## ETOP'2013, 12<sup>th</sup> Education and Training in Optics and Photonics Conference

## Brief report:

The teaching and learning of optics and photonics, critical fields at the core of today's scientific and technological infrastructure, must continually be upgraded and renewed in order to meet the growing demands of research, science and industry for the sake of the sustainable development of our world and humankind.

The International Conference on Education and Training in Optics, known as ETOP, is the principal conference that brings together the international community of optics and photonics educators, leading optics and photonics scientists, academia, and industry, from all around the world to share experiences and knowledge, to discuss, demonstrate and learn about new developments and approaches to teaching in these fields.

Through presentations, panel discussions, workshops and exhibits, it is the intent of this conference to inform professors, students, teachers and professional trainers on how to promote the learning of optics and photonics for the future.

Since 1988, SPIE, the International Society for Optics and Photonics, and OSA, The Optical Society, have sponsored the ETOP conference. The first meeting, initiated by SPIE's Academic Advisory Committee, focused on undergraduate and master's level programs in optics and related fields, the supply and demand for graduates, and academia-industry interaction. The first ETOP was held in conjunction with SPIE's annual meeting in San Diego. It brought together scientists, technicians and educators to discuss educational programs and the opportunities and challenges for graduates. The second conference was held in 1991 in St Petersburg, Russia, for which the ICO joined the founding organizations as a co-sponsor. From there, ETOP became a biennial meeting that has been held in Pecs, Hungary (1993); San Diego, California, USA (1995); Delft, the Netherlands (1997); Cancun, Mexico (1999); Singapore (2001); Tucson, Arizona, USA (2003); Marseille, France (2005); Ottawa, Ontario, Canada (2007); and St Asaph, Wales (2009). The 2011 conference was scheduled to be held in Tunisia but was cancelled by the ETOP Long Range Advisory Committee because of the civil unrest in the region.

ETOP'2013 was then held 23–26 July, 2013, in the beautiful city of Porto, Portugal, sponsored by SPIE, OSA, IEEE, and ICO. It was jointly organized by the Portugal and Tunisia Territorial Committees of the ICO. The event was collocated with RIAO/OPTILAS 2013.

We are very proud to present to you the outcome and results of the ETOP'2013 Conference. This event attracted over 210 participants including 68 students, with 140 submitted works including 31 invited presentations, 5 workshops, 3 hands-on activities, 1 short course, a poster session and two special sessions run jointly with RIAO/OPTILAS2013 conference (Entrepreneurship in Optics & Photonics session and Women & Optics session). It was the first ever ETOP event of this scale at which we were able to actively engage with and reach out to a wider range of delegates from 38 countries Additionally, the conference served as a forum for representatives from academia and industry as well as students and school teachers to interact and build bridges. The different sessions provided the framework of wider discussions on how to improve education, training and teaching in the field of optics and photonics. Indeed, the four days were buzzing with lively discussion and debate – not only during the interactive sessions, but also around the coffee tables.

We would like to express our thanks to our host, the Science Faculty of the University of Porto, for providing its premises, technical equipment and ever-helpful staff. And last, but certainly not least, we wish to thank wholeheartedly all contributors and participants of this event for making it an informative as well as enjoyable event.

The conference co-chairs:

Prof. Manuel Filipe Pereira da Cunha Martins Costa (University of Minho, Portugal)

and

Prof. Mourad Zghal (University of Carthage, Tunisia)