

# PROCEEDINGS OF SPIE

## ***Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies III***

**Ovidiu Iancu**  
**Adrian Manea**  
**Paul Schiopu**  
*Editors*

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# **Introduction**

On behalf of the organizers, especially in the name of professor Iancu Ovidiu, Politehnica University of Bucharest, Optoelectronic Research Center, and president of the ATOMN 2006 Organizing Committee, I am pleased to welcome you to the third edition of the conference proceedings of Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies, held 24–26 November 2006 in Bucharest Romania.

The field of micro- and nanotechnology in optoelectronics is a domain that has great scientific applications worldwide. Two years have passed since we last met in this hall and almost all of us who participated at the previous conferences are here again. We meet as scientists, engineers, and students to report on recent research results and educational approaches in this field.

The conference is organized into five main sections:

- Nanoscience and Nanoengineering
- Physical Optics and Signal Processing
- Lasers and Biomedicine
- Environmental and Chemical Sensors
- Optical Communications, Modelling and Simulation.

I would like to thank to the organizations that offered us assistance and support to organize this conference:

- SPIE Romania Chapter, especially to its president Constantin Grigoriu, Ph.D., for support in publishing the proceedings of this conference in the United States of America
- Ministry of Education and Research, Bucharest, Romania
- Electromagnetica-GoldStar, Bucharest, Romania
- Optokon Romania S.R.L.

Thanks also to the faculty of Electronics, Communications and Information Technology for support, and to all the staff of the Optoelectronics Research Center.

**Paul Șchiopu**

