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Introduction

The International Conference on Applications of Optics and Photonics (AOP2011) ran very successfully in an exciting, friendly, and rewarding way. 257 participants openly shared ideas and experiences, discussing the remarkable and exciting recent developments in optics and photonics and preparing new development paths and cooperation projects.

The conference was held May 3–7 2011 at the University of Minho and the Melia Braga Hotel and Spa in Braga, Portugal. It was the first major international organization of the Portuguese Society for Research and Development of Optics and Photonics (SPOF—Sociedade Portuguesa para a Investigação e Desenvolvimento em Óptica e Fotónica, contact@spidof.pt).

The Portuguese Optics and Photonics Society was established in November 2009, reflecting the development of scientific and technological research in optics and photonics in Portugal over the last decades and our main goal of promoting the development of optics and photonics in general, particularly in Portugal. Coming from all Portuguese continental and Atlantic autonomous regions, SPOF has an increasing membership of over fifty regular members and a good number of student members working in almost all fields of pure and applied research at university and research institutions, as well as in education and industry services.

The conference was organized to foster the establishment of the widest range of cooperation projects and relationships with colleagues and institutions from all around the world while increasing the external visibility of Portugal' optics and photonics research.

The success of the conference was only possible with the commitment of the vast majority of Portuguese optics and photonics scientists, as well as the endorsement support, active participation, and leadership of the most important international scientific optics societies including ICO, SPIE, OSA, EOS, Photonics'21, RIAO, and SECPHO, and several national societies, committees, and boards including SEDOPTICA, AMO, CTOM, STO, OPSS, CVO, APLO, SPF, FCT, and the contributions of over 460 authors and co-authors from 47 countries of the five continents.

38 invited lectures from world-leading scientists, including nine plenary lectures, gave an excellent overview of the state of the art in optics and photonics research across the world, pointing out future development perspectives.

From the 256 works accepted in all fields of optics and photonics, 237 (103 posters and 134 oral) were effectively presented. Over 150 full papers were received and

accepted for publication in these proceedings.

Almost 40% of the works presented at the conference originated in Portugal, giving the widest representation of research currently being done in Portuguese research institutions. Spain's representation was also remarkable, with nearly 20% of the conference participants.

The conference counted 257 effective participants (plus 85 undergraduate students in the May 3 and 5 sessions on vision sciences and optometry). Although $\frac{3}{4}$ of the participants came from Europe, Asia and Latin America had also major representations.

One third of all participants were students, a good percentage of which came from developing countries. Roughly 50% of the Portuguese participants were PhD and masters students, illustrating the vitality and growth potential of Portugal's research in optics and photonics.

The participation of women optics scientists is also notable, both in the quality of the works presented and the number of participants rising up to nearly one third of the total. It is also positive that the percentage of female students rose to 40%. The importance of women in optics has long been recognized by the community. The conference's first plenary speakers were five of the most distinguished optics women scientists, including former and current ICO, SPIE, and OSA presidents.

SPOF and the Portuguese Optics and Photonics community will continue actively working towards the development of optics in Portugal and in general. In September 2013 we will host the 8th Ibero-American Optics Meeting (RIAO/OPTILAS) in Portugal, and in the spring of 2014 the next AOP conference will be organized.

We are looking forward to welcoming you all in Portugal to share with us the remarkable foreseeable developments of optics and photonics!

Manuel F. M. Costa
Conference Chair

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