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Valentin I. Vlad
Editor

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Introduction

The conference on Micro- to Nano-Photonics II - ROMOPTO 2009 is the ninth in a series of international conferences dedicated to optics and photonics, held every three years in Romania. The first three conferences were organized by Acad. Ioan Ursu in collaboration with Acad. A. M. Prokhorov under the name "Trends in Quantum Electronics." The topics of this conference are related to the modern micro- and nano-photonics and reflect the fast evolution of optics and its applications in material science, information science and technology, optoelectronics, biology and medicine, sensing and metrology. The results in these fields demonstrate the important role of photonics in the progress of the modern society, in the 21st century.

The purpose of ROMOPTO 2009 is to provide an opportunity for the optics scientists to share experiences, to discuss their newest results, to stimulate interdisciplinary research, and to consider the perspective of applications. The position of our country, Romania, in central-eastern Europe plays an important role in the promotion of the scientific contacts in this region. Since January 2007, Romania is a member of European Union and is actively participating in the EU-R&D Programs. In the national strategy in R&D, photonics plays an important role both in basic research and in technological platforms. An actual challenge for all of us is the financial and economic crisis, which affects research funding, participation in our conference, and many others.

The organization of ROMOPTO 2009 was possible by the actions and support of several national and international institutions. We want to mention and thank the Romanian Academy, the Romanian Ministry of Education, Research and Innovation, the National Institute for Laser, Plasma and Radiation Physics (NILPRP), the University "Lucian Blaga" of Sibiu, the Division of Optics and Quantum Electronics of the Romanian Physical Society (which is a territorial committee of ICO and EOS), the Romanian Photonics Society, the National Institute of Optoelectronics (NIOE 2000), and the University of Bucharest.

Thanks are due to the cosponsoring institutions of this conference: International Commission for Optics (ICO), the "Abdus Salam" International Centre for Theoretical Physics (ICTP, Trieste, Italy), and the European Optical Society (EOS). Particularly, I express my entire gratitude to Prof. Maria Calvo, Prof. A. Friesem, Prof. Anna Consortini, Prof. A. Friberg and Prof. G. von Bally (ICO), Prof. Maria Yzuel, Dr. E. Arthurs, Mr. E. Pepper (SPIE), Prof. K.R. Sreenivasan, Prof. J. Niemela and Prof. G. Thompson (ICTP), Prof. Roberta Ramponi (EOS), Prof. C. Sheppard, Prof. E. Fazio and Prof. J.P. Huignard, for their important support to the ROMOPTO 2009 conference and to our optics community.

By the efforts of the scientific advisory committee, coordinated by Prof. M. Bertolotti and the efforts of the programme committee, 120 scientific

papers by authors from 15 countries have been selected for presentation at ROMOPTO 2009, in 8 plenary lectures, 27 invited lectures, 38 oral presentations and 47 posters. I express my entire gratitude to the members of these committees, referees, to the invited professors and to all participants for their high level work. Some of these papers, reviewed by an international referee board, are published in this SPIE Proceedings volume, which hopefully will attract the interest of the optics community.

The joy of meeting so many friends at ROMOPTO 2009 was shadowed by the passing from this world of two of the strongest Romanian supporters of this conference: Acad. Ioan Ursu (in 2007), the Director of the Institute of Atomic Physics, a President of EPS and the founder of this conference series and Acad. Radu Grigorovici (in 2008), the Director of the Institute of Physics and a Vice-president of the Romanian Academy, exceptional men and friends. Requiescant in Pace!

I would like to express my thanks to the members of the international scientific advisory committee, programme and organizing committees of ROMOPTO 2009 for their hard work. My gratitude is specially conveyed to Prof. C. Oprean, the Rector of the University "L. Blaga" of Sibiu, Prof. I. Isarie, former Rector, Prof. I. Bondrea, the Dean of Faculty of Engineering "H. Oberth" and to the local organizing team: Prof. Toderita Nemes, Prof. V. Petrescu, Prof. Cl. Isarie, Prof. D. Chicea and Dr. Eng. V. Fagarasan (University Protocol), who are hosting admirably this conference. Special address and thanks are to Dr. R. Medianu, the General Director of the Natl. Inst. for Laser, Plasma and Radiation Physics, Dr. Adrian Petris, the coordinator of the organizing committee, my PhD student, Tatiana Bazaru for conference programme preparation and other organization matters, and Mariana Buzatu for financial matters and social events, for their important efforts in all steps of conference organization, Dr. M. Udrea for sponsorship by "Apel Laser" and transports, Dipl. Eng. S. T. Popescu for the design and updating the conference web site, to my PhD students, I. Dancus for conference poster, banner and programme cover and Petronela Gheorghe for site information and social programme. The financial skill of our treasurer, Alexandra Olteanu is also acknowledged.

Finally, I hope that the participants in ROMOPTO 2009 enjoyed the scientific sessions, met in Sibiu-Hermannstadt friends, have had the opportunity to start new scientific collaborations and will remember their visit in Romania, in Alba-Iulia (Apulum) and Western Carpathians from the Transylvania County.

Valentin I. Vlad
Chair of ROMOPTO 2009