Preface

The Mechanical Engineering and Science Postgraduate International Conference (MESPIC) was the second Postgraduate International Conference organized by the Faculty of Mechanical Engineering, Universiti Teknologi MARA (UiTM) Shah Alam. The conference focused on the recent advances in the Mechanical Engineering domain locally and internationally. It caters as a strategic platform that enables knowledge sharing and encourages research collaboration among participants from various institutions of higher education within the domain. We are overwhelmed with the credible support that we have received from local and international universities through paper contributions.

This volume consists of technical papers that are divided into several sub-disciplines namely, materials science and materials processing technologies, mechatronics and robotics, design of machines and equipment, biomedical engineering, engineering management, ergonomics, and product design.

We wish to extend our gratitude to the keynote speakers, who have accepted our invitation to present their propounded knowledge sharing that are gaining attention among the research fraternity. Dato' Dr. Ir. Mohd Abdul Karim Bin Abdullah (Serba Dinamik Holdings Bhd, Malaysia) have shared his experience in the dynamic leadership and its related development, Professor Ir. Dr. Nukman Bin Yusoff (Universiti Malaya, Malaysia) delivered a paper on "Textured Novel Cutting Tool for Sustainable Machining in Green Manufacturing Application", Assoc. Prof. Dr. Osama Eljamal (Kyushu University, Japan) highlighted on "International Postgraduate Program in Japan: Challenges and Opportunities", and Prof. Ir. Esa Haruman W. (University of Bakrie, Indonesia) promoting on the research collaboration opportunity with UB and its latest research interest areas. For their support and enthusiasm, we are grateful.

Also, we would like to acknowledge and salute all members of the organizing committee for their relentless work and support. Finally, our sincere appreciation goes to the members of the advisory panel, and board of editors for their advice, support and guidance towards realizing this conference and publication.

All the papers have been prepared from the camera-ready manuscripts submitted by the author and editing has been limited to minor changes where it was considered necessary by the editors.

Editorial team.
Associate Prof. Dr. Ts. Solehuddin Shuib
Dr. Idris Saad
Ir. Dr. Noriah Yusoff
Dr. Mohd Hafiz Mohd Noh
Dr. Ts. Abdul Halim Abdullah
Dr. Nur Faiga Ismail

Organizing Committee

Patron	Prof. Dr. Ir. Muhammad Azmi Ayub Dean Faculty of Mechanical Engineering Universiti Teknologi MARA
Chairman	Assoc. Prof. Dr. Nor Hayati Saad Deputy Dean (Academic), Faculty of Mechanical Engineering Universiti Teknologi MARA
Vice Chairman 1	Assoc. Prof. Dr. Solehuddin Shuib Head, Centre of Postgraduate Studies, Faculty of Mechanical Engineering Universiti Teknologi MARA
Vice Chairman 2	Mohd Syukri Kamil Bin Sulaiman
Chief Editor	Dr. Idris Saad
Editorial Board Member	Assoc. Prof. Dr. Solehuddin Shuib Ir. Dr. Noriah Yusoff Dr. Mohd Hafiz bin Mohd Noh Ts. Dr. Abdul Halim Abdullah Nur Faiqa Binti Ismail
Vice Chairman 2	Mohd Syukri Kamil Bin Sulaiman
Treasurer & Registration	Nur Faiqa Binti Ismail
Program & Awards	Nadia Nurul Nabihah Binti Ahmad Fuad
Sponsorship	Khairul Syazwani Binti Shahrudin
Publicity & Promotion	Mohd Hazwan Bin Mohamed Norli
Protocol & VIP	Ain Athirah Binti Rozali
Technical & Logistic	Mohamad Amar Shahmin Bin Zulkiflee
Admin	Noor Hidayah Binti Othman