



## SCHEDULE AND SESSION DETAILS OF ICMMM-2021

DATE	TIME	PROGRAM
19-03-2021	10.00-11.00 AM	<b>INAGURAL FUNCTION</b>
	11.00-11.45 AM	<b>KEY NOTE SESSION 1</b>  <b>NANO-ENGINEERED SURFACES FOR AEROSPACE APPLICATIONS</b> Dr. Harish Barshilia, FNAE, Chief Scientist, Head of Surface Engineering Division, CSIR - National Aerospace Laboratories, Bangalore, India
		12.00-01.40 PM
	02.00-02.45 PM	<b>KEY NOTE SESSION 2</b>  <b>TITLE- AN INDUSTRY 4.0 VIEW ON PRODUCT MANUFACTURING – CHALLENGES &amp; WHAT LIES AHEAD?</b> Dr. Arivazhagan Anbazhagan Robert Gordon University Scotland
		03.00-03.45 PM
	03.45-5.30 PM	<b>TECHNICAL SESSION - 2</b>



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	05.35-6.15 PM	<b>KEY NOTE SESSION 4</b>  <b>NUMERICAL STUDIES OF MQL AND CRYO ASSISTED MACHINING</b> Prof. Arnaud Duchosal University of Tours, France
20-03-2021	09.30-11.10 AM	<b>TECHNICAL SESSION - 3</b>
	11.15 – 11.55 AM	<b>KEY NOTE SESSION 5</b>  <b>ADDITIVE MANUFACTURING: A JOURNEY FROM 2D TO 5D</b> Dr. Kaushik Kumar BITS, India
	12.00-01.40 PM	<b>TECHNICAL SESSION - 4</b>
	02.00-03.40 PM	<b>TECHNICAL SESSION - 5</b>
	04.00-05.40 PM	<b>TECHNICAL SESSION - 6</b>
21-03-2021	10.00 - 12.20 PM	<b>TECHNICAL SESSION - 7</b>



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**TECHNICAL SESSIONS**

<b>TECHNICAL SESSION 1: 12.00-01.40 PM (PANEL -1, PANEL -2)</b>		<b>19-03-2021</b>
<b>PANEL - 1</b>	MATPR-D-20-04851R1	A Novel Use of Twisted Continuous Carbon Fibers In Additive Manufacturing Of Composites
	MATPR-D-20-05085R1	Impact of Shock Waves on Glass Wool Composition and Properties
	MATPR-D-20-06281R1	Strength Properties of Aerated Cement Composite Reinforced with Steel Fibres
	MATPR-D-20-06634R1	Effect of SiC Reinforcement on the Mechanical and Tribological Behaviour of Al6061 Metal Matrix Composites.
	MATPR-D-20-07677R1	DFMA for Product Designers: A Review
	MATPR-D-20-07882R1	Studies on Mechanical and Thermal Performance of Carbon Nanotubes/ Polypropylene Nano composites
	MATPR-D-20-07811R1	A New Selective Assembly Model for Achieving Specified Clearance in Radial Assembly
	MATPR-D-20-08272R1	Optimization of wear behaviour of AA6061 - SiC - B4C metal matrix composite using response surface methodology
	MATPR-D-21-03102R1	Comparative Analysis on Natural and Recycled Coarse Aggregate Concrete



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<b>PANEL - 2</b>	MATPR-D-20-08316R1	A Review of Different Techniques in Cloud Computing
	MATPR-D-20-08475R1	Dynamic responses of laminated composite sandwich beam with double-viscoelastic core layers
	MATPR-D-20-09254R1	Surface modification on Aluminum Metal Matrix Composite for high strength Application -Current State of Art
	MATPR-D-20-09783R1	Design and Analysis of 3D printed UAV wheel
	MATPR-D-20-09959R1	Artificial neural network models for predicting the corrosion behavior of friction stir processed AA5083
	MATPR-D-20-09960R1	Soft Computing model for predicting the wear resistance of friction stir processed aluminum alloy AA5083
	MATPR-D-20-10640R1	A Numerical simulation of the influence of torque on the performance of composite gears
	MATPR-D-20-10641R1	Fabrication and Analysis of Mechanical Properties of Textile Waste/Glass Fiber Hybrid Composite Material
	MATPR-D-20-10971R1	Stress analysis of different cross section for Passenger Truck chassis with material of ASTM A148 Gr 80-50
	MATPR-D-21-03025R1	Comparative study on design of steel structures and RCC frame structures based on column span



