

Name of the Faculty: **Dr. Md Ershad**

Designation: Assistant Professor

Department: Mechanical Engineering

No. of Publication : 27

**Journal Publication :**

Type of Journal	DOI No.	Name of the Article	Name of the Author	ISSN No.	Year of Publication
Scopus Indexed	<a href="https://doi.org/10.18311/jmmf/2023/45547">https://doi.org/10.18311/jmmf/2023/45547</a>	TEM Analysis and Insights into the Physicomechanical Characteristics of CeLa-Substituted Bio-Glass Ceramics	<b>Md Ershad</b>	0022-2755	2023
Scopus Indexed	<a href="https://doi.org/10.18311/jmmf/2023/43176">https://doi.org/10.18311/jmmf/2023/43176</a>	CoO Substituted Borate 1393B3 Glass Scaffold with Enhanced Metallurgical Performance	<b>Md Ershad</b>	0022-2755	2023
Scopus Indexed	<a href="https://doi.org/10.18311/jmmf/2023/45541">https://doi.org/10.18311/jmmf/2023/45541</a>	Examining the Performance Traits of a Rear-Supported V-Cone Flowmeter	<b>Md Ershad</b>	0022-2755	2023
Scopus Indexed	<a href="https://doi.org/10.18311/jmmf/2023/35871">https://doi.org/10.18311/jmmf/2023/35871</a>	Metallurgical Properties of CeLa Substituted Bio-Glass Ceramics	<b>Md Ershad</b>	0022-2755	2023
Scopus Indexed	<a href="https://doi.org/10.18311/jmmf/2023/36041">https://doi.org/10.18311/jmmf/2023/36041</a>	Metallurgical Behavior and Biocompatibility of Boron Trioxide on the Bioactive Glasses	<b>Md Ershad</b>	0022-2755	2023
Scopus Indexed	<a href="https://doi.org/10.18311/jmmf/2023/43787">https://doi.org/10.18311/jmmf/2023/43787</a>	Experimental Investigation of Welding Parameters On Mild Steel Using Metal Active Gas Welding. Journal of Mines, Metals and Fuels	<b>Md Ershad</b>	0022-2755	2023
Scopus Indexed	<a href="https://doi.org/10.5281/zenodo.14551719">https://doi.org/10.5281/zenodo.14551719</a>	Predicting Mosquito Repellent for Smart home system Utilizing Intelligent Machine Learning Model	<b>Md Ershad</b>	1671-1793	2024

Scopus Indexed	<a href="https://doi.org/10.5281/zenodo.14551500">https://doi.org/10.5281/zenodo.14551500</a>	Eco-friendly Ocean Power: Minimizing Environmental Impacts of Marine Energy Technologies	<b><u>Md Ershad</u></b>	1671-1793	2024
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Book Chapter Publication :

DOI No.	Name of the Article	Name of the Author	ISBN No.	Year of Publication
<a href="https://doi.org/10.1002/9781394175109.ch9">https://doi.org/10.1002/9781394175109.ch9</a>	Mechanical Behavior of Bioglass Materials for Bone Implantation. Mechanical Engineering in Biomedical Applications: Bio-3D Printing, Biofluid Mechanics, Implant Design, Biomaterials, Computational Biomechanics, Tissue Mechanics	<b><u>Md Ershad</u></b>	Print ISBN:9781394174522  Online ISBN:9781394175109 (Scopus Indexed)	2023
	“Material Classification Based on Structure and Composition” Book Title: “Elements of Innovation: A Journey into Material Science and Engineering”, Chapter No:1, pp :10-20, April-2024, [Publisher: Swami Vivekananda University, (Institutional Publisher), Kolkata, India	<b><u>Md Ershad</u></b>	978-81-964878-5-0	2024

