



Track-1 Thermal Systems		
Sr. No.	Article No.	Title of the submitted article
1	ATSMDE-TS-003	HEAT PUMP DRYER FOR AGRICULTURAL PRODUCE
2	ATSMDE-TS-004	Design and Development of Transient Heat Flux Measurement Sensor
3	ATSMDE-TS-006	Solar Chimney
4	ATSMDE-TS-008	Performance Analysis of Microchannel Heat Sink with Fan-Shaped Cavities
5	ATSMDE-TS-012	Mathematical and simulation analysis of various LED bulb arrays
6	ATSMDE-TS-013	Numerical Analysis of Nusselt Number and Friction Factor in Rhombus type Artificial Roughness in Solar Air Collector.
7	ATSMDE-TS-015	The influence of thermal conductivity and embedded tubes on the hydrogen storage performance in LaNi ₅ reactor
8	ATSMDE-TS-019	Experimental Investigation of Different Shapes of Perforated Fins with Natural Convection
9	ATSMDE-TS-020	Development of artificial neural network model to investigate heat flow, frictional resistance, and thermohydraulic performance parameters of inclined ribs with gaps roughened solar absorber.
10	ATSMDE-TS-022	Investigation of Flat Heat-pipe-based tab cooling thermal management for battery pack
11	ATSMDE-TS-023	Thermal Performance of Al ₂ O ₃ -Water Nanofluid in Copper Metal Foam: An Experimental Analysis
12	ATSMDE-TS-024	Evaluating Tilt Angles and Reflector Types for Enhanced Irradiance in Vertical Bifacial Photovoltaic Systems
13	ATSMDE-TS-031	CFD Simulation for Jet Interaction with Flow Obstruction and Erosion of Stratified Layer
14	ATSMDE-TS-035	Thermal Performance of Heat Pipe - An Experimental Study
15	ATSMDE-TS-038	Performance Analysis of an Air Conditioning System with Air-Cooled and Evaporative Air-Cooled Condensers Using Different Cooling Pad Materials: A Comparative Study
16	ATSMDE-TS-040	Estimation of Shock Strength for Conical Supersonic Underexpanded Nozzle in Stable Atmospheric Condition
17	ATSMDE-TS-042	Vapour Compression Refrigeration System Using CO ₂ as Refrigerant
18	ATSMDE-TS-043	Numerical investigations of Li-ion batteries cooling system used in electric vehicle
19	ATSMDE-TS-045	Effect of Intermittent Impingement on Heat Transfer Characteristics



20	ATSMDE-TS-046	Heat Transfer Analysis in Gun Barrels
21	ATSMDE-TS-049	Thermal Characteristics of a Phase Change Material (PCM) During Separate and Simultaneous Charging and Discharging in the Presence of Inclined Fins
22	ATSMDE-TS-052	An Experimental Investigation of Impinging air jet on Rectangular Grooved surface
23	ATSMDE-TS-053	Experimental investigation and Exergy analysis of a two-stage humidification-dehumidification (HDH) based desalination system by varying water and Air Temperature
24	ATSMDE-TS-056	Experimental Investigation of Flame Stabilization in Standalone Liquid Fuel Film Combustor
25	ATSMDE-TS-057	Evaluation of pressure-based and density-based solver to investigate supersonic jet flow through the confined wall
26	ATSMDE-TS-058	Experimental Investigation of the effect of heat source designs on Standalone Liquid Fuel Film Combustor
27	ATSMDE-TS-059	Optimizing Thermal Management in Lithium-Ion Battery Packs: A Numerical Study
28	ATSMDE-TS-061	Approaches used for Cooling Load Computation based on ASHRAE and ISHRAE Standards
29	ATSMDE-TS-063	Three-Dimensional Fluid Flow and Heat Transfer Analysis of Reflector Tank for a Research Reactor
30	ATSMDE-TS-064	Ray Tracing-based Discrete Aiming Strategy for Heliostat Field to Obtain Uniform Solar Flux Distribution in 1MW Cavity Receiver
31	ATSMDE-TS-065	Experimental Evaluation of Methyl Ester Blend Emissions for Compression Engines
32	ATSMDE-TS-067	Design, Development, Analysis, and Acoustic Optimisation of Exhaust Muffler for Noise Attenuation of Constant Speed Diesel Engine
33	ATSMDE-TS-068	Assessing k- ϵ Family Turbulence Models for a Study of Sonic Jet Flow in a Quiescent Environment
34	ATSMDE-TS-072	Heat Transfer Characteristics for Liquid Flows in Microchannels
35	ATSMDE-TS-077	A Note on Non-modal, Transient Decay in Linearly Unstable Flows
36	ATSMDE-TS-078	Numerical Modeling and Optimization of Counterflow Wet Cooling Towers