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<b>TECHNICAL SESSION 2: 03.45-05.30 PM (PANEL -3, PANEL -4)</b>		<b>19-03-2021</b>
<b>PANEL - 3</b>	MATPR-D-20-11054R1	Investigating the Mechanical, Electrochemical and Tribological Properties of Cold Sprayed Coatings – A review
	MATPR-D-20-11055R1	MICRO STRUCTURE AND FINITE ELEMENT ANALYSIS OF FITNESS AND UNFITNESS SQUARE BUTT JOINT OF ALUMINIUM BASED NANO COMPOSITE PLATES
	MATPR-D-20-11249R1	Application of data computing for resource scheduling in manufacturing industries
	MATPR-D-20-11349R1	Development and Characterization of Bamboo - Sesame Stalk Hybrid Urea-formaldehyde Matrix Composite for Particleboard Application
	MATPR-D-20-11468R1	Vibration of a Rectangular Plate Using Finite Continuous Radon Transform
	MATPR-D-20-11469R1	A review on failure mechanisms and analysis of multidirectional laminates
	MATPR-D-20-11513R1	Numerical Analysis of Reinforced Carbon Fiber Composite Material for Lightweight Automotive Wheel Application
	MATPR-D-20-11559R1	Finite Element Modelling of Thermal History During Friction Stir Processing of AA5052
	MATPR-D-20-11825R1	Ergonomics survey in thread manufacturing industry by using Workplace Ergonomic Risk Assessment (WERA) method
	MATPR-D-20-11892R1	Design of manually operated multiple-seed planting machine for an Ethiopian environment



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<b>PANEL - 4</b>	MATPR-D-20-11894R1	Experimental Investigation on Mechanical of Randomly Oriented Treated Palmyra Fibre Reinforced Polyester Composites
	MATPR-D-21-01163R1	Comparative analysis of stress-strain state of bars from aluminum alloys A2024 and A7075 processed by RSR based on FEM modeling
	MATPR-D-21-00005R1	Viscoelastic characteristic iron powder core for reducing vibration and noise radiated by Switched Reluctance Machine
	MATPR-D-21-00073R1	Optimization of machining parameters using Artificial Intelligence techniques
	MATPR-D-21-00074R1	Tribological properties of areca sheath fiber composites
	MATPR-D-21-00077R2	Multifactor Door Locking Systems: A Review
	MATPR-D-21-00185R1	Biomedical application of Carbon nanotubes (CNTs) in vulnerable parts of the body and its toxicity study: A state-of-the-art-review
	MATPR-D-21-00388R1	A FEA Simulation Study of Ball End Mill for Fixed 3+1/3+2 Axis Machining of Ti-6Al-4V
	MATPR-D-21-00513R1	Stress Distribution On A Tooth Supported Removable Partial Denture Fabricated Using Two Different Materials: A 3-Dimensional Finite Element Analysis
	MATPR-D-21-02874	Dynamic analysis of bi-dimensional functionally graded beams



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<b>TECHNICAL SESSION 3: 09.30-11.20 AM (PANEL -5, PANEL -6)</b>		<b>20-03-2021</b>
<b>PANEL - 5</b>	MATPR-D-21-00618R1	Studies on dynamic characteristic of stepped horn profile utilized ultrasonic insertion process using finite element analysis and experimental methods
	MATPR-D-21-00957R1	Damping Device to Prevent Cervical Fracture
	MATPR-D-21-01163R1	Investigations on Microstructure and Tensile properties of as-cast ZA27 Metal matrix Composite Reinforced with Zircon Sand
	MATPR-D-21-01313R1	Nonlinear Transient Analysis of Porous Functionally Graded Material Plates under Blast Loading
	MATPR-D-21-01413R1	Experimental Investigations on Mechanical Properties and Abrasive Wear Response of Glass, Kevlar and Carbon Fabric Reinforced Composites
	MATPR-D-21-01591R1	Benchmarking service excellence in accredited services of Indian calibration and testing laboratories
	MATPR-D-21-01855R1	Comparison of Static and Thermal Stress Analysis on Mg AZ-63 Textured and Untextured Material Surfaces
	MATPR-D-21-01992	Characterization of Jute Fiber-Epoxy Reinforced Composites
	MATPR-D-21-02083	Design of an Autonomous Water Cleaning Bot
	MATPR-D-21-02136R1	MATLAB code for the design of High Strength Concrete mix
	MATPR-D-21-03128R1	Earthquake resistant Design of G+5 multistorey residential building using STAAD.pro



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<b>PANEL - 6</b>	MATPR-D-21-02411R1	Effect of WS2 and Redmud Reinforcements on Mechanical Behaviour of Al6061-T6 Surface Composite
	MATPR-D-21-02456	A contemporary review on additive manufactured biomedical implants
	MATPR-D-21-02481	Preparation and Characterization of Ni <sub>0.5</sub> Zn <sub>0.5</sub> Co <sub>0.2</sub> Fe <sub>1.8</sub> O <sub>4</sub> Filled Polypropylene Composites
	MATPR-D-21-02548	Fiber Extraction and Mechanical Properties of Agave Americana/Kenaf Fiber Reinforced Hybrid Epoxy Composite
	MATPR-D-21-02596	Effect of Fiber Reinforcement on the Open Hole Tensile Strength of 3D printed composites
	MATPR-D-21-02625	Design and development of an ultrasonic stack assembly for ultrasonic vibration assisted grinding
	MATPR-D-21-02633	Leveraging Lean Six Sigma: Reducing Defects and Rejections in Filter Manufacturing Industry
	MATPR-D-21-03015	Sol-gel Ceramic Coatings on SiCp for interfacial design of PM Cu composites
	MATPR-D-21-03124R1	Strength studies on effect of Glass waste in Concrete
	MATPR-D-21-02256R1	Mechanical and Wear Characterization of LM13/SiC/Gr Dispersed Hybrid Composites Formed through Stir Casting





