

NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE – 52



DEPARTMENT OF MECHANICAL ENGINEERING  
ACADEMIC YEAR 2024-2025 (July 2024 – February 2025)  
JOURNAL PUBLICATIONS

1. P. Mathan Kumar; M. Prabu; **S. Magibalan**; S. Natarajan; **R. Ashokkumar**, “Personal protective equipment perception survey”, The Third International Conference on Materials, Computing and Communication Technologies, <https://doi.org/10.1063/5.0211997>, AIP Conf. Proc. 2965, 040019, Volume 2965, Issue 1, 8 July 2024
2. T. Sureshkumar; S. Sakkaravarthi; **S. Magibalan**; M. Prabu; A. V. Balan, “Eyewash & shower for pre treatment of chemical spillage at ETP and STP”, The Third International Conference on Materials, Computing and Communication Technologies, <https://doi.org/10.1063/5.0212086>, AIP Conf. Proc. 2965, 040019, Volume 2965, Issue 1, 8 July 2024
3. R. Krishnamoorthi; M. Prabu; **S. Magibalan**; T. Sureshkumar; A. V. Balan, “Validation of Toyota stops 6 plus 2 safety practice enablers in manufacturing industry through ISM approach”, The Third International Conference on Materials, Computing and Communication Technologies, <https://doi.org/10.1063/5.0212002>, AIP Conf. Proc. 2965, 040018, Volume 2965, Issue 1, 8 July 2024
4. **M Easwaramoorthi**, A Giridharan, K Nandhakumar, E Pradeep, G Rangith, “Mechanical Characterization and Predictive Analysis of Flax Fiber/PLA Honeycomb Sandwich Structures in FDM Additive Manufacturing”, International Conference on Sustainable Technologies in Civil and Environmental Engineering, <https://doi.org/10.1051/e3sconf/202455902010>, E3S Web of Conf. Volume 559, 2024
5. P Surya, **B Ashok Kumar**, **S Magibalan**, “Enhancing Mechanical Properties of Hybrid Natural Fiber Reinforced Epoxy Composites with Acacia Mangium Fiber and Teak Wood Powder”, International Conference on Sustainable Technologies in Civil and Environmental Engineering, <https://doi.org/10.1051/e3sconf/202455902011>, E3S Web of Conf. Volume 559, 2024

6. Tamilselvan R, Magibalan S, Rajkumar R, Eswaran S, **Senniangiri N**, “Enhancement of Mechanical Properties in Hybrid Polymer Composites through Titanium Nanoparticles and Kenaf Fiber Integration”, International Conference on Sustainable Technologies in Civil and Environmental Engineering, <https://doi.org/10.1051/e3sconf/202455902009>, E3S Web of Conf. Volume 559, 2024
  
7. Kalayarasan M, Dhanabal P, Shankar S, Chethan K.N **Manikandan M**, “Unveiling the influence of one leg stance and standing up from a chair on human hip joint prosthesis using finite element concepts”, Journal of Mechanics in Medicine and Biology, <https://doi.org/10.1142/S0219519424500192>,
  
8. **M Sengottaiyan**, A Inesh, R Manokar, R Manova Arputharaj, R Vijayaragavan, “Experimental Evaluation of Solar-Powered Desalination Ponds in Waste Water Treatment”, International Conference on Sustainable Green Energy Technologies, <https://doi.org/10.1051/e3sconf/202454701020>, E3S Web of Conf. Volume 547, 2024
  
9. **M Mohamed Ajmal Mahasin**, R Sanjay, D Rathinavel, E Raviprakash, V Vinubalan, “Optimizing Motor Performance with Improved Fractional Order Darwinian Particle Swarm Optimization and Fuzzy Logic Controllers: A Comparative Study in Torque Control”, International Conference on Sustainable Green Energy Technologies, <https://doi.org/10.1051/e3sconf/202454701018>, E3S Web of Conf. Volume 547, 2024
  
10. **D Ravichandran**, S Dhanabalan, A Santhanakrishnan, S Sarveshwaran R Yogesh, “Digital Agriculture: Harnessing IoT and Data Analytics for Smart Farming Solutions”, International Conference on Sustainable Green Energy Technologies, <https://doi.org/10.1051/e3sconf/202454702003>, E3S Web of Conf. Volume 547, 2024

11. **D Ravichandran**, M Muthukumar, S Muruganantham, V Thiyagarajan, S Ashoksri, S Sibindharan , “Optimizing Environmental and Economic Performance of Grid-Connected PV Charging Stations with Battery Energy Storage Systems (BESS) and an Advanced Energy Management System (EMS)”, International Conference on Sustainable Technologies in Civil and Environmental Engineering, <https://doi.org/10.1051/e3sconf/202455903014>, E3S Web of Conf. Volume 559, 2024

