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Alexander I. Melker Vladislav V. Nelayev Editors

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Introduction

The Twelfth International Workshop on Nanodesign Technology and Computer Simulations (NDTCS-2008) took place 23–27 June, 2008 in Minsk, Belarus. The forum was organized by the Belarusian State University of Informatics and Radioelectronics with support from the Education Ministry of the Republic of Belarus.

The NDTCS-2008 workshop was devoted to modern investigation methods and the results of studying the structures and properties of nano- and microsystems, computing simulation of physical processes in nanotechnology, and nanoelectronics.

Reports presented at the workshop were divided into 5 sessions:

- 1. Electronic, atomic, and molecular dynamics
- 2. Biology systems
- 3. Nanomaterials and nanotechnologies
- 4. Nano-, micro- and macromechanics
- 5. Computer technologies and simulation

Nearly 60 scientists and graduate students attended the conference representing Belarus, Russia, Lithuania, Brazil, Poland, and Vietnam. In addition, representatives of France, USA, Germany, and Japan were among the authors of the submitted papers.

A total of 58 contributions were presented including 7 invited lectures, 39 oral, and 12 poster presentations. Proceedings (in the form of compressed preprints) of the NDTCS-2008 workshop were delivered before beginning of the event. 41 papers in the form of extended manuscripts were accepted for publication in these proceedings.

The NDTCS-2008 workshop is a continuation of the previous annual international workshops which were held in 1997–2005 (St. Petersburg, Russia), in 2006 (Olsztyn, Poland), and in 2007 (Beyreut, Germany).

Materials of all previous NDTCS workshops were published in English in the form of published papers in the Proceedings of SPIE and in the Proceedings of the Academy of Sciences for Strength Problems (Proceeding of SPAS).

The Thirteenth International Workshop on New Approaches to High-Tech: Nanodesign, Technology, Computer Simulations (NDTCS-2009) will be held on 23–26 June, 2009 in Vilnius, Lithuania.

Alexander I. Melker Vladislav V. Nelayev