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<b>TECHNICAL SESSION 7: 10.00-12.20 PM (PANEL -7)</b>		<b>21-03-2021</b>
<b>PANEL - 7</b>	MATPR-D-21-02635	Machinability studies on boron carbide and graphite reinforced aluminium hybrid composites
	MATPR-D-21-02636	Big Data Analysis of Demand Side Management for Industrial IOT Applications
	MATPR-D-21-02683	Impact Analysis of Rifle Bullet on Corrugated Sandwich Panel Structures for Defense Applications
	MATPR-D-21-02684	Modelling and simulation of primary suspension springs used in Indian Railways
	MATPR-D-21-02685	Study on PLA and PA thermoplastic polymers reinforced with carbon additives by 3D Printing process
	MATPR-D-21-02690	An Overview of Aluminium Matrix Composites: Particulate Reinforcements, Manufacturing, Modelling and Machining
	MATPR-D-21-02691	Mathematical Modeling of Auxetic Foams
	MATPR-D-21-02953	Application of bispectrum analysis to detect faults in helical gearedmem syst
	MATPR-D-21-02792	Materials Today A Demand-Based Relocation of Warehouses and Green Routing
	MATPR-D-21-02793	Recycled materials execution through digital image processing
	MATPR-D-21-02805	Reinforced Concrete Column-Beam Joint Impact due to Blast Loading
	MATPR-D-21-02851	Optimization of Prosthetic Leg Using Generative Design and Compliant Mechanism
	MATPR-D-21-00577R1	Experimental Analysis and Validation of Torsional Stiffness of a Tubular Space Frame Chassis
	MATPR-D-21-02932	Structural analysis of mini drone developed using 3D printing technique



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<b>TECHNICAL SESSION 1: 12.00-01.40 PM (PANEL -8, PANEL -9)</b>		<b>19-03-2021</b>
<b>PANEL - 8</b>	MATPR-D-20-06693R1	Natural Frequency Study on AA7075 - Aluminosilicate Layered Nanocomposites under T6 Heat Treatment Condition
	MATPR-D-20-07098R1	Methodological Approach for Best Tool Geometry Determination in Friction Stir Welding Process
	MATPR-D-20-07175R1	Effect of heat treatment on the properties of solution annealed and hot rolled Incoloy 20
	MATPR-D-20-07810R2	Properties of Zn foam filled with cenosphere microballoons
	MATPR-D-20-07725R1	Evaluation of circularity deviation from coordinate measurement data using an improved area hunting method
	MATPR-D-20-08273R1	Reduction in Total Completion Time in a Sequential Manufacturing Environment
	MATPR-D-20-08474R1	Parametric Influence on Residual stresses in VAT
	MATPR-D-20-08624R1	Review on Welding and Fracture of Nickel based Superalloys
	MATPR-D-20-08555R1	Analysis Of Chip Morphology To Understand The Machining Mechanism Of Micro End Milling While Machining Ti-6Al-4V.
	MATPR-D-20-08809R1	Evaluation Of Lead Time For Contour And Roundness Measuring Equipment
MATPR-D-20-12314R1	Experimental Investigation of Waste Heat Recovery from the Disposal of Ammonium Perchlorate	



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PANEL - 9	MATPR-D-20-09337R1	POLYAMIDE BASED AMALGAMS IN MARINE CUSTOM: HISTORY AND FORTHCOMING LEANINGS
	MATPR-D-20-09338R1	Mechanical possessions of Jute/ Sisal Natural Fiber Mixture Amalgams
	MATPR-D-20-09751R1	Application of PROMETHEE-GAIA method to priority sequencing rules in a dynamic job shop for single machine
	MATPR-D-20-09853R1	Effect of chemical treatments on polarization and dielectric properties of kumpang wood reinforced epoxy composite
	MATPR-D-20-10149R1	Effect of stirring on Solid Solution Hardening
	MATPR-D-20-10148R1	Fabrication of Fly-Ash Based Tiles using Liquid Phase Sintering Technology
	MATPR-D-20-10642R1	Micro Hardness and Optical Microscopy Analysis of Textile Waste/Glass Fiber Hybrid Composite Material
	MATPR-D-20-11052R1	Ductility Properties Analyses in Nano Silicon Particulate Reinforcement on AZ91 Magnesium Metal Matrix Composites Using Friction Stir Processing
	MATPR-D-20-11056R1	Analysis the Mechanical Properties and Material Characterization on Magnesium Metal Matrix Nano Composites through Stir Casting Process
	MATPR-D-21-03126R1	The Performance of high grade concrete (M60) with full and partial replacement of crushed sand by granulated blast furnace slag (GBFS) in OPC&PPC Concrete
MATPR-D-21-03127R1	Comparative studies on conventional concrete and self-curing concrete	



