AC.1 (2018)

Affiliated Commission AC.1: The International Commission for Optics (ICO)

The International Commission for Optics was created in 1947. It is an Affiliated Commission of the International Union of Pure and Applied Physics (IUPAP), and a Scientific Associate of the International Council of Science (ISC). Its objective is to contribute, on an international basis, to the progress and diffusion of knowledge in the fields of optics and photonics.

The Commission has three categories of members: Territorial Committee Members (53 members including 13 Associate Members), and International Organization members (7 members). The governing body of ICO is its General Assembly, usually held every three years during an ICO Congress that includes an international conference on optics and photonics. Between General Assemblies, a Bureau is responsible for the conduct of the Commission. The bureau consists of the President, the Past-President, the Secretary General and the Associate Secretary, the Treasurer, and fifteen Vice-Presidents, (eight elected) of whom at least two are from industry. The bureau was renewed for the period 2017-2020 in the last general assembly celebrated in Tokyo in August 2017. The ICO president for the mentioned period is Prof. Roberta Ramponi from the CNR Institute for Photonics and Nanotechnologies and Politecnico di Milano (Italy).

During 2018, an important ICO activity was the meeting of the ICO bureau, which took place at Westcord Hotel in Delft (The Netherlands), in coordination with the meeting of the European Optical Society (EOSAM 2018). During the meeting, several important decisions were taken, as the ICO awards, which are a crucial ICO action in terms of representing the Optics and Photonics community worldwide. The prizes approved in the last ICO bureau meeting corresponded to the following proposals:

The ICO Prize, to be given each year to an individual who has made a noteworthy contribution to optics, published submitted for publication before he or she has reached the age of 40 (specifically, the Prize winner must not have reached the age of 40 before December 31 of the year for which the Prize is recognised) was awarded to **Prof. Mikael Rechtsman**, from Pennsylvania State University, *“for his groundbreaking discovery and first demonstration of photonic topological insulators”*.

The ICO Galileo Galilei Award Committee proposed to the ICO Bureau **Dr. Debabrata Goswami** from Indian Institute of Technology, India, as the recipient for the Award for 2018 *“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”*.

The IUPAP prize in optics is awarded annually to a scientist who has made noteworthy contributions to applied optics and photonics during a maximum of 8 years of research experience after having earned a PhD degree. This year the committee has proposed **Dr. Can Bayram**, *“who revolutionized the way graphene has been employed, and for his major contributions to III-V photonic devices”*.

The ICO/ICTP Gallieno Denardo Award recognizes the work of young researchers from developing countries who are active in optics and photonics research and have contributed to the promotion of research activities in in their own or another developing country. Candidates must be under 40 on 31 December of the year for which the Award is given. The ICO/ICTP Gallieno Denardo Award 2018 has been awarded to: **Dr Urbasi Sinha**, Raman Research Institute, Bangalore, India, “for her pioneering research in photonic quantum technologies, contributions to cutting edge experimental research in quantum optics, and extensive and multifaceted outreach activities towards popularizing experimental optical science in India”.

ICO activities and cosponsored events approved were:

Event	Location	Requested	Approved	Budget 2018	Budget 2019	Budget 2020	Status
11th International Conference on Optics-photonics Design & Fabrication	Hiroshima	0	0	0	0	0	approved
OWLS 2018	Perth	3000	2000	2000	0	0	approved
EOSAM 2018	Delft	1175	1175	1175	0	0	approved
ISPHOA 2018	Surabaya	2500	1500	1500	0	0	approved
OPTISUD 2019	Carthage	5000	3500	0	3500	0	approved
BIOAM 2018	Palaiseau	2300	1000	1000	0	0	approved
Correlation Optics 2019	Chernivtsy	2000	1500	0	1500	0	approved
RNO 2018	Castelloon	1848	0	0	0	0	withdrawn
AOP	Lisbon	2500	1250	0	1250	0	approved
Photonics 2018	Dehli	3000	0	0	0	0	rejected
ICO GA	Dresden	0	0	0	0	0	in preparation
				5675	6250	0	11925

Other events with ICO participation were:

February 13th, 2018: Trieste, TSOSA meeting

Since the TSOSA Committee was founded, ICO has the pleasure and honor to chair it. The annual meeting takes place during the Winter College and is followed by the ICO-ICTP Gallieno Denardo Award ceremony.

April 3rd-4th, 2018: Singapore, C&CC IUPAP meeting

May 16th, 2018: Paris, International Day of Light

July 3rd- 4th, 2018: Paris, ISC Foundation General Assembly

During the ICO bureau meeting in Delft, a commemorative photo of the 70th anniversary of the first ICO bureau meeting celebrated in the same city in 1948 was taken in front of the same historic building.