Malnad College of Engineering, Hassan

(An Autonomous Institute, Affiliated to V.T.U, Belagavi

Faculty Biodata

GENERAL INFORMATION AND ACADEMIC BACKGROUND

PART-A

1.	Name	Dr. Sharath B. N
2.	Qualification	B.E., M. Tech (Univ. Medalist), Ph. D., Postdoc [IISc]
3.	Date of joining the service at MCE	**21-08-2015**
4.	Department	**Mechanical Engineering**
5.	Current Designation & Experience in MCE	Associate Professor (**09-05-2025 to Till Date)** **Experience (10.5 years)** **2015 – Till Date,** **Assistant Professor (21-08-2015 to 08-05-2025)** **Malnad College of Engineering, Hassan,** **Karnataka, India.**
6.	**Teaching Experience:** U.G. (in Years)	**10.5 years**

Research Experience (in Years)

7.	**a) Total Number of years** **b) Years spent in Ph.D.** **c) Years of Guiding Ph.D. / M. Phil.** **d) Total No. of papers Published in** i. International Journals **e) Total No. of Conferences/Seminar/Workshop attended**	**10 years** **05** **01** **51** **34**
8.	**Awards /Prizes/ Honor's / Recognitions**	II Rank in **M. Tech** [Production Engineering & Systems Technology] in **Visvesvaraya Technological University Belagavi**. (State Technological University, Govt. of Karnataka).

		Postdoctoral Fellow **2023 to till date** **Department of Aerospace Engineering,** **Indian Institute of Science** (**IISc**), Bengaluru **Editorial Board Member** **1. Scientific Reports -Nature Portfolio, a division of Springer Nature Ltd. ISSN 2045-2322 [Q1]** **https://www.nature.com/srep/** **2. Discover Mechanical Engineering-Springer**, Electronic **ISSN** 2731-6564 **[Q2]** https://link.springer.com/journal/44245/editorial-board **3. Discover Materials- Springer-** Electronic **ISSN** 2730-7727 **[Q1]** https://link.springer.com/journal/43939 4. **Advances in Materials** (AM). ISSN Print: 2327-2503; ISSN Online: 2327-252X. https://www.sciencepg.com/j/am **Review Board Member** **1. PriMera Scientific Engineering** (PSEN) (ISSN: 2834-2550) https://primerascientific.com/psen/editorialboard 2. **Medicon Engineering Themes** (ISSN: 2834-7218). Medicon Engineering Themes (MCET) is a multidisciplinary International, double blinded peer reviewed open access Journal with 0.868 ISI impact factor. **https://themedicon.com/engineeringthemes-reviewer-board** **3. International Journal of Novel Research and Development**, (ISSN: 2456-4184). Scholarly open access journals, Peer-reviewed, and Refereed Journals, Impact factor 8.76. Member ID: 111844

		Potential Reviewer in journals 1. Journal of Asian Ceramic Societies **-Tylor & Francis online** 2. Engineering Research Express **-IOP science** 3. Silicon Journal**-Springer** 4. Biomass Conversion and Biorefinery-**Springer** 5. Journal of The Minerals, Metals & Materials Society (TMS) -**Springer** 6. Multiscale and Multidisciplinary Modeling, Experiments and Design -**Springer** 7. International Journal of Energy and Water Resources-**Springer** 8. Materials Research Express-**IOP science** 9. Journal of Manufacturing, Materials, and Mechanical Engineering. 10. Journal of The Institution of Engineers (India): Series D- **Springer** 11. Journal of Engineering Materials and Technology- **ASME** 12. Engineering Applications of Artificial Intelligence- **Elsevier** 13. Journal of Advanced Research in Applied Mechanics 14. Advanced Engineering Informatics- **Elsevier** 15. Journal of Tribology- **ASME** 16. Advanced Engineering Materials- **Wiley** 17. Discover materials- **Springer** 18. Journal of Materials Engineering and Performance- **Springer** 19. Advances in Materials and Processing Technologies- **Tylor & Francis online** 20. Ceramic international- **Elsevier**
9.	**Fields of Specialization under the Subject / Discipline**	Materials & Manufacturing Science

10.	**Orientation/Refresher Course/Summer School / Winter School/Workshopsattended:**	**06**

Book Editor- Elsevier (**Production stage**)

Book title- Metal Matrix Composites: Materials, Processing, Properties and Applications

Achievements - journals/book chapter Published- 72

International Journals with**MCE affiliation**	Book Chapters	SCIE Indexed	Scopus Indexed	Quartile of Q-Index	FDP/ NPTL	**Patents**	**Citations**
51	**21**	23	26	Q1= 07 Q2= 29 Q3=5 Q4=0	**30/1**	**04**	**831** **H- index- 17** **I10- index-23**