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<b>TECHNICAL SESSION 2: 03.45-05.30 PM (PANEL -10, PANEL -11)</b>		<b>19-03-2021</b>
<b>PANEL - 10</b>	MATPR-D-20-11096	Novel Deposition Process on Improving the Efficiency and Crystallographic aspects of Electroless Deposits
	MATPR-D-20-11185R1	Intelligent welding by using machine learning techniques
	MATPR-D-20-11275R1	Influence on Nonhomogeneous microstructure formation and its role on tensile and fatigue performance of duplex stainless steel by a solid-state welding process
	MATPR-D-20-11359R1	Optimization of Machining Parameters in Turning of EN31 steel with TiAlN coated cutting tool
	MATPR-D-20-11422R1	Some studies of nanoparticle properties for dissimilar materials on the surface features created by EBW and LBW
	MATPR-D-20-11514	Burnishing of Ultra High Molecular Weight Poly Ethylene
	MATPR-D-20-11537R1	A study on bio implants materials and machining
	MATPR-D-20-11648R1	Present knowledge and perspective on the role of natural fibers in brake pad material
	MATPR-D-20-11666R1	Erosion Studies of SS316L Using Water Jet Machine (WJM) for the Piping Applications
	MATPR-D-20-11667R1	A Review: Machinability studies on human implant materials



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PANEL - 11	MATPR-D-20-11824R1	ERGONOMIC EVALUATION OF WORKERS DURING MANUAL MATERIAL HANDLING
	MATPR-D-20-11826R1	Multi-response optimization of Process Parameters for Laser beam Welding of AA6061-Ti6Al4V by Grey Relational Analysis
	MATPR-D-20-11827R1	JSHIRA Analysis in Gear Manufacturing Industry on Foundry Division
	MATPR-D-20-11828R1	Reduction of health and environmental hazard in cement industry
	MATPR-D-20-11865R1	Strength Enhancement of Clayey Sand Subgrade using Lime and Rice Husk Ash
	MATPR-D-20-11866R1	Influence of rotational speed, angle of impingement, concentration of slurry and exposure time on erosion performance of HVOF sprayed cermet coatings on 35CrMo steel
	MATPR-D-20-11867R1	Sig sigma implementation (DMAIC) of friction welding of tube to tube plate by external tool optimization
	MATPR-D-21-03125R1	Strength performance of high-grade concrete using rice husk ash (RHA) replacing with cement
	MATPR-D-20-11945R1	Investigation of Heat generation during Submerged Friction Stir Welding on 6061-T6 Aluminum Alloy
	MATPR-D-20-11985R1	Mechanical, Wear and Corrosion Properties of Micro Particulates Reinforced ZA-27 Hybrid MMC by Stir casting: A Review



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<b>TECHNICAL SESSION 3: 09.30-11.20 AM (PANEL -12, PANEL -13)</b>		<b>20-03-2021</b>
<b>PANEL - 12</b>	MATPR-D-20-11986R1	Investigation on Mechanical Behavior of B4C Dispersed Advanced Novel Composites Fabricated through Molding and Curing
	MATPR-D-20-11988R1	A Review on Mechanical and Wear Properties of Fiber-Reinforced Thermoset Composites with Ceramic and Lubricating Fillers
	MATPR-D-20-12052R1	Engineering the Properties of Nanomaterials for its Use in Cement Concrete
	MATPR-D-20-12081R1	A review of properties of Inconel 625 and Inconel 718 fabricated using direct energy deposition
	MATPR-D-20-12234R1	Effect of material variation on the uniaxial compression behavior of FDM manufactured polymeric TPMS lattice materials
	MATPR-D-20-12256R1	Spare Parts Ordering Decisions Using Age Based, Block Based and Condition Based Replacement Policies
	MATPR-D-20-12365R1	Studies On Cubic Boron Nitride Reinforced Al2014 Composites
	MATPR-D-21-00006R1	Comparison and Selection of Suitable Materials Applicable for Gas Turbine Blades
	MATPR-D-21-00039	Microstructural evolution and elemental variation across the fusion interface of AISI 904L and Inconel 625 dissimilar weldments
	MATPR-D-21-00075R1	Optimization of Friction Stir Welding Parameters during Joining of AA3103 and AA7075 aluminium alloys Using Taguchi Method



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PANEL - 13	MATPR-D-21-00076R1	Investigation of Drying Kinetics and Qualities of Turkey Berry in Fluidized Bed Dryer
	MATPR-D-21-01161R1	Effect of Dumped Iron Ore Tailing Waste as Fine Aggregate with Steel and Basalt Fibre in improving the performance of concrete
	MATPR-D-21-00131R1	Unconventional Machining of Ceramic Matrix Composites - A Review
	MATPR-D-21-00186R1	Synthesis of SnO <sub>2</sub> and MoS <sub>2</sub> nanocomposites for supercapacitor applications
	MATPR-D-21-00345R1	Machinability, Weldability and Surface Treatment Studies of SDSS 2507 Material-A Review
	MATPR-D-21-00346R1	Investigation Of Physical And Chemical Properties Of Tobacco Seed Oil Fatty Acid Methyl Ester For Biodiesel Production
	MATPR-D-21-00382	Machining Parameter Optimization using Adam Gene Algorithm for Electro Spark Erosion on Shape Memory Alloy
	MATPR-D-21-00383R1	Significance of continuous wave and pulsed wave laser in direct metal deposition
	MATPR-D-21-00556R1	Selection of Intense Energy Welding Process for High Strength Aluminum Alloy Using AHP
	MATPR-D-21-00578R1	A Recent Examination On The Nano Coating Techniques In Heat Transfer Applications



