

# ICO

## Activities' Report - Year 2018

### Delegate/Paolo De Natale

#### 1. Introduction

The International Commission for Optics was created in 1947. Its objective is to contribute to the progress and diffusion of knowledge in the fields of optics and photonics on an international basis. It is an Affiliated



Commission of the International Union of Pure and Applied Physics (IUPAP), and an Affiliated Member of the International Science Council (ISC).

With the goal of celebrating the 70<sup>th</sup> anniversary of the first ICO Bureau meeting, the current ICO Bureau met in Delft (The Netherlands) last 8<sup>th</sup> October and took a commemorative photo in front of the same building where the first ICO meeting took place in 1948. 70 years have passed and ICO has grown and expanded, as it was commented in the ICO newsletter issue dedicated exclusively to this anniversary.

In the above photo, members of the current ICO Bureau in front of the same building, where the first ICO bureau took place in 1948.

#### **Main activities carried on by ICO during 2018 relevant for Italy and for CNR**

Two female Italian scientists have been nominated by the ICO Bureau for two ICO Prizes. They will both receive the Prizes at the next ICO Assembly, which will be held in Dresden in 2020. In particular, the ICO Prize has been awarded to Francesca Calegari and the IUPAP Young Scientist Prize in Optics to Giulia Grancini.

ICO actively takes part to ICTP Programs, especially involving the Winter College in Optics, that is held every year in February, in Trieste. The colleague Roberta Ramponi, President of ICO, is also chair of TSOSA, the advisory board of ICTP for planning all programs in Optics in Trieste. The main

subject of ICTP 2018 in Trieste has been Photonics for Agrifood; the subject selected for 2019 is Quantum Optics.

### **Activities carried on by Paolo De Natale within the Union during 2018 and impact on the Italian scientific community**

As Italian Territorial Representative, I have supported the colleague ICO President in several actions, for example to select nominations for ICO Prizes, In EU interactions in the Optics and Photonics areas, in the interaction with IUPAP to get the status of International Organization at the same level as IUPAP.

### **Evaluation of the participation in terms of benefits and membership cost**

ICO is the only truly international Organization in the areas of Optics and Photonics. Thanks to the teamwork done, Italy has now the Presidency of ICO. Moreover, two important Prizes have been awarded to two Italian women in science. This witnesses the world-wide relevance of our Country in the areas represented by ICO.

### **Evaluation of Italians' attendance and how to improve interest and involvement**

I ricercatori italiani hanno elevate tassi di partecipazione alle organizzazioni SPIE ed OSA, che sono parte di ICO, ma gestiscono le principali Conferenze internazionali e le principali riviste nei settori dell'Ottica e Fotonica e, per questo motivo, sono più attrattive rispetto ad ICO, che svolge un ruolo molto diverso, in un certo senso di livello superiore, e focalizzato anche sulle attività di Ottica e Fotonica sviluppate nei Paesi in via di sviluppo

Italian scientists have high rates of participation to SPIE and OSA Organizations, that are part of ICO but directly manage the main international Conferences and the most significant Journal in Optics and Photonics. Therefore, they are more attractive than ICO. Indeed, ICO plays a different role, in a sense at a higher level, more focused also on the promotion of Optics and Photonics in the Developing Countries.

### **Italian experts with important roles within the Union or within related Commissions and Programs (if known)**

The ICO President is Roberta Ramponi, former full professor at Politecnico di Milano and, at present, director of CNR-IFN (Institute of Photonics and Nanotechnologies)

### **Conclusions**

In conclusion, having high level roles in ICO increases the international relevance of Italy, though ICO has mostly a representative role in the areas of Optics and Photonics, but on a worldwide scale, as compared to Organizations, like OSA and SPIE, much more focused on the organization of important Conferences and on the management of specialized Journals

Signature  
Paolo De Natale

Place and date

Firenze, September 30th, 2019