

EDITORIAL PREFACE

It is my great pleasure to publish Volume 7, Number 1, December 2013 of the *Jordan Journal of Mechanical and Industrial Engineering (JJMIE)*. *JJMIE* is a refereed, peer reviewed international journal issued by the Jordanian Ministry of Higher Education and Scientific Research in cooperation with the Hashemite University. *JJMIE* aims at providing a highly readable and valuable addition to the literature, which will serve as an indispensable reference tool for the years to come .

The journal covers a wide range of research and development concerning mechanical, industrial, material, mechatronics, and biomedical engineering. Through this publication, we hope to establish and provide an international platform for information exchange in the different fields mentioned above. The journal also encourages the submission of critical review articles, as well as technical notes, covering advances in the recent research pertaining to such fields.

This issue contains nine interesting research papers covering various aspects of solar energy, control, nanomaterial, composite material, quality management, and manufacturing: (i) performance study of on-grid thin-film photovoltaic solar station as a pilot project for architectural use; (ii) hourly solar radiation prediction based on nonlinear autoregressive exogenous (narx) neural network; (iii) development of a bond graph control maximum power point tracker for photovoltaic: theoretical and experimental; (iv) a comparative study of PZT-based & TiNi-shape memory alloy based MEMS microactuators; (v) crystallization behavior of iPP/LLDPE blend filled with Nano kaolin particles; (vi) studying the properties of polymer blends sheets for decorative purposes; (vii) investigating the applicability of EFQM and KAIIAE in Jordanian healthcare organizations: a case study; (viii) understanding the linkage between soft and hard total quality management: evidence from Malaysian manufacturing industries; (ix) prediction of surface roughness in electrical discharge machining of SKD 11 tool steel using recurrent Elman networks. The methodology employed in these research articles ranges from analytical and empirical models to experimental studies.

It is due to the dedicated efforts of our editors and reviewers that our journal is attracting high quality research papers from the authority in the field, and is becoming increasingly more popular amongst our engineer profession colleagues. It gives us immense pleasure to see the journal grow by leaps and bounds, and become stronger with each day passing by.

The Editorial Board is very committed to build the Journal as one of the leading international journals in mechanical, industrial, material, mechatronics, and biomedical engineering in the next few years. With the support of the Ministry of Higher Education and Scientific Research and Jordanian Universities, it is expected that valuable resources will be channeled into the Journal to establish its international reputation.

It is my great pleasure to thank the former Editorial Boards and Editors-in-Chief for founding *JJMIE*. I would like to thank all members of the recent editorial board, the international advisory board members, assistant editors, and the editorial board support team (language editor and publishing layout) for their continued support to *JJMIE* with their highly valuable advice. Additionally, I would like to thank the manuscript reviewers for providing valuable comments and suggestions to the authors that helped greatly in improving the quality of the papers. My sincere appreciation goes to all authors and readers of *JJMIE* for their excellent support and timely contribution to this journal. My great appreciation goes to the dean of Faculty of Engineering (Dr. Shaher Rababeh) and my colleagues at the Engineering Faculty of Hashemite University.

I would be delighted if the *JJMIE* could deliver valuable and interesting information to the worldwide community at the various fields of engineering. Your cooperation and contribution would be highly appreciated. More information about the *JJMIE* guidelines for preparing and submitting papers may be obtained from: www.jjmie.hu.edu.jo

Now, the *JJMIE* invites contributions from the entire international research community. The new journal will continue to deliver up-to-date research to a wide range of mechanical, industrial, material, mechatronics, and biomedical engineering professionals. The *JJMIE* will assure that rapid turnaround and publication of manuscripts will occur within three to six months after submission.

Prof. Nabil Anagreh
Editor-in-Chief
Hashemite University
Zarqa, Jordan, 2013