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PANEL - 14	MATPR-D-21-00619R1	Metal casting modelling software for small scale enterprises to improve efficacy and accuracy
	MATPR-D-21-00748R1	Experimental Investigation on Mechanical Properties of Economical Local Natural Fiber Reinforced Cement Mortar
	MATPR-D-21-00848R1	Critical review of off-axial nozzle and coaxial nozzle for powder metal deposition
	MATPR-D-21-00849R1	Electrochemical behavior of NiTi alloy wire electro spark erosion machined surface
	MATPR-D-21-00942R1	Optimizing the welding parameters for Straight Tube Butt Welding of dissimilar metals
	MATPR-D-21-00992R1	Analytical investigation of hydraulic scissor lift for modular industrial plants in Ethiopia
	MATPR-D-21-01145R1	Study on Thermal, Mechanical, Microstructural Properties and Failure analyses of Lanthanum Zirconate based Thermal barrier coatings: A review
	MATPR-D-21-00129R1	Experimental investigation of compressive strength for fly ash on high strength concrete C-55 grade
	MATPR-D-21-01162R1	Influence of Tool Profiles on Similar Al-5083 Alloys Using Friction Stir Welding
	MATPR-D-21-01206R1	Ageing kinetics of SiC <sub>p</sub> reinforced Al metal matrix composites





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<b>PANEL - 15</b>	MATPR-D-21-01207R1	PIV Study of Directional Solidification of a Binary Metal Alloy Analogue
	MATPR-D-21-01229R1	Real-time applications and novel manufacturing strategies of incremental forming: an industrial perspective
	MATPR-D-21-01230R1	Blast Analysis of Functionally Graded Sandwich Plates
	MATPR-D-21-01231R1	Investigation on surface roughness, ultimate tensile strength, and microhardness of friction stir welded AA7075-T651 joint
	MATPR-D-21-01315R2	Review on the evolution and technology of state-of-the-art metal additive manufacturing processes
	MATPR-D-21-01415R1	Investigation of Al <sub>2</sub> O <sub>3</sub> -water Nanofluid Flow through the Circular Tube
	MATPR-D-21-01416R1	Effect of cutting speed on cutting zone temperature, surface roughness, chip form and insert after dry turning Inconel 600 with TiAlN coated carbide insert
	MATPR-D-21-01562R1	Investigations on the Effect of Surface Coatings on the Weldment Properties on Chromium Manganese Stainless Steel Gas Tungsten Arc Welded Plates
	MATPR-D-21-01590R1	Experimental investigation on surface roughness parameters in dry turning of Monel 400 with uncoated and coated carbide inserts
	MATPR-D-21-01592R1	Implementation of LSS framework in Automotive Component Manufacturing: A Review, Current Scenario and Future Directions.



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<b>TECHNICAL SESSION 5: 02.00-3.40 PM (PANEL -16, PANEL -17)</b>		<b>20-03-2021</b>
<b>PANEL - 16</b>	MATPR-D-21-03026R1	Investigation of Impingement Cooling on a Heat Sink Using CFD Simulation
	MATPR-D-21-02222R1	Analysis on surface grinding of mild steel by varying grinding parameters
	MATPR-D-21-02224	Parametric Study on Impact Behaviour of Sisal and Cenosphere Reinforced Natural Rubber-Based Hybrid Composites: FE Approach
	MATPR-D-21-02225R1	An Experimental Investigation of Wirecut Electric Discharge Machine Processed Titanium Material
	MATPR-D-21-02251R1	Critical Review on Porous Material Manufacturing Techniques, Properties and their Applications
	MATPR-D-21-02257R1	AHP for Ranking Effect of Qualitative Factors in Uncertainty Measurement of Material Testing
	MATPR-D-20-11053R1	Performance and Emission Evaluation of HVOF Sprayed Zirconium Dioxide and Aluminium Oxide coated Internal Combustion Engine by Incorporating Injection Timing Retardation
	MATPR-D-21-00515R1	Analyzied of Vapor Absorption Refrigeration Systems Powered by Geothermal Energy: Site in Ethiopia
	MATPR-D-21-02409R1	Performance of Surface Textured PCD Inserts with Wettability Chemical Solutions for Machining Operation
	MATPR-D-21-03027R1	Design and development of longitudinal vehicle dynamics for an All-terrain vehicle