12. **B Velliyangiri**, R Dharaneesh, G Bala Surya, T Ragul kannan, K Boopathi, “Enhancing Electric Vehicle Efficiency with a Novel SIMO DC-DC Converter: Integrating Multiple Speed Transmissions and Regenerative Braking”, International Conference on Sustainable Green Energy Technologies, <https://doi.org/10.1051/e3sconf/202454703011>, E3S Web of Conf. Volume 547, 2024

13. **S Balakrishnan**, R Harish, R Mukesh, K Rajkumar, R Seenivasan , “Numerical Investigation of Solar Still Desalination Efficiency across Different Salinity Levels”, International Conference on Sustainable Green Energy Technologies, <https://doi.org/10.1051/e3sconf/202454701015>, E3S Web of Conf. Volume 547, 2024

14. **R Rajkumar**, J Stephen Ponraj, M Gowtham, M Yathish prasanna,P Divakaran , “Enhancing Rotation in Quadruped Robots Using Multi-Degree of-Freedom Tails”, International Conference on Sustainable Green Energy Technologies, <https://doi.org/10.1051/e3sconf/202454702009>, E3S Web of Conf. Volume 547, 2024

15. **B. Velliyangiri**, M. Vinothkumar, “Simulation of structural design and Finite Element Analysis of Titanium based Bio Metallic alloy Plate implantation for Fractures Rehabilitations”, International Conference on Scientific and Technological Advances in Materials for Energy Storage and Conversions, [https://doi.org/10.1007/978-981-97-3173-2\\_41](https://doi.org/10.1007/978-981-97-3173-2_41), Lecture Notes in Mechanical Engineering, pp 589–600

16. **S. Magibalan** , R. R. Jagadeesh, “Design and Analysis of Effective Automotive Silencer”, International Conference on Scientific and Technological Advances in Materials for Energy Storage and Conversions, [https://doi.org/10.1007/978-981-97-2481-9\\_4](https://doi.org/10.1007/978-981-97-2481-9_4), Lecture Notes in Mechanical Engineering, pp pp 41–53

17. **M. Shanmugam**, S. Sundararaj, M. Ravi Shankar M. Senthil Prabhu , “CFD Analysis of Thermal Performance in Heat Pipes with Dissimilar Wick Materials”, International Conference on Scientific and Technological Advances in Materials for Energy Storage and Conversions, [https://doi.org/10.1007/978-981-97-2481-9\\_44](https://doi.org/10.1007/978-981-97-2481-9_44), Lecture Notes in Mechanical Engineering, pp 619–642

18. M. Thiruchitrabalam, Putta Nageswara Rao, Siva Sankara Babu Chinka, R. Sampath Kumar, Mohammad Jahidul Islam, **B. Ashok Kumar**, “Study of the analysis of the corrosion resistance of Ti6Al4V and CoCrMo Metallic alloys”, International journal of vehicle structures and systems , <https://doi.org/10.4273/ijvss.16.2.06>, Vol. 16 No. 2 (2024)

19. S. Jayaprakasam, M. Gnanasekaran, **S. Magibalan**, Ravindra Pratap Singh,V. Mohanavel, Sathish kannan, Jayant Giri, Mohd Sajid Ali, Praveen Barmavatu , “Tribological, mechanical and microstructure characteristics of hybrid aluminium matrix composite containing titanium carbide (TiC) and graphite particles”, Journal of Materials Research and Technology, <https://doi.org/10.1016/j.jmrt.2024.10.167>, Volume 33, November–December 2024, Pages 5482-5489

20. **M. Manikandan**, S. Seenivasan, Prasanth Ponnusamy, R. Girimurugan, S. Sakthi & Anand Karuppannan , “Enhancing the Wear Resistance of AA2024 Alloys Through Ni and MgO Composite Reinforcements”, International Conference on Smart and Sustainable Developments in Materials, Manufacturing and Energy Engineering , [https://doi.org/10.1007/978-3-031-63909-8\\_27](https://doi.org/10.1007/978-3-031-63909-8_27), International Conference on Smart and Sustainable Developments in Materials, Manufacturing and Energy Engineering

21. **Ashok Kumar, B** Dhiyaneswaran, J Selvaraj, Malathi Pradeepkumar, M Shajeeth, S, “Cracking Activity and Characterization of Magnesium Titanium Dioxide - Silicon Dioxide Catalysts”, Automotive Technical Papers, <https://doi.org/10.4271/2024-01-5241>, Society of Automotive Engineers (SAE), ISSN: 0148-7191, EISSN: 2688-3627