



**DEPARTMENT OF MECHANICAL ENGINEERING**  
**ACADEMIC YEAR 2023-2024 (June 2023 – June 2024)**  
**JOURNAL PUBLICATIONS**

1. Janaki Saminathan, **Muthukumar Marappan**, Senthil kumar Angappamudaliar Palanisamy, Sivabalakrishnan Ramasamy (2023) “ Performance improvement of Proton Exchange Membrane fuel cell by modified flow field design”, Journal of Energy Engineering, ISSN: 0733 9402, 149 (5) (SCI - indexed)
2. **B. Ashok Kumar**, M. Vimal Raja, V. L. Vel Prakash, M. Vinosh, Prajwal P.G. Shastry (2024) “The determination of the stress field surrounding a quasi –constrained inclusion in a chromium -3.5 nickel alloy”, SAE Technical paper, <https://doi.org/10.4271/2023-01-5184>, ISSN: 0148-7191, e-ISSN: 2688-3627, pp: [1-6] (Scopus - Indexed)
3. **Subramaniam Magibalan**, Vinayagam Mohanavel, Alagesan Sivapragasam, Arul Kulandaivel, Sathish Kannan, Yosef Jazaa, (2023) “Industrial waste fly ash experimental research on the thermal, mechanical, and electrical characteristics of AA8011 metal matrix composites”, The International Journal of Advanced Manufacturing Technology, <https://doi.org/10.1007/s00170-023-12662-w>, pp [1-16] (SCI - Indexed)
4. Sudharsan Gunasekarana, Suresh Periyagounder, **Magibalan Subramaniam** (2023), “Enhancing micromachining precision with novel electrolyte combinations: an investigation”, Journal of Ceramic Processing Research. <https://doi.org/10.36410/jcpr.2023.24.4.705>, Vol. 24, No. 4, pp. [705 -713] (WOS - Indexed)
5. Sakthivel S, **Magibalan S**, Jeyaprakasam S, Venkatraman J (2024), “Improving Fire Resistance in E-Vehicles: A Study on MPP-Enhanced S-Glass/Phenolic Hybrid Composites”, E3S Web of Conferences, <https://doi.org/10.1051/e3sconf/202452902001>, 529, 02001, pp: [1-10] (Scopus - Indexed)

6. **N. Senniangiri**, J. Bensam Raj, Y. Bruceley, A. Bovas Herbert bejaxhin (2023), “Effect of SnO<sub>2</sub> and Ag nano-additives on the performance, combustion and emission characteristics of diesel engine fueled with mango seed biodiesel”, *Petroleum Science and Technology*, <https://doi.org/10.1080/10916466.2022.2120501>, pp: [1-22] (WOS - Indexed)
7. Omprakas M A, **Manikandan M**, Balakrishnan S, Pavithran S, Sasikaran S, Venugopal S, Vishnuprasath L (2024), “Cutting Fluid pH Value Maintenance in CNC Machine by Arduino Nano”, *E3S Web of Conferences*, <https://doi.org/10.1051/e3sconf/202452904002>, 529, 04002, pp: [1-12] (Scopus - Indexed)
8. S. Shankar, **M. Manikandan**, D.K. Karupannasamy, C. Jagadeesh, Alokesh Pramanik, Animesh Kumar Basak (2023) “Investigations on the tribological behaviour, toxicity, and biodegradability of kapok oil bio-lubricant blended with (SAE20W40) mineral oil”, *Biomass Conversion and Biorefinery*, <https://doi.org/10.1007/s13399-021-01394-0>, Volume 13, pp [3669–3681]. (SCI - Indexed)
9. Deepan Kumar S, **Balakrishnan S**, Saminathan S, Arun Raj V, Sivaji Dhayaneethi, Soundrapandian E, B Veath Prakash (2023) “Design and Fabrication of FDM Adapter Head Setup for CNC Milling Machine”, *SAE Technical Paper*, doi:10.4271/2023-28-0081, pp [1-8] (Scopus - Indexed)
10. **Balakrishnan S**, Manikandan M, Omprakas M A ,Giri D G, AravindKumar V V, Arun Prasanth S, and Arul Vignesh S L (2024), “Experimental Investigation and CFD Analysis of Wind Turbine Blades with Different Attack Angles”, *E3S Web of Conferences*, <https://doi.org/10.1051/e3sconf/202452902011>, 529, 02011, pp: [1-9] (Scopus - Indexed)
11. Arjunraj, R., Ancelin Nishanth, M.A., Niji Jeba Mahiban, J., Vishwanath, G., Santhosh, E. “Eco-Friendly Waste Management: A Segregation and Composting System for Domestic Use”, (Scopus - Indexed)