



SRI RAMAKRISHNA INSTITUTE OF TECHNOLOGY

(Approved by AICTE, New Delhi & Affiliated to Anna University)

Coimbatore -641 010

Department of Mechanical Engineering



Publications 2022-2023

1. B. Chokkalingam, M. Priya, R. Immanuel and B. Varun, Identification of the Root Causes for Blowhole Defective using Quantitative Risk Ishikawa Diagrams, Journal of Advanced Manufacturing Systems, 2022.
2. Benjamin Franklin Selvanayagam, Krishnamoorthy S. Gowtham S, Balaji N. A review of parabolic collector with shell and tube heat exchanger, Materials Today: Proceedings, 2022.
3. Benjamin Franklin Selvanayagam, Adarsh A, Gowtham K. Kavin S. Jagan J, A review on nanoparticles blended with diesel to improve combustion characteristics and reduction in emission of diesel engine, Materials Today: Proceedings, 2022.
4. B. Varuna, S. Gopib and R. Manikandan, Influence of cowpat ash particles on micro structure, mechanical and tribological properties of Al 7075 composites, Journal of Ceramic Processing Research, 2022.
5. B. Varuna,*, S. Gopib and R. Manikandan, Experimental studies on the effects of reinforcing cowpat ash with aluminium composites, Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2022.
6. Veeramanikandan M, Arjunan T V, Gunasekar N & Rubesh Raja V, Design optimization and experimental evaluation of novel photovoltaic modules in comparison with a conventional photovoltaic module, , Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 2022.
7. Dhandapani Sathish a,*, Selvaraj Jegadheeswaran b, Murugan Veeramanikandan, Enhancing the thermo-economic performance of mobile solar desalination system with dual reflectors, phase change materials and insulator cover: Experimental investigations, 2022,
8. R. Immanuel, K. Kannan, B. Chokkalingam, B. Priyadharshini, J. Sathya, S. Sudharsan, E. Raghu Nath, Performance Prediction of solar still using Artificial neural network, Materials Today: Proceedings, 2022.



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Publications 2021-2022

1. Veeramanikandan M, Arjunan T V, Gunasekar N, Numerical simulation and experimental validation of a novel Sandwich Glazed Photovoltaic Thermal (SGPV/T) water heating system, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 2021.
2. R. Tamilselvan, S. Periyasamy, A novel investigation in the performance, combustion and emission characteristics of variable compression ratio engine using bio-diesel blends, Journal of Mechanical Science and Technology 36 (4) 2022.
3. S. Selvalakshmi, R. Immanuel, B. Priyadarshini, J. Sathya, Artificial neural network (ANN) modelling for the thermal performance of bio fluids, Materials Today: Proceedings, 2022.
4. M. Arunkumar, S. Veerakumar, V. Mohanavel, J. Vairamuthu, V. Vijayan, N. Senthilkumar, A Novel Visible Light-Driven p-Type BiFeO₃/n-Type SnS₂ Heterojunction Photocatalyst for Efficient Charge Separation and Enhanced Photocatalytic Activity, Journal of Cluster Science, 2021.
5. S. Sudharsan, R. Arul, C. Veera ajay, S. Veerakumar, Multiple response optimization of WEDM parameters using grey relational method, Materials Today: Proceedings, 2021.

Publications 2020-2021

1. B. Chokkalingam, A. Thangarasu, S. Sudharsan, Effect of Micro alloying Elements on Microstructure and Mechanical Properties of Normalized Cast Steel, International Journal of Advanced Science and Technology, 2020.
2. S Benjamin Franklin, I Karthikeyan, K Ramesh, Finite element modeling of energy storage materials alumina using heat recovery in packed pebble bed heat exchanger, Materials Today: Proceedings, 2021.
3. S Benjamin Franklin, R Arul, Experimental investigation on EGR technique and performance evaluation of diesel engine using diesel blend cotton seed oil as renewable fuel, Materials Today: Proceedings, 2021.
4. B Varun, V Muthukumar, L Jeryraj Kumar, & D R Medhumbashini, Characterization of aluminium/(SiC+B₄C) ceramic particles reinforced hybrid surface composites (SC) fabricated by friction stir processing, IOP Conference series, Materials Science and Engineering, 2020.
5. E Varadha, S Rajakumar, R Immanuel, XSA Jain, Vibration analysis of transverse galloping of different bluff bodies, Materials Today: Proceedings, 2020.



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6. Selvalakshmi, I Karthikeyan, R Immanuel, AP Vinofer, E Varadha, B Chokkalingam, Evaluation of mechanical properties of aluminium 6063 - Borosilicate reinforced metal matrix composite, AIP Conference Proceedings, 2020,
7. M Veeramanikandan, D Sathish, L Jeryraj Kumar, S Boovendrarvarman, Effective study on developments in photovoltaic thermal (PV/T) water heating system, Materials Today: Proceedings, 2020.
8. R. Tamilselvan, I. Karthikeyan, P. Vijian, Performance, and Emission Characteristics of Mahua Biodiesel blends, IOP Conference Series: Materials Science and Engineering, 2020.
9. R. Thirunavukkarasu, S. Periyasamy, Enhancing Diesel Engine Performance and Balancing Emissions with Effect and Contribution of MgO-ZrO₂ and AT13 Layered Piston, Arabian Journal for Science and Engineering, 2020.
10. D. Sathish, S. Jegadheeswaran, Experimental Investigation on a Novel Composite Salt Gradient Solar Pond With an East-West Side Reflector, Journal of Thermal Science and Engineering Applications, 2021.
11. D. Sathish, S. Jegadheeswaran, Evolution and novel accomplishments of solar pond, desalination and pond coupled to desalination systems: a review, Journal of Thermal Analysis and Calorimetry, 2021.
12. D Sathish, M Veeramanikandan, S Boovendrarvarman, L Jeryraj Kumar, "Influences of welding parameters on friction stir welding of AA 6063 Al-alloy and copper plates—An experimental study, Journal of Physics: Conference Series, 2020.
13. S Veerakumar, V Anandbabu, B Varun, Design and implementation of PK-PD model based PID controller for closed loop anesthesia regulation, IOP Conf. Series: Materials Science and Engineering, 2020.
14. S Veerakumar, B Dhanakumar, J Balamurgan, M Balanayagam, "Modernization of Automotive Air Condition System Using Arduino Controller, Journal of Automation and Automobile Engineering, 2020.
15. **S Benjamin Franklin**, R. Arul, T K Sakthivel, 3D-printing and computational fluid dynamics analysis of single expansion ramp nozzle, IOP Conf. Series: Materials Science and Engineering 2020.