Patent

Dual patent: **UK and Indian design patent**
Design number**: 6348985**
Grant date**: 04-03-2024**
Design**: Sleek Non-Destructive material testing tool**

Dual patent: **Indian design patent Application No.202441053537 A**
Publication Date : **02/08/2024**
Design**: Eco-friendly venturimeter: chemically treated coir fiber reinforced bio-PLA composite via 3D printing**

Patent: **Indian design patent**
Design number**:436922-001**
Grant date**: 10/11/2024**
Design**: Auto floor cleaning and mopping device**

Patent: **Indian design patent**
Design number**:422025-001**
Grant date**: 03/07/2024**
Design**: Handy concrete thermal conductivity meter**

Membership in Technical Societies

- **International Association of Engineers (IAENG).**

Part-B

International Journals with MCE affiliation- 51

Sl. No.	Title of the paper	Name of the Journal	Published Year	Quartile of Q-Index
1.	Infrared-assisted precipitation hardening of stir-cast Al2219 alloy: Enhanced mechanical and tribological properties achieved via microstructural refinement	Infrared Physics & Technology	**2025**	**SCIE Q2**
2.	Enhanced Mechanical and Moisture Resistance in Aramid/Epoxy Composites with Aluminum and Graphite Fillers for Precision Engineering Applications.	International Journal of Precision Engineering and Manufacturing.	**2025**	**SCIE Q2**
3.	Mechanical and moisture performance of pineapple leaf fiber/carbon fiber-eggshell reinforced epoxy composites for eco-friendly applications	Journal of the Indian Academy of Wood Science	**2025**	**Scopus Index Q3**
4.	Evaluation of Dry Sliding Wear Behavior at Elevated Temperatures for Thermal Sprayed and Microwave-Fused WC-12Co Coatings with CeO_2 Modification.	Journal of Bio-and Tribo-Corrosion	**2025**	**Scopus Index Q2**
5.	Critical review on additive manufacturing based biomedical and biosensors application	Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine	**2025**	**SCIE Q2**
6.	Enhancing Mechanical and Tribological Properties of Hybrid Kenaf–Carbon Fiber Vinyl Ester Composites for Advanced Applications.	Journal of Materials Engineering and Performance	**2025**	**SCIE Q2**
7.	Carbon Nanotube-Infused Metal Matrix Composites: A Review of Recent Advances and Future Prospects for Engineering Use	Sadhana	**2025**	**SCIE Q2**
8.	Investigation on swelling behavior of gamma irradiated and cryogenically treated PALF-reinforced polymer composite	Polymer Bulletin	**2025**	**SCIE Q2**

9.	Mechanical and structural optimization of flax fiber reinforced composites through controlled gamma irradiation	I science	**2025**	**SCIE Q1**
10.	Artificial intelligence and machine learning in mechanical engineering: Current trends and future prospects.	Engineering Applications of Artificial Intelligence	**2025**	**SCIE Q1**
11.	Tribological performance and 3-D surface characterisation of age-hardened Al2090-based ceramic composites	Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications	**2025**	**SCIE Q2**
12.	Advancements in 3D Printed Hemp-PLA Composites: A Sustainable Approach for Additive Manufacturing.	Next Research	**2025**	
13.	Jeevan TP, Divya HV, Madhu P, Sharath BN, Pradeep S. Performance Evaluation of Blended Neem and Mahua Oil-Based Cutting Fluids in Machining of SS316 Stainless Steel.	Journal of Bio-and Tribo-Corrosion	**2025**	**Scopus Index Q2**
14.	Eco-Friendly Reinforcement: Enhancing Wear and Corrosion Resistance of Al7079 with Boron Nitride and Aloe Vera Powder	Journal of Bio-and Tribo-Corrosion	**2025**	**Scopus Index Q2**
15.	The Effect of Tertiary Ceramic Particle Reinforcement on the Mechanical Characteristics of Hybrid Composites Based on Al7029	Journal of Materials Engineering and Performance	**2025**	**SCIE Q2**
16.	Wear behaviour of aluminium-based hybrid composites processed by equal channel angular pressing	Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology	**2024**	**SCIE Q2**
17.	Gamma radiation-induced degradation of mechanical properties in Carbon/Kevlar hybrid epoxy composites for aerospace applications	Journal of Polymer Research	**2024**	**SCIE Q2**
18.	On enhancing the high-temperature wear behaviour of Al2090-based hybrid composites using tertiary ceramic particles	Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications	**2024**	**SCIE Q2**

