



**SETHU INSTITUTE OF TECHNOLOGY**  
(An Autonomous Institution)  
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**Department of Mechanical Engineering**  
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## LIST OF PUBLICATIONS

### **Faculty Journal Details 2024-2025**

- 1. K. Arun Balasubramanian**, Performance analysis and emission characteristics of VCR diesel engine using palm stearin oil biodiesel as fuel, International Journal of Low-Carbon Technologies, Oxford Publications, 2024, 19, 1674–1681, <https://doi.org/10.1093/ijlct/ctae118>.
- NB Karthik Babu, Vignesh.V , **K. Arun Balasubramanian**, Kamatchi Devi, Mohamed Hashem and Hassan Fouad, “Effect of natural hybrid fillers reinforced vinyl ester composites on mechanical and physical properties”, Materials Research Express, 11, 105504, 2024.
- 3. K. Arun Balasubramanian**, Flame stabilization and emission reduction: a comprehensive study on the influence of swirl velocity in hydrogen fuel-based burner design, Aircraft Engineering and Aerospace Technology, Emerald insights publications, ISSN: 0002-2667, September 2024, <https://doi.org/10.1108/AEAT-05-2024-0137>.
- 4. K. Arun Balasubramanian**, Exploring alternative fuel solutions: lemon grass oil biodiesel blend with dibutyl ether additive for VCR diesel engines - an experimental analysis, Scientific Reports, 14:20272, August 2024. <https://doi.org/10.1038/s41598-024-70491-7>
- 5. David Gnanaraj J**, VigneshV , Mohamed Hashem, Hassan Fouad ‘Statistical approach to explore sustainable characteristics of cellulosic Desmostachya bipinnata fiber and its chemically modified conditions, Materials Research Express, 30(2), 1251-1257 (Aug 2024) Impact Factor 3.5, <https://doi.org/10.1088/2053-1591/ad7446>
- 6. G. Venkatesan** R. Selvabharathi K. Kulathuraan V. Vivek ‘Influence of microstructure and tribology properties on deep-dippingcoating method of sappanwood (SW)/ polyvinyl alcohol(PVA)/ Polyethylene (PE)/ Aluminium nitride (AlN) natural fibernanocomposite materials’ ‘Journal of Polymer Research’ Volume 31, article number 299, ( Nov 2024), <https://doi.org/10.1007/s10965-024-04151-9>