Track-2 Design Engineering		
Sr. No.	Article No.	Title of the submitted article
1	ATSMDE-DE-001	Pneumatically operated upper body exoskeleton
2	ATSMDE-DE-005	Modifications in Split Hopkinson Pressure Bar to study the response of TPB specimen under high strain rate loading – a combined experimental and numerical study
3	ATSMDE-DE-008	Towards Safer Skies: Design and Implementation of a Bird Detection and Deflection System in Aviation
4	ATSMDE-DE-009	EMERGENCY RAPID DEFLATION DEVICE [ERDD] FOR LIGHTER-THAN-AIR SYSTEMS
5	ATSMDE-DE-010	Detection of L- and inverted-shaped cracks in cantilever beam using artificial neural network.
6	ATSMDE-DE-011	Drag Reduction using Flow Separation Control in Decelerating Duct of Marine Propeller
7	ATSMDE-DE-020	Techniques for the optimal design of PMSM
8	ATSMDE-DE-027	Modeling and Analysis of Electric Vehicle: Drive-Cycle Based Simulation for Range and Battery Discharge Analysis
9	ATSMDE-DE-028	DEVELOPMENT OF ECO-FRIENDLY FILTRATION TECHNIQUE & WATER TREATMENT SOLUTION DURING INDIAN RITUALS
10	ATSMDE-DE-033	Multi-Fault Detection in Bearings Using Voting Classifier: A Machine Learning Approach
11	ATSMDE-DE-037	Experimental Studies on Biochar Kiln for small scale applications
12	ATSMDE-DE-040	Design and Development of a Test Rig for an Electric Propulsion System for an Unmanned Aerial Vehicle (UAV)
13	ATSMDE-DE-046	Exploring the oil analysis of damaged crankshafts in Gensets for Advanced Design & Development
14	ATSMDE-DE-047	Design Analysis of Helium Compressor for GM Cryocooler
15	ATSMDE-DE-049	Design and PID Control Implementation of Modular Compliant XY Positioning stage
16	ATSMDE-DE-051	Assessing the influence of particle size and filling ratio on response reduction of a particle damper
17	ATSMDE-DE-052	An extensive exploration in the integration of Robotics to amplify efficiency within logistics through Automated Storage and Retrieval Systems
18	ATSMDE-DE-054	Experimental Performance of Automated Zinc Flake Coating in Wind Energy Applications



19	ATSMDE-DE-055	Optimized Design of a Motorcycle Disc Brake Plate Through Material Selection and Weight Reduction
20	ATSMDE-DE-056	"Design and Applications of a Multi-Functional Foldable Staircase Mechanism"
21	ATSMDE-DE-057	Parametric Analysis and Optimization of Kinematics, Load Distribution, and Torque Dynamics in Quadruped Robot Design

