

School of Mechanical Engineering, Universiti Sains Malaysia

April 2025 Volume 9 Quarter 2

eISSN 2550-2069

Editorial Board

Editor in Chief

-Assoc. Prof. Ir. Dr. Ahmad Baharuddin Abdullah

Secretary

-Zarirah Karrim Wani

Inside the Issue

Preface.....1 Congratulation Zul.....1 Sharing at ETW25......1

Active Grants

FRGS Grant

Title: Investigation on the effect of hot forging on the deformation behavior and microstructural response of Wire Arc Additive Manufacturing (WAAM) of high strength low alloy (HSLA) steel components.

Short Term

Title: Post Welding cold deformation effect on bonding behavior of bimetal wall deposited by arc additive wire manufacturing.

The Metal Forming Research Lab (MFRL) is very honor after been invited by the Assoc. Prof. Dr. Dr. Rajamani from Vel-Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai, India to join his research team to apply for fund under the ASEAN-India Collaboration Project. It is a form of recognition by the international organization for our contribution in the field.



Congratulation Zul

On 13th of May 2025, one of our members, Muhammad Zulkhairi Rizlan has passed his viva voce after more than 4 hours defense session.

Thank you to all examiners and co-supervisor for a very constructive and benefited comments and suggestions. Congratulations to Rizlan.



Sharing Session at ETW 2025.

This year, Malaysian Society of Engineering Technology (MySET) had successfully organized an Engineering and Technology Week 2025 from 17th to 23rd of May 2025. The theme of ETW2025 is "Digital Revolution in Engineering and Technology: Redefining Efficiency, Safety and Sustainability". At this event, Assoc. Prof. Ir. Dr. Ahmad Baharuddin was invited to share and give a talk on metal additive manufacturing, issues and challenges. It is a huge opportunity for us to be known locally as the key players in the metal based additive manufacturing field.

Welcome to MFRL - Dr Aslam





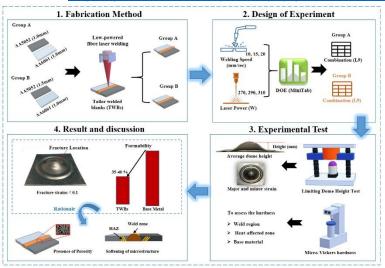
MFRL would like to welcome Dr Mohd Aslam to the group. He is the first postdoctoral to join the group. His project is on real data monitoring of molten spool in the wire arc additive manufacturing. He was graduated from National Institute of Technology (NIT) Silchar, Assam, India. We are hoping his excellent research experience and strong background knowledge on metal-based additive manufacturing may help the group to excel in the field locally and internationally.

Contact Details

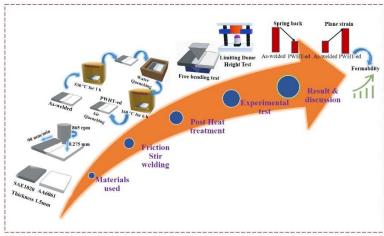
Metal Forming Research Laboratory, School of Mechanical Engineering, Engineering Campus Universiti Sains Malaysia Seri Ampangan14300 Nibong Tebal, Pulau Pinang, MALAYSIA, Phone: 604-5996361, Fax: 604-5996912, e-mail: mebaha@usm.my, http://metalforming.usm.my

Publication 2025 (till Jun 2025)

Jamaludin, M. F., Abdullah, A. B. ., Samad, Z., & Yusof, F. (2025). Formability Analysis of Dissimilar Aluminium Tailor Welded Blanks by Low-Powered Fibre Laser for Lightweight Automotive Application. *Journal of Applied Engineering Design and Simulation*, *5*(1), 57-65. Retrieved from https://jaeds.uitm.edu.my/index.php/jaeds/article/view/103



Rizlan, M.Z., Abdullah, A.B. & Hussain, Z. The effect of post-weld heat treatment on the formability of aluminum to steel friction stir welded blanks. *Int J Mater Form* 18, 38 (2025). https://doi.org/10.1007/s12289-025-01898-4



Kamarul Al-Hafiz Abdul Razak, Ahmad Baharuddin Abdullah & Norzalilah Mohamad Nor. (2025). Effect of Single Point Incremental Forming (SPIF) Process Parameters on Surface Roughness of Dissimilar Tailor Welded Blanks using the Taguchi Method, Jurnal Kejuruteraan 37(1), pp. 299-308. https://doi.org/10.17576/jkukm-2025-37(1)-20