7. Prasanna Venkatesh Ramdas Anand Palanivel, Vijayan Rajendran, Lakshmanan Selvam, **Venkatesan Ganapathy, Perumal Arumugam, Rajkumar Putta Ramarathinam** ‘Reinforcement Learning Technique Applied to the Manufacturing Industry for Material Handling System,’ Materials, Analysis, and Advanced Manufacturing ‘AIP Conf. Proc. 3192, 020062-1–020062-8; (NOV 2024) <https://doi.org/10.1063/5.0241663>’
8. Anand Palanivel, Vijayan Rajendran, Lakshmanan Selvam, **Venkatesan, Ganapathy , Perumal Arumugam, Rajkumar Putta. Ramarathinam**, Prasanna , Venkatesh Ramdas, ‘Optimizing Noise Reduction through Redesigned ThreeBlade Horizo’ Materials, ‘Analysis, and Advanced Manufacturing, AIP Conf. Proc. 3192, 020063-1–020063-16; (NOV 2024) <https://doi.org/10.1063/5.0241654>
9. Vijayan Rajendran, Lakshmanan Selvam , **Venkatesan Ganapathy, Perumal , Arumugam, Rajkumar Putta Ramarathinam**, Prasanna Venkatesh Ramdas, Anand Palanivel ‘Finite Element Analysis On Natural Fibre (Musa Sapientum And Hibiscus Sabdariffa) Reinforced Composite Leaf Spring’ ‘Materials, Analysis, and Advanced Manufacturing’ AIP Conf. Proc. 3192, 020064-1–020064-7; (NOV 2024) <https://doi.org/10.1063/5.0241727>
10. Lakshmanan Selvam, **Venkatesan Ganapathy, Perumal Arumugam, Rajkumar Putta Ramarathinam**, Prasanna Venkatesh Ramdas, Anand Palanivel, Vijayan , Rajendran ‘A Study of Oxidation Behaviour of Hard-Faced Surface on Steel Using SMAW’ ‘Materials, Analysis, and Advanced Manufacturing’ ‘AIP Conf. Proc. 3192, 020065-1–020065-7’ (NOV 2024) <https://doi.org/10.1063/5.0241671>
11. **Venkatesan Ganapathy, Perumal Arumugam, Rajkumar Putta Ramarathinam**, Prasanna Venkatesh Ramdas, Anand Palanivel, Vijayan Rajendran, Lakshmanan Selvam. ‘Review on dissimilarly welding techniques titanium alloys’ ‘Materials, Analysis, and Advanced Manufacturing’ AIP Conf. Proc. 3192, 020066-1–020066-8, (NOV 2024) <https://doi.org/10.1063/5.0241775>
12. **Perumal Arumugam , Rajkumar Putta Ramarathinam** , Prasanna Venkatesh, Ramdas , Anand Palanivel , Vijayan Rajendran , Lakshmanan Selvam , **Venkatesan Ganapathy**. ‘Experimental Investigation of Machining Parameters of EDM Process for Machining Ti Alloy’ Materials, Analysis, and Advanced Manufacturing’ AIP Conf. Proc. 3192, 020067-1–020067-, (NOV 2024) <https://doi.org/10.1063/5.0241816>
13. **Rajkumar Putta Ramarathinam**, Prasanna Venkatesh Ramdas, Anand Palanivel, Vijayan

Rajendran , Lakshmanan Selvam, **Venkatesan Ganapathy, Perumal.** “Synthesis, Characterization and Corrosion Resistance of Sol-Gel Treated Aluminium Alloy Materials, Analysis, and Advanced Manufacturing AIP Conf. Proc. 3192, 020068-1–020068-13, (NOV 2024) <https://doi.org/10.1063/5.0241767>

**14.** Dr. P Venkateswara Rao, **Dr. G. Nagaraj**, Dr. Nehal Ahmad Ansari, Dr. Bhagirathi Tripathy, Dr. (Mrs) M. K. Priyanka, Dr. T. Arun Christopher ‘The Role of Vocational Education and Its Impact on Human Development in India: Integrating Information Technology for Enhanced Skills and Opportunities, Educational Administration: Theory and Practice, 30(2), 1251-1257 (June 2024) Impact Factor 3.5 Doi: 10.53555/kuey.v30i2.642

**15.** Tiny Tanushree Gohain, R. Gokilavani, Firas Armosh, Punit Kumar Dwivedi, **G. Nagaraj**, Raghu Yadaganti ‘A Study on Role of Neuromarketing in Digital Era Business Development’ Migration Letters, Volume: 21, No: S4 (Nov 2024), pp. 1600-1605 ISSN: 1741-8984 (Print) ISSN: 1741-8992 Impact Factor 0.374

**16. G. Nagaraj** , Divya Nimma , Prasad H K, Nageswara Rao Eluri, Janardhana C5, Sudheer S Marar6 ‘Optimizing Customer Support for Small Businesses Using Machine Learning Algorithms’ ‘Nanotechnology Perceptions’ 20 No. S14 (SEP 2024) 1410-1417’ ‘ISSN 1660-6795’

**17. Meenatchisundaram P.,** Muthusamy C., & Vinayagar K. (2025), "Experimental and numerical crashworthiness analysis on truncated thin-walled tubes under axial loading" Physica Scripta.

**18. G Venkatesan, A Perumal,** R Prithivirajan, S Muthu Natarajan, P Balasundar, “Investigation of mechanical properties of environmentally friendly human hair fiber-reinforced polymer composite” Journal of Polymer Research, (Dec 2024) Volume 32, Issue 1, Pages-11 <https://doi.org/10.1007/s10965-024-04236-5>