

Preface

The 171 research papers are selected in this special issue. These papers have presented results obtained from '**Joint International Conference on Nanoscience, Engineering and Management (BOND21)**', <http://bond21.unimap.edu.my/>, that be held on 19th- 21st of August 2013, Penang, Malaysia. BOND21 is a Malaysian event of nanotechnology. The BOND21 has involved 236 scientists from 17 countries across the world.

The principal objectives of BOND21 are exchanging the information about the nanoscience, engineering and management researches and achievements. Valorization of the competence in nanotechnology and nanoscience beside facilitation for scientists lead to access into recent high-tech research achievements. In recent years these researches have successfully contributed too many interdisciplinary fields. Therefore, transfer of ideas, methods and tools from traditional to a new scale should be a promising endeavor. An additional objective is to increase the understanding of its applications which underlies the problems of nano in the life realms. This is of great relevance to the society and science, in particular for economic endeavors. Objective assessment of risk and quantitative representations of information that support decisions has a vital role to play in many other areas.

The contributions have focused on nano research studies and applications. They have completed the overview of the research papers within the different themes of BOND21. The selected papers are divided into: the first focuses on nanoscience of nanostructures, nano-scale properties and applications. Followed by engineering of different branches of civil, mechanics and chemistry within nanotechnology. And finally, oriented on management of nanotechnology as hot topic applicable internationally to be into context of modern life.

Interactions between participants within their papers can be described as links between nodes. These papers address problems from various perspectives. They provide new insights, also formal models for the characterization of complex systems. As an editor of this special issue, I hope that the current selected papers provide a good overview of the research activities within nanoscience, engineering and management studies and applications. The results should also boast future research activities within the new actions, meetings and conferences.

I would like to acknowledge Prof. Datuk Dr. Kamarudin Hussin, the Vice-Chancellor of University Malaysia Perlis, for his support and encouragement during the organization of BOND21. Also, I would like to thank Prof. Dato' Dr. Zul Azhar Zahid Jamal, Deputy Vice-Chancellor for Academic and Internationalization; Prof. Dr. Abdul Hamid Adom, Deputy Vice-Chancellor for Research and Innovation; Prof. Dr. Uda Hashim, Director of Institute of Nano Electronic Engineering for their reinforcement and propping for preparing this special issue. I appreciate the amount of work that goes into writing papers when the authors are heavily burdened with other demands on their time. Finally, I present my special greetings to the publisher (Trans Tech Publications) for giving us the opportunity to publish and distribute this special issue of participated papers at BOND21.

Chairman of BOND21 and the Editor

Assoc. Prof. Dr. Yarub Al-Douri,
International Journal of Nanoelectronics and Materials, *Editor-in-Chief*
<http://ijneam.unimap.edu.my/>

World Journal of Nano Science and Engineering, *Editor-in-Chief*
<http://www.scirp.org/journal/wjnse/>

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