

JOURNAL OF

Advanced Manufacturing Technology

Vol. 12 No. 1 (3) (2018)

Theme

**Advances in Manufacturing Engineering and
Industrial System Technology**

Chief Editor

Noraiham Mohamad

Editors

**Mohd Asyadi 'Azam Mohd Abid, Mohd Amran Md Ali,
Azrul Azwan Abdul Rahman, Saifudin Hafiz Yahaya and Mohd Shukor Salleh**

The logo for the journal 'Advanced Manufacturing Technology' (AMT). It features the letters 'AMT' in a bold, italicized, yellow font. The 'A' is stylized with horizontal lines extending to the left, and the 'M' and 'T' are also bold and italicized. The entire logo is set against a blue background with a faint, repeating watermark of the journal's title.

**JOURNAL OF
ADVANCED MANUFACTURING TECHNOLOGY**

Contents

**Symposium of Advanced Manufacturing Engineers & Technologists 2017
(AMET 2017)**

<i>No.</i>	<i>Title</i>	<i>Page</i>
1.	Nickel-Cobalt Alloy Deposition on Iron Substrate using Electroless Deposition in Deep Eutectic Solvent <i>M. Zaimi, M. A. Din, K.T. Lau, I.S. Othman and T.D. Widodo</i>	1
2.	Experimental Investigation of Drilling Process using Nanofluid as Coolant <i>P.J. Liew, M.R. Yahaya, M.S. Salleh, R. Izamshah and J.Wang</i>	11
3.	Effect of Different Cooking Temperature and Alkalinity on Mechanical and Morphological Properties of Composite Sheet from Durian Shell Waste Fibre <i>R.F. Munawar, A.B. Arif, N. Mohamad, M.F. Dimin, M.S.M Suan, I.S. Othman, H. Hasib, M. Abu, S. Radiman and N.H.M. Hassan</i>	23
4.	Hybridization and Thermal Stability Effects on Physical Properties of Hybrid Glass/Jute Fiber Reinforced Epoxy Composites <i>N. Mohamad, M.F. Hassan, S.Y. Chang, M.Y. Yuhazri, M.E. Abd Manaf, H.E. Ab Maulod, J.A. Razak, R.F. Munawar and A. Qumrul</i>	35
5.	Enhancing Graphitic Carbon Content of Carbon-Based Electrode Materials by Pulsed Electrophoretic Deposition for Electrochemical Capacitor <i>K.T. Lau, M.A. Azam, M.E.A. Manaf, M. Zaimi, M.S.M. Suan, N.A. Yaacob, J. Narayanasamy and K.F. Samat</i>	51
6.	Effect of Cutting Parameter on the Tool Life of the Uncoated Carbide Tool During Turning using Minimum Quantity Lubrication (MQL) <i>M.A. Sulaiman, M.S. Asiyah, R. Shahmi, E. Mohamad, N.A. Mohamad, M.A. Md Ali, D. Yuniawan and T. Ito</i>	63
7.	Suppression of Cutting Forces using Combined Inverse Model Based Disturbance Observer and Disturbance Force Observer <i>M. Maharof, Z. Jamaludin, M. Minhat, L. Abdullah, N. A. Anang, T. H. Chiew, J. Jamaludin and T.Tjahjowidodo</i>	73
8.	Multi-Response Optimization of Plastic Injection Moulding Process using Grey Relational Analysis Based in Taguchi Method <i>M.A. Md Ali, N.I. Mohd Ali, M.S. Kasim, R. Izamshah, Z. Abdullah, M.S. Salleh, Z. Razak, R.M. Sharip and M. Yamaguchi</i>	87

9. Calcium Phosphate from Waste Animal Bones: Phase Identification Analysis	
<i>A.R. Toibah, F. Misran, Z. Mustafa, A. Shaaban and S.R. Shamsuri</i>	97
10. Effect of Degussa P25 Content on the Deposition of TIO₂ Coating on Ceramic Substrate	
<i>M.A. Musa, J.M. Juoi, Z.M. Rosli, N.D. Johari and T. Moriga</i>	111
11. Preliminary Investigation on the Physical Properties and Morphological of Sintered Cockle Shell/Recycled Soda Lime Silicate Composite	
<i>Z. Shamsudin, A.H. Razali, F.H. Suzaim, Z. Mustafa, T.A. Rahim and A. Hodzic</i>	125
12. Integration of Simulation Technologies with Physical System of Reconfigurable Material Handling	
<i>A.A. Abdul Rahman, M.S. Osman, R. Ng, S. Abdullah, M.A.A. Rahman, E. Mohamad and A. Abdul Rahman</i>	139
13. Comparison of Adaptive Neuro Fuzzy Inference System and Response Surface Method in Prediction of Hard Turning Output Responses	
<i>M.R. Jamli and S. Fonna</i>	153
14. Optimization of Channel Assignment for Mobile Communication using Tabu Search	
<i>S.L. Loh, N.A. Amat Ali, S.H. Chong, D. Malinin and S.F. Fam</i>	165
15. Impact of Single and Double Zincating Treatment on Adhesion of Electrodeposited Nickel Coating on Aluminium Alloy 7075	
<i>I.S. Othman, M.J. Starink and S.C. Wang</i>	179
16. Electrical Conductivity Models of Die Configuration for Polypropylene-Reinforced Milled Carbon Fibre	
<i>N.A.M. Radzuan, A.B. Sulong, M.R. Somalu and H. Suherman</i>	193
17. Innovation of Mooc for Future Technologists	
<i>Z. Jano, H. Hasan, A. Mohd Pilus, A. Yahya, H. Janor and R. Padfield</i>	207

Chief Editor

First and foremost, warm greetings to all the readers. I am delighted to announce the publication of the third Special Issue of the Journal of Advanced Manufacturing Technology (JAMT). It is a compilation of articles generated mostly from discussions in the Symposium of Advanced Manufacturing Engineers & Technologists (AMET 2017) organized by the Advanced Manufacturing Centre of Universiti Teknikal Malaysia Melaka held at Kobemas Hotel, Melaka, Malaysia.

The Special Issue comprises articles concerning the major components of the Manufacturing Engineering and Technology from the Advanced Materials, Designs, Latest Technology in Robotics, Processing to Industrial Engineering. The goal of the symposium was to provide a platform for local researchers, including engineers and technologists, who work closely with international collaborative partners to recognize their potentials for expanding their research activities and innovating the outputs for the strategic field of manufacturing engineering. AMET 2017 is expected to be a catalyst for robust engineering solutions beyond current or dominant technologies which *Improve, Innovate, and Invent* through a synergistic blend of science, engineering and technology to achieve the *Advances in Manufacturing Engineering and Industrial System Technology*.

I would like to take this opportunity to thank all the individuals involved in this publication particularly the editorial and technical boards for their tireless efforts in ensuring the continued success of the JAMT. It is my privilege to extend a heartfelt and warm thank you to all of our dear contributors: we are so grateful.

Best wishes and thank you for your support.