
Editorial

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Biographical notes: Mohamed Bououdina is the Director of the Nanotechnology Center at the University of Bahrain, Kingdom of Bahrain. He received his PhD in Physics from the Université Joseph Fourier (Grenoble, France). His research expertise and interests are in the field of nanoscience and nanotechnology, renewable energy such as hydrogen storage, materials science, biomaterials and neutron diffraction. He is an Editorial Board Member and Reviewer for many international journals and conferences. He has also made over 60 presentations and published over 60 papers in international learned journals.

J. Paulo Davim received his PhD in Mechanical Engineering from University of Porto in 1997 and the Aggregation from University of Coimbra in 2005. Currently, he is an Aggregate Professor in Department of Mechanical Engineering of the University of Aveiro and the Head of MACTRIB – Machining and Tribology Research Group. He has more 24 years of teaching and research experience in manufacturing, materials and mechanical engineering with special emphasis in machining and tribology. He is the Editor of five international journals, Guest Editor, Editorial Board Member, Reviewer and Scientific Advisory for many international journals and conferences. He has also published more than 300 articles in journals and conferences (more than 150 articles in ISI Web Science, h-index 15).

Recently, nanoscience and nanotechnology, as an emerging multidisciplinary research field (chemistry, physics, biology, materials science, engineering, medicine, etc.) have attracted special and great attention. The synthesis of materials at the nanoscale has shown an exceptional improvement of the material's properties (thermal, optical, electrical, magnetic, mechanical, etc.) as well as the discovery of new materials with

novel properties, due to the fact that at the nanometre scale the materials possess high surface area, spatial confinement, less imperfections, etc. This leads to the exploration and development of new technological applications in various domains.

After the review process, seven articles were selected for inclusion in this special issue. The guest editors hope that this special issue will stimulate more research on this topic.

The guest editors would like to thank all the authors and all the referees for their time and their thorough evaluations of these articles.