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PANEL - 17	MATPR-D-21-00279R1	Some study on the potential energy extraction from solar-assisted solid waste for produce electricity in Adama city in Ethiopia
	MATPR-D-21-02413	Geotechnical and Microstructural Behaviour of Expansive Soil Using Calcium Chloride and Alccofine
	MATPR-D-21-02540	Influence of welding parameters on the weld properties in Friction Stir Spot Welding of Aluminium alloys of varying thicknesses
	MATPR-D-21-02542	Evaluating the Machining Parameters for Milling P20 HH Mould Steel using a Specific End Mill
	MATPR-D-21-02541R1	A Digital Twin study for Immediate Design / Redesign of Impellers and Blades: Part 1: CAD Modelling and Tool Path Simulation
	MATPR-D-21-02545	Analytical study on failure of Granular Anchor Pile
	MATPR-D-21-02546	Design and Strengthening Properties of Different Forging Gas Turbine Blade Materials
	MATPR-D-21-02571	Machinability Study in Milling of Ti-6Al-4V Using Cryogenic Treated and Coated Tool
	MATPR-D-21-02572	Serpentine Square Wave Microchannel Fabrication with WEDM and Soft Lithography
MATPR-D-21-02573	A Facility Location Model for Marine Applications	



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<b>TECHNICAL SESSION 6: 04.00-05.40 PM (PANEL -18, PANEL -19)</b>		<b>20-03-2021</b>
<b>PANEL - 18</b>	MATPR-D-20-11276R1	Exhaust Gas Recirculation for enhancing the performance of HVOF Sprayed Zirconium Dioxide and Aluminium Oxide coated Internal Combustion Engine
	MATPR-D-21-02595	Effect of microstructural change on cutting force fluctuation
	MATPR-D-21-02598	Effect of compressive strength for pond ash on high strength of C-25 concrete
	MATPR-D-21-02951	DESIGN AND DEVELOPMENT OF SMART SOLAR POWERED STREET SWEEPING MACHINE
	MATPR-D-21-02601	Experimental Investigation of Surface Roughness For AA 3003-0 Aluminium Alloy Using Single Point Incremental Forming.
	MATPR-D-21-02602	Recent developments and challenges associated with wire arc additive manufacturing of Al alloy: A Review
	MATPR-D-20-12315	Gas turbine blade failure scenario due to thermal loads in case of Nickel based super alloys
	MATPR-D-21-02628	Characterization of pre-treated and post-treated PVD-AlTiN coating: Nanohardness, modulus of indentation and percent elastic portion of the nanoindentation
	MATPR-D-21-02629	Surface Preparation and Analysis on Fused Silica Glass Substrate with Deterministic Grinding Method
	MATPR-D-21-02630	An experimental investigation on potassium activator based geopolymer concrete incorporated with hybrid fibers



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PANEL - 19	MATPR-D-21-02631	A Bibliometric Analysis of Circular Economy Concept in E-waste Research During The Period 2008–2020
	MATPR-D-21-02637	Comparative Study of Parametric Effects on the Performance of Simple and Powder Mixed EDM using Aluminium and Graphite Powder on Inconel X750 Alloy
	MATPR-D-21-02638	Study on scratch behavior of Ni-Al <sub>2</sub> O <sub>3</sub> coating composition on Al-2219 substrate by electro deposited technique
	MATPR-D-21-02681	Performance study of dimple and channel textured tools during turning of Inconel-718
	MATPR-D-21-02682	Studies on the selection of cutting parameters of ti-6al-4v alloy turning operation using principal component analysis
	MATPR-D-21-02692	Study on the Fresh and Hardened properties of foam concrete incorporating Fly ash
	MATPR-D-21-02693	TOPSIS & EXPROM2 Multicriteria Decision Methods for Al <sub>2</sub> O <sub>3</sub> /Al 6061 Nanocomposite Selection
	MATPR-D-21-02695	Recent developments and challenges accompanying with WAAM of Mg alloys: A Review
	MATPR-D-21-02699	A Review on SPD Processes used to produce ultrafine-grained and multilayer nanostructured Tubes
	MATPR-D-21-02954	Mechanical Properties of Carbon Particle Mixed Polylactic acid via Fused Deposition Modeling



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<b>TECHNICAL SESSION 7: 10.00-12.20 PM (PANEL -20)</b>		<b>21-03-2021</b>
PANEL - 20	MATPR-D-21-02700	Investigations on Al 7075 /nano-SiC/ B4C hybrid reinforcements using Liquid casting Method
	MATPR-D-21-02702	Structural, Elastic and Multiferroic property of strontium ferrite nanoceramic prepared by sol-gel derived citrate precursor method.
	MATPR-D-21-02804	Fitting IGM, FGM and NLS switching models to NaNO <sub>2</sub> -PVA composite transients for its microscopic parameter estimation
	MATPR-D-21-02806	Optimum resin, aggregates mix and design criteria for particulate polymer concrete machine tool structures-A review
	MATPR-D-21-02850	Effect of fiber orientation on tensile strength of thin composites
	MATPR-D-21-02854	Flexural Strength and Antifungal Activity of Copper Nanoparticles on Polymethyl Methacrylate Denture Base Resins
	MATPR-D-21-02863	Co-Mo nano-composite material: Synthesis, characterization and thermal behaviour
	MATPR-D-21-02864	Investigation of switching dynamics by fitting FGM and NLS models to PVA based NaNO <sub>2</sub> -CsNO <sub>3</sub> composite transients
	MATPR-D-21-02876	A study of age effect through NDT and crushing strength of concrete with different industrial wastes under loading and unloading conditions



