
Preface

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Biographical notes: Vitalii Petranovskii received his PhD in Physical Chemistry from Moscow Institute of Crystallography in 1988. In 1993–1994, he worked as an Invited Scientist at the National Institute of Materials and Chemical Research, Japan. Since 1995, he is working at “Centro de Nanociencias y Nanotecnología, Universidad Nacional Autónoma de México” (2006–2014 – as the Nanocatalysis Department Chair). His research interests include synthesis and properties of nanoparticles supported over zeolite matrices. He is a member of Mexican Academy of Sciences, International Zeolite Association, and Mendeleev Russian Chemical Society. He has published over 100 papers in peer-reviewed journals and four invited book chapters. Also, he is a co-author of monograph “Clusters and matrix isolated cluster superstructures”, SPb, 1995.

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Marina G. Shelyapina received her PhD in Physics from Saint Petersburg State University (SPbSU) in 2000. Since then, she works at SPbSU as an Associate Professor focusing her research on the nuclear magnetic resonance and computer simulation study of solids. In 2001–2010, she worked as a Visiting Researcher in the “Laboratoire de Cristallographie” and “Institut Néel du Centre National de la Recherche Scientifique” in Grenoble, France. Her research interests include magnetic resonance and computer simulation of functional materials. She has published over 50 papers in peer-reviewed journals. Also, she is a co-author of two books.

The present issue of the *International Journal of Nanotechnology* contains a selection of peer-reviewed papers based on the contributions from the *Fourth Russian-Mexican Workshop “Nanoparticles, Nanomaterials and Nanoprocessing” (RuMex)*, held on 5–8 May 2014 in Ensenada, Baja California, Mexico. The meeting was organised in the spirit of the three previous RuMex workshops, with the active participation of Russian and Mexican scientists. This last workshop was co-organised by the Center of Nanoscience and Nanotechnology, National Autonomous University of Mexico (CNYN-UNAM) and Saint Petersburg State University, Russia, in order to bring together all researchers in the field of nanomaterial science and nanotechnology from Mexico and abroad.

The multi-disciplinary scientific program was dealing with both basic and application-oriented research in nanomaterial synthesis, properties and applications. RuMex is focused on the synthesis, processing, characterisation and modelling of nanostructured materials and their use in catalysis, photocatalysis, environmental applications, non-linear optics, medicine and veterinary, among others. We believe that the selected papers reflect the great efforts made by Mexican and Russian research groups and the high quality of investigations in this interdisciplinary field. Many fruitful and exciting research achievements were presented in the RuMex Workshop. One of the main objectives of the RuMex is to encourage students to participate and engage in the discussions with scientists on nanoscale science and technology, and to form a collaborative network.

The guest editors would like to thank the Editorial Board of the *International Journal of Nanotechnology*, and especially Dr. Lionel Vayssieres, the Editor-in-Chief of the IJNT, for the invitation to publish this special issue. We would also like to appreciate and thank all the authors who have contributed to this special issue, and to reviewers for their careful reading and helping in the improvement of the revised papers.

Special thanks go to the organising committee of the RuMex-IV and all the participants for their enthusiastic work that led to such a great success of the workshop and possibility to publish this special issue of the journal. This event was financially and all-around supported by Coordination of Scientific Research, UNAM, and CNYN-UNAM.