Track-3 Material Science and Manufacturing		
Sr. No.	Article No.	Title of the submitted article
1	ATSMDE-MM-003	An Investigation of construction strength of concrete M25 + x wt.% Polystyrene (x=10,20,30,40) for plastic waste management.
2	ATSMDE-MM-004	Experimental Investigation of MWCNT Nanocomposite and Effect of Infill Ratio Variation on Flexural Strength
3	ATSMDE-MM-007	Evaluation of Mechanical Properties in Al-SiC Metal Matrix Composites Fabricated via Stir Casting Process
4	ATSMDE-MM-008	Investigation of Zeta Enhance the Surface Charge with pH Stability of Phase Change Materials
5	ATSMDE-MM-010	Micro-structuring on Polyimide Using Excimer Laser Lithography
6	ATSMDE-MM-011	Cost-effective ways to recycle 3D printing filament
7	ATSMDE-MM-013	Impact of coolant temperature on machining performance during turning of SS304
8	ATSMDE-MM-016	Experimental study of Post-Consumer Recyclates (PCR) in primary non-food packaging
9	ATSMDE-MM-017	State of The Art on Reverse Engineering in Manufacturing Applications
10	ATSMDE-MM-018	Influence of Infill Density, Raster Angle, and Pattern on the Tensile Strength of PLA+ and ABS+ in FDM 3D Printing
11	ATSMDE-MM-019	Experimental Investigation of Torsional Fatigue Behavior in Pure Epoxy Resin
12	ATSMDE-MM-021	Predictive Optimization Framework for Die-Punch Clearance in Copper Sheet Metal Blanking to Control Burr Formation
13	ATSMDE-MM-023	Comparative Analysis of Printing Process Parameters of Pure PLA and PLA - -Walnut Shell Powder Bio composite on Dimensional Accuracy and Surface Finish Using Taguchi analysis
14	ATSMDE-MM-024	Visual Vibration Analysis for High Amplitude Movements using Pixel Matching



15	ATSMDE-MM-025	Optimization of Mechanical Properties in Metal Matrix Composites with Carbon Fiber and Steel Variants Using the Taguchi Method
16	ATSMDE-MM-026	Springback Analysis in V Bending Process of Sheet Metal Through Finite Element Method
17	ATSMDE-MM-027	SS304 CNC turning process mathematical modeling and machining parameter optimization utilizing the Taguchi technique
18	ATSMDE-MM-029	Cellular Materials for Multifaceted Applications
19	ATSMDE-MM-031	High-Temperature Compressive Response and Microstructure Analysis of 316L SS Foam
20	ATSMDE-MM-032	Influence of cutting parameters on surface finish and material removal rate in eco-friendly high-speed dry machining of Nickel-based Inconel 600 superalloy
21	ATSMDE-MM-036	Mathematical Modelling and Design Calculator for Cup-Shaped Forging
22	ATSMDE-MM-039	Manufacturing and Characterization of Jute/Glass PLA Hybrid Composites
23	ATSMDE-MM-040	Finite element analysis of straight horizontal flat clamps hinged at one end milling fixture for friction stir joining process of Aluminium AA3103
24	ATSMDE-MM-041	Comparative study of topological optimized bio-inspired structure for its superior mechanical strength
25	ATSMDE-MM-042	Tailoring TiO ₂ -Polymer Nanocomposite Membranes for Selective Dye Removal
26	ATSMDE-MM-044	Durability of Adhesive Bonded Steel Joints in Marine Environments
27	ATSMDE-MM-046	Using Artificial Neural Network and Finite Element Method to predict the springback in deep drawing
28	ATSMDE-MM-048	Binder Jet 3D Printed Alumina Substrates: Sintering and Dielectric Property Study
29	ATSMDE-MM-049	Designing of bi-phase electrolyte material for low temperature solid oxide fuel cells
30	ATSMDE-MM-053	Synergistic Improvement of Mechanical and Thermal Performance in Epoxy Nanocomposites through Hybrid Reinforcement with Graphene, Alumina, and Silica Nanoparticles
31	ATSMDE-MM-054	Assessing Electric Vehicle Ranks: A Comparative Study of Normalization Techniques in Multi-Criteria Decision-Making
32	ATSMDE-MM-056	Thermal and Melt Flow Rates analysis of ABS polymer composites having dual fillers of titanium dioxide and tungsten



33	ATSMDE-MM-057	Performance Evaluation of Turning Bearing Steel: Insights into Cooling Techniques and Machining Parame
34	ATSMDE-MM-058	Influence of Quenching Media and CuO Nanomaterial Concentration on the Temperature Gradient and Hardness Properties of EN-8 Material
35	ATSMDE-MM-061	Development and evaluation of easy-to-apply nano fire-retardant composite coating for cotton/polyester fabric
36	ATSMDE-MM-062	Chemically Synthesized Monoclinic BiVO ₄ for Photoelectrocatalytic Water Splitting
37	ATSMDE-MM-065	Selecting materials for aerospace components to be machined using a micro-WEDG technique with a novel m-polar fuzzy ELECTRE-I method
38	ATSMDE-MM-066	Sustainable Corrosion Inhibition: Exploring the Role of A. Marmelos Extract in Corrosion Mitigation

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