

JOURNAL OF MECHANICAL ENGINEERING

An International Journal

Special Issue
Engineering for Humanity Vol 1

Vol SI 4 (1)	August 2017	ISSN 1823-5514	eISSN 2550-164X
--------------	-------------	----------------	-----------------

- 1 [A Comparative Study of Mould Base Tool Materials in Plastic Injection Moulding to Improve Cycle Time and Warpage Using Statistical Method](#) 1
A.A. Raus, M.S Wahab, M. Ibrahim, K. Kamarudin, A. Ahmed, and N. Sa'ude
- 2 [Predictive Model of Parameters Validation for the Vortexanda Technique by using Fuzzy Logic and Neural Network](#) 19
Norashikin Ahmad Kamal, Sangmin Shin, and Heekyung Park
- 3 [Preliminary Feasibility Studies of Vegetable Oil as Substitution to Mineral Lubricant](#) 37
Muhammad Aizat bin MD Alias and Muhamad Azwar bin Azhari
- 4 [Investigating the Influences of Automated Guided Vehicles \(AGVs\) as Material Transportation for Automotive Assembly Process](#) 47
Seha Saffar, Zamberi Jamaludin, and Fairul Azni Jafar
- 5 [Fuzzy-PID Position Control of a Three Fingered Robot Hand for Grasping Varying Loads](#) 61
Norshariza Mohd Salleh, Ruhizan Liza Ahmad Shauri, Khairunnisa Nasir, and Nurul Hanani Remeli
- 6 [The Effect of Square Finned Conformal Cooling \(SFCC\) on Cycle Time for Plastic Injection Moulding](#) 79
K. Kamarudin, M.S. Wahab, M. Ibrahim, M.F.M. Batcha, A.A. Raus, Aqeel Ahmed, N. Sa'ude, Z. Shayfull, and S.M. Nasir
- 7 [Investigation of the Emission Characteristics of Iso-Butanol Additives on Methanol-Gasoline Blends using Spark Ignition Engine](#) 93
Hazim Sharudin, Nik Rosli Abdullah, M. N. A. M. Yusoff, H. H. Masjuki, and Obed M. Ali
- 8 [Effects of Baby Carrier on Wearer's Posture Stability](#) 107
Aizreena Azaman, Nurshazni Aiman Mat Isa, Mohd Azuwan Mat Dzahir, and Khor Kang Xiang

9	Parameter Magnitude-Based Information Criterion in Identification of Discrete-Time Dynamic System <i>Md Fahmi Abd Samad and Abdul Rahman Mohd Nasir</i>	119
10	Influence of Iron Oxide Powders on Braking Performance of Brake Friction Materials <i>R.J. Talib, M. Hisyam Basri, N. I. Ismail, R. Rabilah, and M.A. Selamat</i>	129
11	Fatigue Life Assessment of 9mm Thickness Low Carbon Steel with Multi-Objective Optimized Welding Process <i>Azrriq Zainul Abidin, Wan Emri Wan Abdul Rahaman, Yupiter HP Manurung, Muhammad Raimiey Bin Abu Bakar and Mohammad Ridzwan Bin Abdul Rahim</i>	143
12	Electrochemical Behaviour and Interfacial Contact Resistance of Ti-6Al-4V and SUS 316L plates with Potential Application as a Bipolar Plate in PEMFC <i>Nur Fawwaz Asri, T. Husaini, Edy Herianto Majlan, Abu Bakar Sulong and Wan Ramli Wan Daud</i>	155
13	Optimization of Automotive Manufacturing Layout for Productivity Improvement <i>Muhamad Magffierah Bin Razali, Mohd Fadzil Faisae Ab.Rashid and Muhammad Razif Abdullah Make</i>	171
14	Effect of Steel Fibres And Wire Mesh Reinforcement on Flexural Strength and Strain Energy Steel-Epoxy-Aluminium Composite Laminates <i>W. N. M. Jamil Z. Sajuri, M. A. Aripin, S. Abdullah, M. Z. Omar, M.F. Abdullah and W. F. H. Zamri</i>	185
15	Influence of Waste Plastic Binder on Sintered Properties of Injection Moulded M2 HSS <i>Rosniza Rabilah, Salina Budin, Talib Ria Jaafar, Siti Mardini Hashim, Nor 'Aini Wahab, Mohd Afian Omar and Rosliza Sauti</i>	197
16	A Study on Potential Physical Hazards at Construction Sites <i>Salim Mkubwa Salim, Fairuz I. Romli, Jailani Besar and Negin Ozve Aminian</i>	207
17	Performance Evaluation of Palm-Olein TMP Ester Containing Hexagonal Boron Nitride and an Oil Miscible Ionic Liquid as Bio-Based Metalworking Fluids <i>Amiril Sahab Abdul Sani, Erween Abd Rahim, Norfazillah Talib, Kamaruddin Kamdani, Mohammad Zulafif Rahim and Syahrullail Samion</i>	223
18	Shear Strength of the Mixed Adhesive Joint Silyl Modified Polymer-Epoxy in Single Lap Joint Aluminium <i>Triyono, Sri Hastuti, and Neng Sri Suharty</i>	235
19	Designing a Firefighter Motorcycle as an Effort to Provide an Early Response to Fire Disaster <i>Himawan Hadi Sutrisno and Triyono</i>	249
20	Social Media Sentiment Analysis of Thermal Engineering Students for Continuous Quality Improvement in Engineering Education <i>Wandeep Kaur, Vimala Balakrishnan, and Baljit Singh</i>	263