19.	Effect of microwave hybrid heating on high temperature dry sliding wear behavior of Al2O3 reinforced WC–Co HVOF coating. Weld World (2024).	Welding in the world	**2024**	**SCIE Q1**
20.	Characterizing the effects of SiC and Al2O3 on the mechanical properties of Al6082 hybrid metal matrix composites: An experimental and neural network approach	Advances in Production Engineering & Management	**2024**	**SCIE Q2**
21.	Enhancing Wear Resistance, Mechanical Properties of Composite Materials through Sisal and Glass Fiber Reinforcement with Epoxy Resin and Graphite Filler.	Journal of the Indian Chemical Society.	**2024**	**SCIE Q2**
22.	Fabrication of raw and chemically treated biodegradable Luffa aegyptica fruit fiber-based hybrid epoxy composite: a mechanical and morphological investigation	Springer -Biomass Conversion and Biorefinery	**2024**	**SCIE Q2**
23.	Mechanical Characterization and Water Absorption Behavior of Waste Coconut Leaf Stalk Fiber Reinforced Hybrid Polymer Composite: Impact of Chemical Treatment.	Applied Science and Engineering Progress	**2024**	**Scopus Index Q2**
24.	Investigation on the wear characteristics of 3D printed graphene-reinforced PLA composites	Discover Materials	**2024**	**Scopus Index Q1**
25.	Advancing the Performance of Ceramic-Reinforced Aluminum Hybrid Composites: A Comprehensive Review and Future Perspectives	Applied Science and Engineering Progress	**2024**	**Scopus Index Q2**
26.	A Review on the Potential Impact of Age Hardening on Aluminium Alloys and Hybrid Composites for Engineering Applications	Progress in Engineering Science	**2024**	**Scopus Index**

27.	High Temperature Tensile Behaviour of Ceramic-Hybridized Metal Matrix Composites for Above-Room-Temperature Applications	Springer-Silicon	**2023**	**SCIE** **Q2**
28.	Evaluation of dry sliding wearbehavior of thermally sprayed and microwave post-processed TiO2reinforced tungsten carbide composite coating	Springer-Welding in the World	**2023**	**SCIE** **Q1**
29.	Artificial neural networks for predicting mechanical properties of Al2219-B4C-Gr composites with multi reinforcements	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science	**2023**	**SCIE** **Q2**
30.	Wear behaviour of hybrid (boron carbide-graphite) aluminium matrix composites under high temperature	Springer-Journal of Engineering and Applied Science	**2023**	**Scopus Index** **Q2**
31.	Experimental and artificial neural network-based slurry erosion behavior evaluation of cast iron.	Springer-International Journal on Interactive Design and Manufacturing (IJIDeM)	**2023**	**Scopus Index** **Q2**
32.	Enhancing tribological performance: A review of ceramic reinforced aluminium hybrid composites for high-temperature engineering Applications.	Elsevier-Hybrid Advances	**2023**	**Scopus** **Q2**
33.	Mechanical Characterization of B4C-Gr Al2618 Based CompositesSynthesized by Stir Casting Method.	Applied Science and Engineering Progress	**2023**	**Scopus Index** **Q2**
34.	Predictive Analysis of Slurry Erosion Behaviour in Aluminium-Based Hybrid Matrix Composites: Experimental and Machine Learning Approach.	Springer-Journal of Bio- and Tribo-Corrosion	**2023**	**Scopus Index** **Q2**

35.	Effects of tertiary ceramic additives on the micro hardness and wear characteristics of Al2618+ Si3N4- B4C-Gr hybrid composites for automotive applications.	Elsevier-Journal of Alloys and Metallurgical Systems	**2023**	**Scopus Index Q1**
36.	Conjectured hybrid power with artificial intelligence and single-axis solar tracking wind turbine	Springer-International Journal of Energy andWater Resources	**2023**	**Scopus Index Q3**
37.	Biopolymer-Based Composites: An Eco-Friendly Alternative from Agricultural Waste Biomass	Journal of Composites Science.	**2023**	**SCIE Q1**
38.	Effect of B4C/Gr on Hardness andWear Behavior of Al2618 Based Hybrid Composites through Taguchi and Artificial Neural Network Analysis.	Catalysts.	**2023**	**SCIE Q2**
39.	Characterization and Evaluation of Mechanical Properties of Al-Zn Based Hybrid Metal Matrix Composites	Applied Science and Engineering Progress	**2022**	**Scopus Index Q2**
40.	Multi Ceramic Particles Inclusion in the Aluminium Matrix and Wear Characterization through Experimental and Response Surface-Artificial Neural Networks	Materials.	**2021**	**SCIE Q2**
41.	Study On Effect of Boron Carbide, Aluminium Oxide and Graphite onDry Sliding Wear Behaviour of Aluminium Based Metal Matrix Composite at Different Temperature	Tribologia - Finnish Journal of Tribology	**2021**	**Scopus Index Q3**
42.	Study on effect of ceramics on dry sliding wear behaviour of Al-Cu-Mg based metal matrix composite at different temperature	Elsevier-Materials Today: Proceedings	**2021**	**Scopus Index**