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Publications 2019-2020

1. Raja, V., Kavitha, M., Chokkalingam, B. T. S. Ashraya, Effect of Interlayers on Mechanical Properties of Aluminium Casting over Stainless Steel Pipe for Heat Exchanger Applications, Transactions of the Indian Institute of Metals, 2020.
2. B. Chokkalingam, S. Boovendrarvarman, R. Tamilselvan, V. Raja, Application of ishikawa diagram to investigate significant factors causing rough surface on sand casting, proceedings on engineering sciences, 2020.
3. S. Benjamin Franklin, I Karthikeyan, R Arul, Experimental Investigation and Computational Fluid Dynamics Analysis of Heat transfer through Circular, Square, Hexagonal shaped Fins Using Forced Convection, International Journal of Advanced Science and Technology, 2020.
4. Immanuel Rajkumar, B Paul Vinofer, Nagarani S, B Chokkalingam, V. Raja, Dhineshkumar, Thermal Performance Investigation Of Spiral Solar Collector Using CFD, International Journal of Advanced Science and Technology, 2020.
5. M Veeramanikandan, T V Arjunan, P Jidhesh, Experimental investigation of sandwich glazed solar photovoltaic module, Materials Today: Proceedings, 2019.
6. R Tamilselvan, S Periyasamy, Effect of Low Proportion Ceiba Pentandra Biodiesel Blend on Performance, Combustion and Emission Characteristics of a CI Engine, Journal of Alternative and Renewable Energy Sources, 2020.
7. K Thomas, R Thirunavukkarasu, P Vahid, W Budi, S Muji, LPG-Fueled Vehicles: An Overview of Technology and Market Trend, Automotive Experiences, 2020.
8. R Thirunavukkarasu, R Tamilselvan S Periyasam, Experimental Investigation on Biofuel Extraction from Silk Cotton seed Oil and Its Characterization, Journal of Advancements in Material Engineering, 2020.
9. D. Sathish, M. Veeramanikandan, R. Tamilselvan, Design and fabrication of single slope solar still using metal matrix structure as energy storage, Materials Today: Proceedings, 2020.
10. D. Sathish, S. Jegadheeswaran, Effective study of thermal behavior on membrane stratified portable solar pond, Materials Today: Proceedings, 2020.



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11. L Jeryraj Kumar , R Immanuel, T Elangovan, M Chris Sheba, Characteristics and potential values of Bio-oil produced from commercial plastics and its impact on DI diesel engine, TEST engineering and management, 2020.
12. S Ram Kumar, P Arun Karthick, S Boovendrarvarman, K S Raghul, S Thiyaagu, Characteristics of contactless swirl vane gripper by investigating the negative pressure and clearance, Materials Today: Proceedings, 2020
13. R Manikandan, TV Arjunan, Studies on micro structural characteristics, mechanical and tribological behaviours of boron carbide and cow dung ash reinforced aluminium (Al 7075) hybrid metal matrix composite, Composites Part B: Engineering, 2020.
14. R Manikandan, TV Arjunan, Mechanical and tribological behaviours of aluminium hybrid composites reinforced by CDA-B4C, Materials Research Express, 2020.
14. R Manikandan, TV Arjunan, Microstructure and Mechanical Characteristics of CDA-B 4 C Hybrid Metal Matrix Composites, Metals and Materials International, 2019.
15. R Manikandan, TV Arjunan M, Experimental Investigations on Microstructure, Mechanical and Wear Behaviours of Al 7075- Boron Carbide-Cow Dung Ash Hybrid Metal Matrix Composites, Journal of the Chinese Society of Mechanical Engineers, 2019.
16. A Anand Jayakumar, S R Kasthuri raj, S Balakrishnan, Selection of Office Bearers for a student chapter using analytical hierarchy process: A Case study, TEST engineering and management, 2020.

Publications 2018-2019

- 1.S Benjamin Franklin, K Ramesh, A Novel Method in Investigation of Thermal energy Storage in Packed Pebble Regenerator by using Design of Experiment, Taga Journal of Graphic Technology, 2018
2. V Rajkumar, R Immanuel, N Sivashanmugam, SPK Babu, N Arivazhagan, Role of Process Parameters on Bead geometry and Metallurgical Characteristics in autogenous Gas Tungsten Arc Welding of Maraging Steels (250 grade), Materials Today: Proceedings, 2018
3. D.Sathish, S.Jegadheeswaran, Relative study of steel solar pond with sodium chloride and pebbles Materials Science for Energy Technologies, 2018



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