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<b>TECHNICAL SESSION 1: 12.00-01.40 PM (PANEL -21)</b>		<b>19-03-2021</b>
<b>PANEL - 21</b>	MATPR-D-20-07466R1	Evaluation Of Wear Resistance Of Vanadis23 PM Steel Subjected To Cryogenic Treatment
	MATPR-D-20-06508R1	Influence of Local post-weld Heat treatment and its Thermal analysis on Thick wall Carbon steel pipe
	MATPR-D-20-09446R1	Modeling of the singularly perturbed process of convection-diffusion heat and mass transfer in multilayer media
	MATPR-D-20-09588R3	Disposal And Recycling Of Plastics
	MATPR-D-20-10972R1	Influence of Heat Treatment and coating techniques on Crystallinity of Electroless Nickel Deposition
	MATPR-D-20-11650R1	Experimental investigation of suitable thin layer drying curve to solar maize dryer assisted for biomass back-up heater
	MATPR-D-20-11694R1	Analytical investigation of pelton turbine for mini hydro power: For the Case of Selected Site in Ethiopia
	MATPR-D-20-11829R1	An Initiative Towards Sustainability In The Petroleum Industry: A Review
	MATPR-D-20-11938R1	Treatment of wastewater from coffee (coffea arabica) industries using mixed culture Pseudomonas florescence and Escherichia coli bacteria
	MATPR-D-20-12082R1	Effect of volumetric fraction index on temperature distribution in thick-walled functionally graded material made cylinder



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<b>TECHNICAL SESSION 3: 09.30-11.20 AM (PANEL -22)</b>		<b>20-03-2021</b>
<b>PANEL - 22</b>	MATPR-D-21-00791R1	Numerical and Thermal Modelling of Machining Implants: A case with Ti6Al4V Alloy with Unsteady Heat Diffusion
	MATPR-D-21-02358	Optimization of Solid Waste Management In A Metropolitan City
	MATPR-D-21-00944R1	Optimization of Solar Tunnel Dryer for mango Slice using Response Surface Methodology
	MATPR-D-21-00993R1	Development of MLP-ANN model Predict the Heat Transfer Rate of Plain Twisted Tape Fitted in a Concentric Tube Heat Exchanger
	MATPR-D-21-01314R1	Experimental Investigation of Natural Convection Heat Transfer Coefficient for Roughed Inclined Plate
	MATPR-D-21-01411R1	Performance Estimation and Redesign of Horizontal Axis Wind Turbine (HAWT) Blade
	MATPR-D-21-02547	CFD ANALYSIS OF ENVIRONMENTAL CONTROL SYSTEM FOR AN AIRCRAFT
	MATPR-D-21-01563R1	Heat Transfer of a Tapered Fin Heat Sink under Natural Convection
	MATPR-D-20-12181R1	EXPERIMENTAL INVESTIGATION OF FLOW VISUALIZATION OF VORTEX SHEDDING ON A FLOW OVER SQUARE BLOCK
	MATPR-D-21-01594R1	An Entropy Based Approach to 5S Maturity





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<b>TECHNICAL SESSION 4: 12.00 – 01.40 PM (PANEL -23, PANEL-24)</b>		<b>20-03-2021</b>
<b>PANEL - 23</b>	MATPR-D-20-12233R1	Application of Nanomaterials in Heat Transfer Fluid for Parabolic Trough Concentrators
	MATPR-D-21-01854R1	Effect of UWS Spray Angle and Positioning of Injector on Ammonia Concentration in Urea-SCR system
	MATPR-D-21-01856R1	Recent strategies and trends in implanting of renewable energy sources for sustainability – A Review
	MATPR-D-21-02137R1	Modeling and simulation of Aero thermodynamics Hot Radiant Blunt Body
	MATPR-D-21-02221	Effect of Reynold’s number on effective heat transfer dissipation of Braking system
	MATPR-D-21-02223R1	Experimental Investigation of Briquettes formed from various sources of Biochar Mixed with Cow Dung as Alternate Source of Energy – a West Bengal Study
	MATPR-D-21-00895R1	Influence of heat treatment on the fatigue resistance of Inconel 718 fabricated by Selective Laser Melting
	MATPR-D-20-12364R1	Experimental Investigation on Heat Transfer on Laminar Flow over Combination of Blocks Mounted on Rectangular Channel
	MATPR-D-21-01414R1	Design and Techno-economic Analysis of Power Generating Unit from Waste Heat(Preheater and Grate cooler) of Cement Factory in Ethiopia
	MATPR-D-21-02597	Material Selection for Rotor Blade of Vertical Axis Wind Turbine



