



DEPARTMENT OF MECHANICAL ENGINEERING

ACADEMIC YEAR 2020-2021

JOURNAL PUBLICATIONS

1. **Dr. M. Muthukumar**, Senthil Kumar A P, Sasikumar C, Yuvaraj S, Thokchom Subhaschandra Singh (2021) “Effect of nano-particles on the droplet combustion of rice bran oil biodiesel”, Biomass Conversion and Biorefinery, ISSN: 2190 6815, <https://doi.org/10.1007/s13399-020-01209-8>
2. **Dr. M. Muthukumar**, Rengarajan Narayanan, Karthikeyan Manoharan, Magesh Kannan Vijayakrishnan, Karthikeyan Palaniswamy, Smagul Karazhanov, Senthilarasu Sundaram (2021) “Scaling up Studies on PEMFC Using a Modified Serpentine Flow Field Incorporating Porous Sponge Inserts to Observe Water Molecules”, MDPI, ISSN: 1420 3049, Molecules 2021, 26, 286, <https://doi.org/10.3390/molecules26020286>
3. **Dr M Muthukumar**, Karthikeyan Palaniswamy, Thiagarajan Velumani, Kim Byung Chul, Rajavel Velayutham, Praveenkumar Shivakumar, Senthilarasu Sundaram (2021) “Performance Studies of Proton Exchange Membrane Fuel Cells with Different Flow Field Designs – Review”, The Chemical Record, DOI: 10.1002/tcr.202000138, pp. [1–53]
4. **Dr M Muthukumar**, Magesh Kannan Vijayakrishnan, Karthikeyan Palaniswamy, Karthikeyan Manoharan, Thanarajan Kumaresan, Jyothis Arumughan (2021) “Experimental investigation on serpentine, parallel and novel zig-zag flow fields for effective water removal and enhanced performance on 25 cm² PEMFC”, Journal of Ceramic Processing Research. <https://doi.org/10.36410/jcpr.2021.22.2.131>, Vol. 22, No. 2, pp. [131-142]
5. Thokchom Subhaschandra Singh, Upendra Rajak, Abhishek Dasore, **Dr. M. Muthukumar**, Tikendra Nath Verma (2021), “Performance and ecological parameters of a diesel engine fueled with diesel and plastic pyrolyzed oil (PPO) at variable working parameters”, Environmental Technology & Innovation, ISSN : 2352-1864, <https://doi.org/10.1016/j.eti.2021.101491>, pp. [1-16]

6. Subramaniam Shankar, **M. Manikandan**, G. Raja, G. Suganya Priyadharshini, Alokes Pramanik (2021) “Experimental studies on viscosity, thermal and tribological properties of vegetable oil (kapok oil) with boric acid as an additive”, Micro & Nano Letters, ISSN: 1750-0443, DOI: 10.1049/mna2.12045, pp. [1-10]
7. Subramaniam Shankar, **Murugasamy Manikandan**, Gunasekaran Raja, Alokes Pramanik (2020) “Experimental investigations of vibration and acoustics signals in milling process using kapok oil as cutting fluid” Mechanics & Industry, ISSN : 2257-7777, Volume 21, (5) pp. [1-10]
8. S. Shankar , **M. Manikandan**, D. K. Karupannasamy, C. Jagadeesh, Alokes Pramanik, Animesh Kumar Basak (2021) “Investigations on the tribological behaviour, toxicity, and biodegradability of kapok oil bio-lubricant blended with (SAE20W40) mineral oil”, Biomass Conversion and Biorefinery, ISSN: 2190-6815, 4 Mar 2021.
9. **M. A. Omprakas, M. Muthukumar**, S. P. Saran, D. Ranjithkumar, C. M. Shantha kumar, S Thiruppathi Venkatesh, M. Sengottuvelan (2021) “Analysis of Shrinkage Defect in Sand Casting by using Six Sigma Method with Taguchi Technique”, Materials Science and Engineering, ISSN: 1059-012047, 2021