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Editors

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Plenary Session
Paul Schiopu, University Politehnica of Bucharest (Romania)
Razvan Tamas, Constanta Maritime University (Romania)
Marian Vladescu, University Politehnica of Bucharest (Romania)

Advanced Materials and New Technologies
Aurelian Popescu, National R&D Institute for Optoelectronics INOE 2000 (Romania)
Aurica Farcas, "Petru Poni" Institute of Macromolecular Chemistry (Romania)
Constantin Hutanu, "1 Decembrie 1918" University of Alba Iulia (Romania)

Diffractive, Micro Optics and Optical Signal Processing
Dorin Dadarlat, National R&D Institute for Isotopic and Molecular Technologies, Cluj-Napoca (Romania)
Nicolae Ţenachi, Institute of Applied Physics, Academy of Sciences of Moldova (Moldova)

Sensors, Microsystems and Instruments
Adrian Tulbure, "1 Decembrie 1918" University of Alba Iulia (Romania)
Florin Toadere, National Institute for R&D of Isotopic and Molecular Technologies, Cluj-Napoca (Romania)
Simona Halunga, University Politehnica of Bucharest (Romania)

Micro-Nanophotonics and Micro-Nanotechnologies
Octavian Fratu, University Politehnica of Bucharest (Romania)
Carmen Voicu, University Politehnica of Bucharest (Romania)
Viorel Ionescu, Ovidius University of Constanta (Romania)

Modelling, Design and Simulation
Emil M. Oanta, Maritime University of Constanta (Romania)
Titus Sandu, National Institute for R&D in Microtechnologies (Romania)
Nicolae Militaru, University Politehnica of Bucharest (Romania)

Optics-Inspired Approaches for Non-Optical Applications: Systems, Devices, and Signal Processing
Razvan Tamas, Constanta Maritime University (Romania)
Alin Danisor, Constanta Maritime University (Romania)
Violeta Văli Ciucur, Constanta Maritime University (Romania)

Biomedical Optoelectronics
Mihai Ionica, Military-Medical Scientific Research Centre (Romania)
Mona Mihailescu, University Politehnica of Bucharest (Romania)
Eugen Scarlat, University Politehnica of Bucharest (Romania)
Introduction

The ninth edition of the International Conference on Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies (ATOM-N 2018), was hosted for the fifth time in Constanta, Romania, one of the most important academic, cultural, and industrial centers in Romania, located in the historical region of Dobrogea, on the Black Sea (Pontus Euxinus) seaside.

The present edition marks 18 years of ATOM-N conference existence, in which it has consistently gathered the youthful spirit and the experience of the most appreciated scientists in the field of micro/nano technology and photonics/optoelectronics: topics that have, nowadays, great scientific applications worldwide.

ATOM-N 2018 took place 23–26 August 2018, and was organized into eight main sessions: the Plenary Session; Advanced Materials and New Technologies; Diffractive, Micro-Optics, and Optical Signal Processing; Sensors, Microsystems, and Instruments; Modeling, Design and Simulation; Micro/Nanophotonics and Micro/Nanotechnologies; Optics-Inspired Approaches for Non-optical Applications; Systems, Devices, and Signal Processing; and Medical Optoelectronics.

This was for the fifth time in the conference history when student contributions have been evaluated, and three prizes awarded.

We received abstracts from scientists all over Europe and the United States, from over six counties total. Due to the efforts of the Scientific and Program Committees, 158 abstracts were accepted for presentation and 155 presented, from which 142 have been selected for publishing in the conference proceedings as follows: 5 plenary lectures, 1 invited lecture, 39 oral lectures, and 110 poster papers.

We would like to express our thanks to the Organizing Committee for their enthusiastic and efficient work, and we extend our warmest thanks to all of the authors who presented their scientific contributions.

We hope that all of the participants of this prestigious meeting have had both an interesting professional experience, as well as moments of relaxation, while discovering the multicultural aspects of the academic city of Constanta, Romania.

Marian Viadescu
Razvan Tamas
Ionica Cristea