

DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2025-2026

FACULTY PUBLICATIONS - International/National Journals

- 1. Subramanian, Mohankumar, Raju, Naveen Kumar, Rathanasamy, Rajasekar and Velu Kaliyannan, Gobinath "Tribological and Mechanical behavior of Al359 Composites reinforced with B4Cp, SiCp and flyash", Material Testing, Vol. 60, No. 7, pp. 1223—1231.
- 2. L.Selvarajan, Prakash B, Niranjan T., Madhava Reddy S., Singaravel B., and Periasamy K "A critical insight into the use of EDM for machining advanced ceramic composites a review", Machining Science and Technology, 29 (5): 723–46.
- 3. A. K. Chaturvedi, T. Jagadeesha, Santosh Kumar Tamang, R. Thanigaivelan, and R. Periyasamy, "Optimization of Cutting Parameter in turning of Super duplex Stainless Steel-SDSS2507 with textured tools under MQL Conditions", Surface Review and Letters, (Published Online).
- Arulpandian Palanisamy, Nagaraj Chelliah Machavallavan, Dhanasekar Ramalingam, Kumaravel Sundaram, "Microstructural and Mechanical Improvements in A356 Composites on Incorporating Polymer Derived Ceramics Through Ultrasonication at Semi-solid and Liquid State", Silicon, 17, 2715–2727.
- 5. V. S.Shaisundaram, Sengottaiyan, Saravanakumar, Raji Gunasekaran and S.Kumaravel, M.Chandrasekaran, Basumatary Sanjay, "Machine Learning Driven Energy Efficiency Enhancement and Emission Reduction in Diesel Engine Using pumpkin seed Bio Diesel Blends and CeO₂ Nano Particles", International Journal of Energy Research, (Published Online).

- 6. Nadanasabapathi Sivashankar, Kadhiresan Santhanam, Shikandar Prasad, Mamidala Jawahar, Rajasekaran Thanigaivelan, "Electrochemical Micromachining of Galvanized iron Sheets: process optimization and Performance Evaluation", Journal of Electrochemical Science and Engineering, (Published Online).
- 7. S. Saravanan, Saravanakumar Sengottaiyan, Ra. Aravind, S. Krishnakumar, "Assessment of the Tribological Behavior of WAAM-Fabricated SS316L through Advanced Ensemble Machine Learning Predictions and RSM-Based Optimization", Journal of Materials Engineering and Performance, (Published Online).
- 8. G. Mahendran, R. Ramadoss, C. Rajendran, G. Selvakumar, V. Jayaseelan, "Influence of Solution Treatment and Artificial Aging on the Strength of LM13 Reinforced with Titanium Diboride Metal Matrix Composite", Journal of Materials Engineering and Performance, (Published Online).
- 9. Sivakumar Viswanathan, Saravanakumar Sengottaiyan, Muthukumar Veerappan, Shaisundaram Veerasamy Shamprasshaath, "Assessment of Mechanical Strength, Thermal Stability, and Moisture Resistance of AA6061-Alumina-Banana Fiber Epoxy Fiber Metal Laminates", Fibers and Polymers, 26, 4497–4512 (2025).
- 10. Dhanapalan Lavanya, Dhavamani Chinnathambi, Venkatesan Subramanian, Ravikumar Natarajan., "Biosilica and Clove Oil-Modified Banana Fiber Epoxy Composites: Mechanical, Thermal, Wear, and Drilling Performance with Machine Learning and RSM Optimization", Composite Interfaces, (Published Online).
- 11. Periyasamy Dhiravidamani, Duraisamy Jagadeesh, Prabagaran S, Srinivasan R, "Hemp-PEEK composites: surface treatment, processing, and performance", International Polymer Processing, vol. 40, no. 5, 2025, pp. 517-524.
- 12. P Suresh, Kumaravel S, Saravanakumar Sengottaiyan, Muthukumar P, "Influence of friction stir processing passes on microstructure, mechanical and tribological performance of Al5083/FeCoCrCuTi high-entropy alloy surface composites", Composite Interfaces, (Published Online).
- 13. N. Santhosh, S.M. Vinu Kumar, R. Sundar, V. Vadivelvivek, C. Dineshbabu, "Hybrid FED former-LSTM model for enhanced heave displacement prediction in offshore buoys", Ocean Systems Engineering, Vol. 15, No.3, pages 271-295.

14. Arulpandian Palanisamy, Krishnaveni Anbalagan, Raja Palanivel, J. R. Vinod Kumaar, "Enhanced Microstructure and Mechanical Properties of In Situ Polymer-Derived Ceramic-Reinforced A356 Aluminum Composites Through Cooling Slope Casting", International Journal of Metalcasting, (Published Online).