

## Research Publications by the Faculties

CAY (2023-24)

Sl no	Name of the staff	Publication / Book Chapter / Patent	Title of the Paper Published	Journal /Book	DOI
1	Dr. Gangadhar M Kanaginahal	Book Chapter	Mechanical Alloying of Magnesium and Titanium Alloys	Advancements in Powder Metallurgy: Processing, Applications, and Properties	10.4018/978-1-6684-9385-4.ch005
			Mechanical Alloying of Aluminium Alloys		10.4018/978-1-6684-9385-4.ch004
		Publication	Tensile, compressive, and fracture behavior of Habeshian chopped banana/epoxy core sandwich woven banana composite	Biomass Conversion and Biorefinery	<a href="https://doi.org/10.1007/s13399-024-05455-y">https://doi.org/10.1007/s13399-024-05455-y</a>
		Publication	Influence of Habesha eggshell on the dry sliding wear behavior of epoxy composites		<a href="https://doi.org/10.1007/s13399-024-05482-9">https://doi.org/10.1007/s13399-024-05482-9</a>
		Publication	An experimental study on the hardness, inter laminar shear strength and water absorption behavior of Habeshian banana fiber reinforced composites	Journal of Natural Fibers	<a href="https://doi.org/10.1080/15440478.2024.2338930">https://doi.org/10.1080/15440478.2024.2338930</a>
		Publication	Flexural behavior of epoxy composites reinforced with banana fibers in different architectures: experimental, analytical, and numerical approaches	Biomass Conversion and Biorefinery	<a href="https://doi.org/10.1007/s13399-024-05872-z">https://doi.org/10.1007/s13399-024-05872-z</a>
		Publication	From Powders to Alloys: A Study of the Mechanical Alloying Process and Sintering	Journal of Mines, Metals and Fuels	10.18311/jmmf/2023/45622
		Publication	Influence of Fiber Type on Electrical, Thermal and Mechanical Properties of Glass Fiber reinforced Polymer Composites for Insulation Panel Applications	Journal of The Institution of Engineers (India): Series D	<a href="https://doi.org/10.1007/s40033-024-00808-3">https://doi.org/10.1007/s40033-024-00808-3</a>
		Patent	Solar-Powered Bird And Animal Repeller For Agriculture	INDIAN Patent	Application No: 202341072022 A
		Publication	Analytical modeling and experimental estimation of the dynamic mechanical characteristics of green composite: Caesalpinia Decapetala seed reinforcement	Polymer Engineering and Science	<a href="https://doi.org/10.1002/pen.26599">https://doi.org/10.1002/pen.26599</a>
2	Prof. Rayappa S Mahale	Book Chapter	Mechanical Alloying of Magnesium and Titanium Alloys	Advancements in Powder Metallurgy: Processing, Applications, and Properties	10.4018/978-1-6684-9385-4.ch005
			Mechanical Alloying of Aluminium Alloys		10.4018/978-1-6684-9385-4.ch004
		Publication	From Powders to Alloys: A Study of the Mechanical Alloying Process and Sintering	Journal of Mines, Metals and Fuels	10.18311/jmmf/2023/45622
		Patent	Solar-Powered Bird And Animal Repeller For Agriculture	INDIAN Patent	Application No: 202341072022 A

		Publication	Fabrication of mechanically alloyed high entropy alloys (20-Fe-20Cr-20Ni-20Mn-20Ti) modified carbon paste electrode sensor for the cyclic voltammetric determination of methyl orange	Inorganic Chemistry Communications	<a href="https://doi.org/10.1016/j.inoche.2024.112428">https://doi.org/10.1016/j.inoche.2024.112428</a>
		Publication	Fabrication of Mechanically Alloyed Super Duplex Stainless Steel Powder-Modified Carbon Paste Electrode for the Determination of Methylene Blue by the Cyclic Voltammetry Technique	ACS omega	<a href="https://doi.org/10.1021/acsomega.3c09163">https://doi.org/10.1021/acsomega.3c09163</a>
		Publication	The Behavior of Banyan (B)/Banana (Ba) Fibers Reinforced Hybrid Composites Influenced by Chemical Treatment on Tensile, Bending and Water Absorption Behavior: An Experimental and FEA Investigation	Journal of Composites Science	<a href="https://doi.org/10.3390/jcs8010031">https://doi.org/10.3390/jcs8010031</a>
		Publication	Effect of Ball to Powder Ratios on the Phase Transformation of Austenite and Ferrite During Ball Milling of SAF-2507 Super Duplex Stainless Steel Powders	Journal of The Institution of Engineers (India): Series D	<a href="https://doi.org/10.1007/s40033-023-00624-1">https://doi.org/10.1007/s40033-023-00624-1</a>
		Book Chapter	Mechanical alloying: a catalyst for advancing tungsten heavy alloy fabrication	Mechanical Alloying of Ferrous and Non-Ferrous Alloys Processing, Properties, and Applications	<a href="https://doi.org/10.1016/B978-0-443-16151-3.00007-5">https://doi.org/10.1016/B978-0-443-16151-3.00007-5</a>
		Publication	Investigation of wear behavior for three-body made of CA-40 steel and nickel hard cast iron by abrasion method	THIRD INTERNATIONAL CONFERENCE ON ADVANCES IN PHYSICAL SCIENCES AND MATERIALS: ICAPSM 2022	<a href="https://doi.org/10.1063/5.0178634">https://doi.org/10.1063/5.0178634</a>
		Book Chapter	A Review on Cyclic Voltammetric Investigation of Toxic Heavy Metals	Frontiers in Voltammetry	10.5772/intechopen.108411
3	Prof. Prasanna Mangaonkar	Publication	Design and analysis of horizontal crystallizer for agro-chemical industries	Materials Today: Proceedings	<a href="https://doi.org/10.1016/j.matpr.2023.06.269">https://doi.org/10.1016/j.matpr.2023.06.269</a>

