

Preface

International Conference on Applications and Design in Mechanical Engineering 2015 (ICADME 2015) was organized successfully by the Mechanical Engineering Program of the School of Mechatronic Engineering, Universiti Malaysia Perlis (UniMAP), Malaysia. It was held during 30th – 31st March, 2015 in Penang, Malaysia. The aim of the conference was to provide a platform for participants from diverse field of Mechanical Engineering backgrounds to exchange ideas and findings to promote cooperation, networking as well as knowledge sharing in both engineering practice and research in higher education. The theme “Innovation and Evolution in Mechanical Engineering” hoped to explore new ideas in Mechanical Engineering in the 21st Century. There was an overwhelming support by the international and national researchers to make this conference successful. This conference was third in series, the earlier two being organized by the same agency and were held in 2009 and 2012. ICADME 2015 was held jointly with ICoMMS 2015 and ICoBE 2015 as was done in 2012 as well.

Manuscripts having focus on theory, applications, design and/or experimental studies relevant to the conference theme were invited. Other related themes included, but not limited to:

Applied Mechanics and Design

Solid and Fracture Mechanics, Fatigue, Machinery Dynamics, Condition Monitoring, Machine Design, Concurrent Engineering, Finite Element Analysis, Noise and Vibration Analysis, Computer Aided Engineering Design, Manufacturing, Rapid Prototyping, Tribology, Aerospace, Composite, Reverse Engineering, and Design Optimization.

Energy and Thermofluids

Energy Conversion System, Renewable Energy, Thermodynamics, Fluid Dynamics, Heat Transfer, Heat Exchangers, Refrigeration and Air Conditioning, Computational Fluid Dynamics, Alternative Energy, Internal Combustion Engines, and Turbomachines

The peer-reviewed accepted papers from ICADME 2015 will be published under four chapters, namely, Applied Materials and their Applications, Noise and Vibration Analysis, Thermal Engineering, Fluids and Energy, and Applied Mechanics, Design and Manufacturing.

We, the editors, appreciate and thank everyone involved in organizing the conference. The national and international reviewers deserve special appreciation who gave valuable suggestions to the authors for improving the quality of their papers. We also thank TTP publisher for bringing out this volume.

Prof. Dr. Ghulam Abdul Quadir and Dr. Nasrul Amri Bin Md Amin

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