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<b>PANEL - 24</b>	MATPR-D-21-02599	Thermal modeling of laser surface micro-texturing: Investigation on effects of laser parameters on dimple-texture dimensions and aspect ratio
	MATPR-D-21-02603	Development of PCPDTBT Thin Film Based Highly Sensitive Organic Phototransistors
	MATPR-D-21-02627	Prediction of compressive strength of recycled aggregate concrete using Artificial Neural Network and Cuckoo Search Method
	MATPR-D-21-02632	Investigation on the Effect of Thermal Properties by Change in Geometry of a Heat Pipe using simulation
	MATPR-D-21-02634	Computational fluid dynamics based analysis for optimization of various thermal enhancement techniques used in evacuated tubes solar collectors: A Review
	MATPR-D-21-02639	Study on Effect of Ceramics on Dry Sliding Wear Behaviour of Al-Cu-Mg Based Metal Matrix Composite at Different Temperature
	MATPR-D-21-02696	A Review on the Simulation/CFD based studies on the Thermal Augmentation of Flat Plate Solar Collectors
	MATPR-D-21-02694	Effect of graphene on the performance of heat exchanges and related simulation studies
	MATPR-D-21-02752	Improved yield of palm oil biodiesel through nano catalytic transesterification
	MATPR-D-21-02832	Effect of Material on Fluid Elastic Instability of Parallel Triangular Tube Array Subjected to Water Cross



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<b>TECHNICAL SESSION 1: 12.00-01.40 PM (PANEL -25, PANEL -26)</b>		<b>19-03-2021</b>
PANEL - 25	MATPR-D-20-07322R1	Design and Analysis of Drilling Head for Steering Linkage Parts in Automobile Industry
	MATPR-D-20-06861R1	Design and Analysis of Composite Mono Leaf Spring for Passenger Cars
	MATPR-D-20-06633R1	Numerical and Experimental Analysis of Torsional Stress of Traditional and Modified Steering Yoke
	MATPR-D-20-08625R1	Design and optimization of gating system, modification of cooling system position and flow simulation for cold chamber high pressure die casting machine
	MATPR-D-20-09255R2	CALCULATION, DESIGN, ANALYSIS OF TWO STAGE SINGLE SPEED GEARBOX FOR ALL TERRAIN VEHICLE FOR BAJA SAE
	MATPR-D-20-10501R1	EFFECT OF THRUST VECTOR CONTROL BY VARYING INJECTION LOCATION IN NOZZLE
	MATPR-D-20-11560R1	Design optimization of Friction Lining of a Clutch Plate
	MATPR-D-20-11649R1	Numerical investigation of thermo-mechanical properties for disc brake rotor using light commercial vehicle



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PANEL - 26	MATPR-D-20-11886R2	Ergonomics Hazard Analysis Techniques- A Technical Review
	MATPR-D-20-11896R1	Numerical Investigation of Annoying CVT Belt Noise
	MATPR-D-20-11936R1	Numerical Analysis on Bending and Contact Stress of Single and Double Start Worm Drive
	MATPR-D-20-11954R1	Optimizing Thermal Performance of a Dry Rigid Clutch by varying Groove Pattern and Friction Material
	MATPR-D-20-12316R1	Emission and Performance Behavior of Flax Seed Oil Biodiesel/Diesel Blends in DI Diesel Engine
	MATPR-D-21-00514R1	Emission and performance behavior of Safflower oil biodiesel/diesel blends in DI diesel engine
	MATPR-D-21-00749R1	Emission and performance behavior of hemp seed oil biodiesel/diesel blends in DI diesel engine
	MATPR-D-21-00205R2	Ceramic material for thermal barrier coatings in CI engine for performance enhancement with biodiesel
	MATPR-D-21-00945R1	Emission and Performance Behaviour of Lemongrass oil/Diesel Blends in DI Diesel Engine
	MATPR-D-21-01078R1	Emission and Performance Behavior of Orange Peel Oil Biodiesel/Diesel Blends in DI Diesel Engine



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<b>TECHNICAL SESSION 2: 03.45-5.30 PM (PANEL -27)</b>		<b>19-03-2021</b>
<b>PANEL - 27</b>	MATPR-D-21-01412	Predictive Analytics as a Service for Vehicle Health Monitoring Using Edge Computing and AK-NN algorithm
	MATPR-D-21-01796	Reduction of Acid mist emission in Formation Process of Automotive Lead Acid Battery Manufacturing Industry by means of an Electrolyte Additive
	MATPR-D-21-02543	Optimal Arrangement of Geogrids in Road Embankment Using Different Fill Materials
	MATPR-D-20-09854	An IoT based Industry 4.0 Architecture for Integration of Design and Manufacturing Systems.
	MATPR-D-20-12366R2	A CASE STUDY ON HAZARD IDENTIFICATION AND RISK ASSESSMENT IN SEWAGE TREATMENT PLANT
	MATPR-D-20-09026R1	A Review on Conventional and Thermal Assisted Machining of Titanium Based Alloy
	MATPR-D-20-07812R1	Impact of E-waste on the Mechanical and Machining Characteristics of Epoxy based Hemp fibre Composite