

**JOURNAL OF**

# **Advanced Manufacturing Technology**

**Vol. 14 No. 2 (1) (2020)**

**Theme**

**Energy Efficiency and Advanced Material  
for Sustainable Development**

**Chief Editor**

**Azma Putra**

**Editors**

**Fatimah Al-Zahrah Mohd Sa'at, Cheng See Yuan  
Suhaila Salleh and Md Fahmi Abd Samad @ Mahmood**

The logo for the journal 'Advanced Manufacturing Technology' (AMT). It features the letters 'AMT' in a bold, yellow, sans-serif font. The 'A' is stylized with horizontal lines extending to the left, suggesting speed or technology. The 'M' and 'T' are solid yellow. The entire logo is set against a blue background with a subtle pattern of the journal's title.

**JOURNAL OF  
ADVANCED MANUFACTURING TECHNOLOGY**

**Contents**

**5<sup>th</sup> International Conference and Exhibition on Sustainable  
Energy and Advanced Materials (ICE-SEAM 2017)**

<i>No.</i>	<i>Title</i>	<i>Page</i>
1.	<b>Enhancing Corrosion Protection of AZ91D Surface via Diffusion, PA-PVD and Duplex Technique: A Comparison Study</b> <i>W.A. Shafiz, Z.M. Rosli, Y. Yusuf, J.M. Juoi and T. Moriga</i> .....	1
2.	<b>The Influence of Ethanol on the Morphology, Phase and Crystal Size of the Sol-Gel Dip Coating TiO<sub>2</sub> Thin Films</b> <i>S.A. Yazid, Z.M. Rosli, J.M. Juoi and T. Moriga</i> .....	11
3.	<b>A Comparative Study between Weighing and Image Analysis Techniques for Predicting the Amount of Deposited Electrospun Nanofibres</b> <i>A.H. Nurfaizey, F.C. Long, M.A.M. Daud, N. Muhammad, N.A. Masripan and N. Tucker</i> .....	23
4.	<b>Influence of Particle Size and Pre-Sintering Temperature on the Properties of Zirconia Block</b> <i>N.F. Amat, A. Muchtar, N.F.Z. Abidin, M.S. Amril, M.J. Ghazali, N. Yahaya and M.M. Aboras</i> .....	37
5.	<b>Rolling Effect on Dissimilar Friction Stir Welded AA5083-AA6061 Aluminium Alloy Joints</b> <i>N.F.M. Selamat, A.H. Baghdadi, Z. Sajuri, S. Junaidi and A.H. Kokabi</i> .....	49
6.	<b>Classical Laminates Theory: Application to Combined Composite CFRP/GFRP</b> <i>N.A.A. Md Zahir, M.A.M. Daud, A.F. Ab Ghani and F. Alami</i> .....	63
7.	<b>Effect of Discharge Time on the Luminance Output of Organic Light Emitting Diode (OLED)</b> <i>M.M. Azrain, M.R. Mansor, L.M. Lim, S. Zambri, B. Cosut and D. Sivakumar</i> .....	77
8.	<b>The Effect of Deposition Time on Filtration Efficiency of Electrospun Nanofibre Water Filters</b> <i>A.H. Nurfaizey, N.S.A. Roslan, M.I.M. Hafiz, M.A.M. Rosli, A.M. Saad and N. Tucker</i> .....	91
9.	<b>Fatigue Life Behaviour of Fiberglass-Reinforced Composites Subjected to Underloading</b> <i>R.H. Jimit, K.A. Zakaria, O. Bapokutty, M.B. Ali and A. Rivai</i> .....	101
10.	<b>Design of Multifunctional Cyclic Bending and Cyclic Stretchability Test Rig for Stretchable Conductive Ink</b> <i>M.Z. Manaf, M.Z. Akop, S.H.S. Md. Fadzullah, A.S. Ashikin, and B. Basori</i> .....	113

<b>11. Noise Characteristics of Ball Bearing Lubricated with Engine Oil Enhanced with Hexagonal Boron Nitride Particle Additive</b> <i>K. Al-Ghaili, R. Ismail, N.S.R. Apandi, M.S. Azmi and M.P. Cartmell</i> .....	125
<b>12. Powder Injection Molding of Cu/Graphene Composite: Rheological Properties</b> <i>M.O.A. Rashid, N. Mohamad, A.B. Sulong, N.N. Kadiman and B.E. Ukwueze</i> .....	137
<b>13. Dimensional Accuracy of Fused Filament Fabrication by Cassava Adhesion on Printing Platform</b> <i>F.R. Ramli, M.A. Nazan, M.R. Alkahari, M.A. Abdullah, M.N. Sudin and S.G. Herawan</i> .....	149

## **Chief Editor**

First and foremost, warm greetings to all the readers. I am delighted to announce the publication of a special issue of the Journal of Advanced Manufacturing Technology (JAMT). JAMT is publishing the 1<sup>st</sup> volume, featuring articles from the 5<sup>th</sup> International Conference and Exhibition on Sustainable Energy and Advanced Materials (ICE-SEAM 2017) held at Holiday Inn Hotel in Melaka, Malaysia on 16-19 October 2017.

The special issue comprises articles which are deemed suitable with the goals of ICE-SEAM 2017 are to increase internationalization activities and to enhance collaborative relationships between universities, to disseminate information, technology, engineering, performance and the latest scientific discoveries in the field of engineering at the international level and to provide information and exposure to the industry and other institutions on the progress and opportunities for collaboration in research and consultancy hence strengthen networking between academicians, scientists, engineers and technologists at regional and international levels.

I wish 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 quality of the papers published in JAMT.

Moreover, my gratitude is extended to all contributors as well.

Best wishes and thank you for your support.