

## DEPARTMENT OF AERONAUTICAL ENGINEERING

### Journal/Conference Publication Details:CAY (2023– 2024)

Name of the faculty	Title of paper	Name of Journal
VIJAYANANDH R	Coalescence property of the liquid droplet	AIAA AVIATION 2023 Forum
NAVEEN KUMAR K	Manufacturing and experimental characterization of new-developed natural fiber reinforced polymer Nanocomposite	Journal of Materials Research and Technology
VIJAYANANDH R	Numerical investigation of turbulence models with emphasis on turbulent intensity at low Reynolds number flows	Advances in Aircraft and Spacecraft Science
VIJAYANANDH R	Hybrid Fuzzy C-Means Using Particle Swarm Optimization (PSO) and Differential Evolution (DE) for Image Segmentation	IEEE
VIJAYANANDH R	A Fast-Compressive Tracking Integrated with Differential Evolution to Optimize Object Tracking Performance	IEEE
SENTHIL KUMAR M	Design, Multi-Perspective Computational Investigations, and Experimental Correlational Studies on Conventional and Advanced Design Profile Modified Hybrid Wells Turbines Patched with Piezoelectric Vibrational Energy Harvester Devices for Coastal Regions	Processes
RAJ KUMAR G	Comprehensive Thermal Characteristic Investigations on Hemp- and Jute-Based Nature Fibre-Reinforced Composites for Engineering Applications through Coupled and Verified Engineering Approaches	Journal of Engineering
VIJAYANANDH R	Computational structural investigations on the various aerospace materials based conventional and hybrid composites: Comprehensive analyses.	AIP Conference Proceedings
VIJAYANANDH R	Comparative computational analyses on various aerospace materials under lower thermal loads by using advanced coupled engineering approach	AIP Conference Proceedings
VIJAYANANDH R	Comprehensive thermal characteristic investigations on various lightweight materials under higher thermal load through fluid-thermal interaction analysis	AIP Conference Proceedings
VIJAYANANDH R	Structural characteristic investigations on propeller of UAVs under different aerodynamic loading conditions: A comprehensive computational approach	AIP Conference Proceedings
VIJAYANANDH R	Design and simulation of cooling and heating system for buildings using solar thermal systems	AIP Conference Proceedings

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RAJ KUMAR G	Multi-perspective structural integrity-based computational investigations on airframe of Gyrodyne-configured multi-rotor UAV through coupled CFD and FEA approaches for various lightweight sandwich composites and alloys	REVIEWS ON ADVANCED MATERIALS SCIENCE
ARUL PRAKASH R	Design and Multi-Perspective Investigations on the Aerodynamic Performance Factors of Conventional and Advanced UAV's Micro Gas-Turbine Engine Nozzles through Validated CFD	International Journal of Fluid Mechanics Research
VIJAYANANDH R	Improving the Stage Efficiency of Axial Compressors by Vane Rotation	Proceedings of the ASME 2023 Gas Turbine India Conference
VIJAYANANDH R	An Innovative Approach for the Validation of Computational Structural Outcomes of Octocopter's Connection Arms Through Advanced Finite Element Methods	Proceedings of the ASME 2023 Gas Turbine India Conference
VIJAYANANDH R	Design and Multi-Perspective Investigations on Aeroacoustic Noise Reduction Technologies for Anti-Drone Propeller	Proceedings of the ASME 2023 Gas Turbine India Conference
DARSHAN KUMAR J	Design, Multiperspective Investigations, and Performance Analysis of Multirotor Unmanned Aerial Vehicle for Precision Farming	International Journal of Aerospace Engineering
VIJAYANANDH R	Experimental studies and comprehensive computational investigations on composites-based phase change material for battery thermal management systems in electric vehicles	Journal of Energy Storage
SENTHIL KUMAR S	Design, control, aerodynamic performances, and structural integrity investigations of compact ducted drone with co-axial propeller for high altitude surveillance	Scientific Reports
VIJAYANANDH R	ON PARAMETRIC STUDY OF FLUID LEAVES AND FLUID PINEAPPLE	International Journal of Fluid Mechanics Research
ARUL PRAKASH R	Thermostructural analysis on airfoil fin printed circuit heat exchanger using supercritical CO <sub>2</sub>	Journal of Thermal Analysis and Calorimetry
RAJ KUMAR G	Multi-perspective Investigations of Aerosol's Non-linear Impact on Unmanned Aerial Vehicle for Air Pollution Control Applications Under Various Aerosol Working Environments	Aerosol Science and Engineering
VIJAYANANDH R	Temporal numerical analysis of beeswax PCM melting in a cube geometry subjected to a constant wall temperature condition	Case Studies in Thermal Engineering
VIJAYANANDH R	Water splitting via electrocatalysis and photocatalysis: Engineering stumbling blocks and advancements	International Journal of Hydrogen Energy

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VIJAYANANDH R	Effect of Ribs in a Suddenly Expanded Flow at Sonic Mach Number	Heliyon
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SENTHIL KUMAR M	Design, Experimental Studies, and CFD Investigations of Bio-inspired slotted rear Diffuser attachment on Car Model for Enhancing Aerodynamic Performance	International Journal of Fluid Mechanics Research
VIJAYANANDH R	Investigation of numerical phase transition of nano-enhanced SiC/paraffin wax PCM in solar-assisted water desalination system	Thermal Science and Engineering Progress
Dr P S Premkumar	Analysis of Heat Transfer Coefficients and Pressure Drops in Surface Condenser with Different Baffle Spacings	Applied Mathematics and Computational Intelligence Springer
Dr P S Premkumar	Estimation of wing stall delay characteristics with outward dimples using numerical analysis	Machine Intelligence in Mechanical Engineering