	Mechanical properties of materials with biomedical applications” Book Title: “Recent Research Advancements in Mechanical Engineering: Material, Design, and production”, Chapter No:2, pp :26-34, December-2023, [Publisher: Swami Vivekananda University, (Institutional Publisher), Kolkata, India,	<b><u>Md Ershad</u></b>	978-81-964878-0-5	2024
<a href="https://doi.org/10.62906/bs.book.210">https://doi.org/10.62906/bs.book.210</a>	Mechanical Performance and Biocompatibility of Hydroxyapatite-Gadolinium Oxide (HA-Gd <sub>2</sub> O <sub>3</sub> ) Composites for Bone Regeneration Applications, Computational Techniques in Modern Engineering Research	<b><u>Md Ershad</u></b>	978-93-6233-525-8	2024
<a href="https://doi.org/10.62906/bs.book.209">https://doi.org/10.62906/bs.book.209</a>	Synthesis and Characterization of Cerium Substituted HA Composite, Research Methodologies in Engineering and Applied Science	<b><u>Md Ershad</u></b>	978-93-6233-705-4	2024
<a href="https://doi.org/10.62906/bs.book.209">https://doi.org/10.62906/bs.book.209</a>	Mechanical Reinforcement and Biocompatibility Evaluation of HA-Gd <sub>2</sub> O <sub>3</sub> Composite for Orthopedic and Dental Applications, Research Methodologies in Engineering and	<b><u>Md Ershad</u></b>	978-93-6233-705-4	2024

	Applied Science			
<a href="https://doi.org/10.62778/int.book.478">https://doi.org/10.62778/int.book.478</a>	Enhancing Mechanical Properties and Biocompatibility of Hydroxyapatite Composites through Gd <sub>2</sub> O <sub>3</sub> Doping: A Study for Biomedical Implants, Interdisciplinary Research in Science and Engineering	<b><u>Md Ershad</u></b>	978-93-5834-191-1	2024
<a href="https://doi.org/10.62906/bs.book.209">https://doi.org/10.62906/bs.book.209</a>	Impact of Lanthanum Oxide on the Physical and Mechanical Characteristics of Calcium Fluoroaluminosilicate Glass Systems	<b><u>Md Ershad</u></b>	978-93-6233-705-4	2024
<a href="https://doi.org/10.62906/bs.book.209">https://doi.org/10.62906/bs.book.209</a>	Industrial Cooling Towers: Direct Contact Heat Exchangers for Water Temperature Reduction	<b><u>Md Ershad</u></b>	978-93-6233-705-4	2024
<a href="https://doi.org/10.62906/bs.book.209">https://doi.org/10.62906/bs.book.209</a>	Synthesis and Characterization of Cerium Substituted HA Composite	<b><u>Md Ershad</u></b>	978-93-6233-705-4	2024
<a href="https://doi.org/10.62906/bs.book.209">https://doi.org/10.62906/bs.book.209</a>	Investigation of Thermal and Mechanical Properties of a Biocomposite Comprising Natural Rubber and 45S5 Bioglass Particles	<b><u>Md Ershad</u></b>	978-93-6233-705-4	2024
<a href="http://surl.li/wxrvvj">http://surl.li/wxrvvj</a>	An Investigation into the Performance Characteristics of a Rear-Supported V-Cone Flowmeter	<b><u>Md Ershad</u></b>	978-10-3298-036-2 (Scopus Indexed)	2024
<a href="https://doi.org/10.62906/bs.book.209">https://doi.org/10.62906/bs.book.209</a>	Investigating the Hydrophobicity and High Temperature Mechanical Properties of Hard Nanocomposite Al-Si-N Thin Films	<b><u>Md Ershad</u></b>	978-93-6233-705-4	2024

Other Publication Details (if any)

❖ **Patents (Published):**

- [1]. **Md Ershad et.al** “Patent on “Fabrication and design of the 360-degree rotating vehicle”, **Indian Patent**, Application no **202331022706A**, Dated 07/04/2023.
- [2]. **Md Ershad et.al** “Plastic- Based Composite for Concrete Production”, **Indian Patent**, Application no **202331055315A**, Dated 08/09/2023.
- [3]. **Md Ershad et.al** “Fabrication and design of the Solar”, **Indian Patent**, Application no **202331057258A**, Dated 29/09/2023.
- [4]. **Md Ershad et.al** “Automatic Electromagnetic Brake Using Ferromagnetic Material Scrap”, **Indian Patent**, Application no **202331057359A**, Dated 13/10/2023.
- [5]. **Md Ershad et.al** “Intelligent Autonomous Wheel-Driven Sprayer System for Precision Agriculture”, **Indian Patent**, Application no **202431028477A**, Dated 19/04/2024.
- [6]. **Md Ershad et.al** “Transformation of Dairy By-Product into Sustainable Biodegradable Material”, **Indian Patent**, Application no **202431028476A**, Dated 19/04/2024.