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Nota di contenuto	Modeling and Optimization of SIS Process Using Evolutionary Computational Approach -- Computational Characterization of a C-D Nozzle with Variable Geometry Translating Throat -- Synthesis and Characterization of Al2O3-Cr2O3 Based Ceramic Composites for Artificial Hip Joint -- Experimental Investigation On Tensile and Fracture Behaviour of Glass Fibre Reinforced Nanoclay/Mg-Al LDH Based Fiber Metal Laminates -- Experimental Study on Micro-Deburring Of Microgrooves by Micro-EDM -- Influences of Tool Pin Profiles on Mechanical Properties of Friction Stir Welding Process of Aa8011 Aluminium Alloy -- Numerical Investigation of the Behavior of Thin Walled Metal Tubes Under Axial Impact -- Improving Process Performance with World Class Manufacturing Technique: A Case in Tea Packaging Industry -- Tensile Testing and Evaluation of 3D Printed PLA Specimens as Per ASTM D638 Type-IV Standard -- Design Optimization and Testing Of Structure of a Single Door Refrigerator -- Use of Low Fidelity Codes for Teaching Aircraft Design -- Drag Reduction for Flow

Past A Square Cylinder Using Rotating Control Cylinders – A Numerical Simulation -- Study the Effect of Mill Scale Filler on Mechanical Properties of Bidirectional Carbon Fibre Reinforced Polymer Composite -- Study On Carbon, Glass and Flax Hybrid Composites Using Experimental and Computational Techniques -- Design Evaluation of A Mono-Tube Magnetorheological (MR) Damper Valve -- Characterization of Soot Microstructure for Diesel and Biodiesel Using Diesel Particulate Filter -- Performance of Diesel Particulate Filter Using Metal Foam Combined With Ceramic Honeycomb Substrate -- Dry Machining of Nimonic 263 Alloy Using PVD and CVD Inserts -- Investigation of Parameters for Machining a Dif-Ficult-To-Machine Superalloy: Inconel X-750 and Waspaloy -- Aerodynamic Characteristics of Semi-Spiroid Winglets at Subsonic Speed -- Vibrational Analysis of Self-Aligning Rolling Contact Bearing Defects -- Fabrication and Characterization of Cu<sub>2</sub>-Xzn<sub>1.3</sub>ns<sub>4</sub> Kesterite Thin Films Synthesized By Solvent Based Process Method for Photovoltaic Solar Energy Applications -- Formula SAE Power Increment -- Temperature Behavior-Based Monitoring Of Worm Gears Under Different Working Conditions -- Production and Comparison of Fuel Properties for Various Bio-Diesels -- Experimental Determination of Fluid Flow Parameters to Study Permeation Process Inside A Porous Channel -- Diesel Engine Cylinder Head Port Design for Armoured Fighting Vehicles: Compromise and Design Features -- Design Optimization of Advanced Multi-Rotor Unmanned Aircraft System Using FSI -- Studies on Carbon Materials Based Antenna for Space Applications -- Progress and Issues Related To Designing and 3D Printing Of Endodontic Guide -- Physical and Tribological Behaviour of Dual Particles Reinforced Metal Matrix Composites -- Parametric Optimization of Friction Welding Parameter of Ferritic Stainless Steel and Copper Material Using Taguchi Approach -- Experimental Investigation on the Thermal Performance of the Light Emitting Diode (LED) Heat Sinks -- Numerical Modeling of Spiral Cyclone Flow Field and the Impact Analysis of a Vortex Finder -- Lattice Boltzmann Simulation of Double-Sided Deep Cavities at Low Reynolds Number -- A Study of Thermo-Structural Behavior of Annular Fin -- A New Design to Achieve Variable Compression Ratio in a Spark Ignition Engine -- Experimental Investigation on Energy Saving Due To Bubble Disturbance in Boiling Process -- Highway Traffic Scenario Based Lane Change Strategy for Autonomous Vehicle -- Friction and Wear Analysis of PTFE Composite Materials -- Flow Analysis of Catalytic Converter – LCV BS III Applications for Optimising Pressure Drop -- Step Towards Computer Aided Integration Of Sheet Metal Applications -- Thermodynamic Analysis of Diesel Engine Fueled With Aqueous Nanofluid Blends -- Investigation of Twin Cylinder Direct Injection CI Engine Characteristics Using Calophyllum Inophyllum Biodiesel Blends -- A Novel Beetle Inspired Fuel Injection System for Improved Combustion Efficiency -- Effect of Friction Stir Processing On the Dry Sliding Wear Behaviour of AA6082-5tib<sub>2</sub> Composite -- Optimization of Sliding Wear Performance of Ti Metal Powder Reinforced Al 7075 Alloy Composite Using Taguchi Method -- A Comparative Study on Mechanical and Dry Sliding Wear Behaviour of Al 7075-T6 Welded Joints Fabricated By FSW, TIG and MIG -- Overview of Cryogens Production and Automation in Cryo-Distribution at TIFR, Mumbai -- Analysis of Recast Layer, Wear Rate and Taper Angle in Micro-Electrical Discharge Machining Over Ti-6Al-4V -- Evaluation of Critical Speed for Aluminum - Boron Carbide Metal Matrix Composite Shaft -- Smart System for Feature Recognition of Sheet Metal Parts: A Review. .

and Development Practices in Aerospace and Automotive Engineering (I-DAD 2018)". The papers discuss new design concepts, analysis and manufacturing technologies, with an emphasis on achieving improved performance by downsizing; improving the weight-to-strength ratio, fuel efficiency, and operational capability at room and elevated temperatures; reducing wear and tear; and addressing NVH aspects, while balancing the challenges of Euro IV/Barat Stage IV emission norms and beyond, greenhouse effects, and recyclable materials. The innovative methods discussed here offer valuable reference material for educational and research organizations, as well as industry, encouraging them to pursue challenging projects of mutual interest. .

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