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Sl no	Name of the staff	Publication / Book Chapter / Patent	Title of the Paper Published	Journal /Book	DOI
1	Dr. Gangadhar M Kanaginahal	Publication	Theoretical and experimental assessment of thermal stability of novel bio-waste Habesha eggshell particles reinforced epoxy composite	Biomass Conversion and Biorefinery	<a href="https://doi.org/10.1007/s13399-023-04704-w">https://doi.org/10.1007/s13399-023-04704-w</a>
		Publication	Flammability studies of Natural Fiber Reinforced Polymer Composites fabricated by Additive Manufacturing Technology –A Review	Journal of The Institution of Engineers (India): Series D	<a href="https://doi.org/10.1007/s40033-023-00509-3">https://doi.org/10.1007/s40033-023-00509-3</a>
		Publication	Studies on Dielectric, Super-Capacitive and Photoluminescence Properties of Metal Organic Frameworks Subjected to Varying Temperature and Frequencies	Nano Hybrids and Composites	<a href="https://doi.org/10.4028/p-si6964">https://doi.org/10.4028/p-si6964</a>
		Book Chapter	Applications of Fused Deposition Modeling in Dentistry	Development, Properties and Industrial Applications of 3D Printed Polymer Composites	10.4018/978-1-6684-6009-2.ch012
		Publication	Evaluation of dynamic mechanical analysis of crump rubber epoxy composites: experimental and empirical perspective	Journal of Brazillian Science of Mechanical Science and Engineering	<a href="https://doi.org/10.1007/s40430-023-04033-z">https://doi.org/10.1007/s40430-023-04033-z</a>
		Publication	Leverage of weave pattern and composite thickness on dynamic mechanical analysis, water absorption and flammability response of bamboo fabric/epoxy composites	HELIYON	<a href="https://doi.org/10.1016/j.heliyon.2023.e12950">https://doi.org/10.1016/j.heliyon.2023.e12950</a>
2	Prof. Rayappa S Mahale	Publication	Flammability studies of Natural Fiber Reinforced Polymer Composites fabricated by Additive Manufacturing Technology –A Review	Journal of The Institution of Engineers (India): Series D	<a href="https://doi.org/10.1007/s40033-023-00509-3">https://doi.org/10.1007/s40033-023-00509-3</a>
		Publication	Studies on Dielectric, Super-Capacitive and Photoluminescence Properties of Metal Organic Frameworks Subjected to Varying Temperature and Frequencies	Nano Hybrids and Composites	<a href="https://doi.org/10.4028/p-si6964">https://doi.org/10.4028/p-si6964</a>
		Publication	Electrochemical Determination of Ascorbic Acid by Mechanically Alloyed Super Duplex Stainless Steel Powders	Metals	<a href="https://doi.org/10.3390/met13081430">https://doi.org/10.3390/met13081430</a>
		Publication	Dielectric and Mechanical Properties of Silicone Rubber Composites Reinforced by	Silicon	<a href="https://doi.org/10.1007/s12633-022-02210-8">https://doi.org/10.1007/s12633-022-02210-8</a>

			Conductive Carbon Black and Neopentyl Glycol Diglycidyl Ether		
		Book Chapter	Biological and biomedical applications of fluoropolymer nanocomposites	Advanced Fluoropolymer Nanocomposites Fabrication, Processing, Characterization and Applications	<a href="https://doi.org/10.1016/B978-0-323-95335-1.00001-3">https://doi.org/10.1016/B978-0-323-95335-1.00001-3</a>
		Publication	Electrochemical Sensor Applications of Nanoparticle Modified Carbon Paste Electrodes to Detect Various Neurotransmitters: A Review	Applied Mechanics and Materials	<a href="https://doi.org/10.4028/p-mizm85">https://doi.org/10.4028/p-mizm85</a>