

# ROMANIAN CONFERENCE ON ADVANCED MATERIALS, ROCAM 2009

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**Abstract:** ROCAM 2009, Aug. 25-28<sup>th</sup>, 2009, Braşov Romania was the 6<sup>th</sup> edition of triennial Romanian Conference on Advanced Materials (ROCAM). Conference noted by addressing issues of interest in modern science materials and continuous adapting in accord with the evolution of theoretical and experimental research. Because of this, the international visibility of the ROCAM conference increased from one edition to another. Honoured by the participation of a large number of local and foreign authors, including a large number of internationally renowned personalities, ROCAM-2009 edition was a great scientific event.

**Key words:** single crystals, nanomaterials, multifunctional materials.

## 1. Introduction

The aim of ROCAM-2009, Aug. 25-28<sup>th</sup>, 2009, Braşov Romania conference was to present an overview of the latest developments in some topics on advanced materials theory, modelling, processing, characterization and applications.

The conference was held at *Transilvania* University of Braşov under the aegis of the Academy of Romanian Scientists and by the contribution of some prestigious institutions: Romanian Materials Science-Crystal Growth Society, *Transilvania* University of Braşov, IKZ-Leibniz Institute for Crystal Growth, Germany, University of Bucharest, Faculty of Physics, National Institute of Materials Physics (NIMP) Bucharest, Institute of R&D for Optoelectronics, Bucharest, *Ovidius* University, Constanţa and Ministry of Education, Research and Innovation.

International Advisory Committee and

International Program Committee were represented by 17, 16 respectively of all outstanding scientific personalities. A special contribution in increasing the importance and the scientific level of the conference had *Alexander CHERNOV*, Editor J. Crystal Growth, Lawrence Livermore National Laboratory, USA; *Thomas KUECH*, Editor-in-Chief J. Crystal Growth, Univ. of Wisconsin - Madison, USA; *Roberto FORNARI*, Assoc. Editor J. Crystal Growth, Director of Leibniz Institute for Crystal Growth (IKZ); *Peter RUDOLPH*, Assoc. Editor J. Cryst Growth, Leibniz Institute for Crystal Growth (IKZ); *Prof. Michael SCHIEBER*, founder of the journal of wide international circulation, J. Crystal Growth, Hebrew University of Jerusalem, Israel; *Jeffrey DERBY*, Department of Chemical Engineering and Materials Science University of Minnesota, USA, President of American Association for Crystal Growth; *Knut DEPPERT*, Head of Epitaxy

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The ROCAM 2009 Exhibition provided a unique opportunity to present innovative products and services of interest to the research community. This time the event attracted 6 exhibitors specialized in the distribution of high-technology equipment for research and industry, covering various field from lasers, optics, spectroscopy, vacuum and cryogenics, electrochemical systems and atomic force microscopy.

In parallel with ROCAM 2009 conference was organized a very important International Summer School on Fundamentals and Basic Methods of Crystal Growth, Braşov, Romania, August 24 - 29<sup>th</sup>, 2009.

## 2. Topics

Modern and highly important subjects of materials science, proposed to be presented in the sections of ROCAM 2009 conference have been highly appreciated; the conference sections had the following topics:

1. *Growth and characterization of inorganic crystals.*
2. *Advanced organic materials for optics and electronics.*
3. *Nanostructured materials for electronic and optoelectronic devices.*
4. *Advanced materials. General aspects.*
5. *Advanced functional oxide materials: characterization and applications.*
6. *Materials under extreme conditions.*
7. *Biocompatible materials.*

## 3. Participants

ROCAM 2009 Conference enjoyed a very good national and international audience being able to attract 218 participants; of which 130 were from Romania and 88 from USA, Germany,

France, Russia, Israel, Ukraine, Canada, Serbia, Montenegro, Japan, Italy, Sweden, Belgium, Portugal, Slovenia, United Kingdom, Bulgaria, Moldavia, Poland, South Korea, Spain, Turkey, Chile, Ireland and Greece.

In the conference there were presented 261 papers, 7 plenary, 49 invited, and 205 oral and poster presentations.

## 4. Publications

Selected papers, presented at the conference, will be published after a peer review and according to author's options, in the following prestigious journals: *Journal of Crystal Growth*; *Thin Solids Films*; *Computational Materials Science*; *Journal of Optoelectronics and Advanced Materials*; *Romanian Journal of Physics and Optoelectronics and Advanced Materials - Rapid Communication*.

## 5. Scientific Conclusions

Scientific level of ROCAM 2009 conference was much higher appreciated than the five previous editions, due to the exceptional personalities' participation.

In particular, the sections on crystal growth and characterization were very successful due to organization of the Summer School. Teachers of school having plenary or invited contributions to the conference, it has stimulated scientific level of the conference.

## Acknowledgement

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