43.	Machinability studies on boron carbideand graphite reinforced aluminium hybrid composites	Elsevier-Materials Today: Proceedings	**2021**	**Scopus Index**
44.	Investigating the adhesion strength of electrodeposited Ni-Al2O3 nano composite on Al-2618 substrate by using the scratch test technique	Elsevier-Materials Today: Proceedings	**2021**	**Scopus Index**
45.	Microstructure and Wear Behavior of Microwave Treated WC-10Co-4Cr Composite Coating on AISI 4140 Alloy Steel"	In IOP Conference Series: Materials Science and Engineering	**2021**	**Scopus Index**
46.	Evaluation of Mechanical Properties of Ceramic Reinforced Aluminium-7029 Hybrid Composite	In IOP Conference Series: Materials Science and Engineering	**2021**	**Scopus Index**
47.	Mechanical and Tribological Characteristics of Aluminium 2618 Matrix Composite Reinforced with Boron Carbide.	Bio interface Research in Applied Chemistry	**2021**	**Scopus Index** **Q3**
48.	Tribological Suitability of aluminium hybrid composite above atmospheric temperature	In IOP Conference Series: Materials Science and Engineering	**2021**	**Scopus Index**
49.	"Study on scratch behavior of Ni- Al_2O_3 coating composition on Al- 2219 substrate by electro deposited technique	Elsevier-Materials Today: Proceedings	**2021**	**Scopus Index**
50.	"Effect of Boron Carbide on wear resistance of graphite containing Al7029 Based Hybrid Composites and its Dry Sliding Wear Characterization Through Experimental, Response Surface Method and ANOVA.	Tribologia-Finnish Journal of Tribology	**2021**	**Scopus Index** **Q3**

51.	Experimental Study on Dry Sliding Wear Behaviour of Al-B_4C-Gr Metal Matrix Composite at Different Temperatures	Applied Mechanics and Materials	**2019**	

Book chapters with **MCE affiliation-** 21

Sl. No.	**Title of the Book chapter**	**Name of the Journal**	**Published Year**	**Quartile of Q-Index**
1.	Introduction to lightweight composites.	Elsevier	**2025**	**Scopus Index**
2.	Biobased polymers: Processing, properties, and engineering applications	Woodhead Publishing	**2025**	**Scopus Index**
3.	Numerical analysis of eco-friendly fibers and polymers for the sustainable environment	Woodhead Publishing	**2025**	**Scopus Index**
4.	Eco-friendly fiber and polymers for production of composites and biocomposites for the sustainable environment	Woodhead Publishing	**2025**	**Scopus Index**
5.	14 Other Advanced Applications and the Future of High Entropy Alloys	CRC Press	**2025**	**Scopus Index**
6.	Applications of High Entropy Alloys as	CRC Press	**2025**	**Scopus Index**
7.	An introduction to metal matrix composites and their applications	Elsevier	**2024**	**Scopus Index**
8.	An introduction to polymer matrix composites and their applications	Elsevier	**2024**	**Scopus Index**
9.	Prospects of synthetic fiber-reinforced polymer composites in engineering and commercial applications	Elsevier	**2024**	**Scopus Index**

10.	Consolidation of lightweight alloy powders: Overcoming the problemsduring pressing and sintering of low dense alloy powders like aluminium, magnesium, titanium, and beryllium alloys	Springer	**2024**	**Scopus Index**
11.	Energy storage applications of mechanically alloyed materials Super capacitors, battery applications	Springer	**2024**	**Scopus Index**
12.	Fabrication of inter metallic alloys	Springer	**2024**	**Scopus Index**
13.	Comparative study of mechanical alloying and other conventional powder metallurgical methods	Elsevier	**2024**	**Scopus Index**
14.	Introduction to bio implants manufacturing	CRC Press- Taylor & Francis.	**2024**	**Scopus Index**
15.	Finite element analysis of polymeric materials in day-to-day applications	Elsevier	**2024**	**Scopus Index**
16.	Unveiling the Potential of Age Hardened Aluminum Alloys: Strengthening Solutions for Engineering Challenges	Springer	**2024**	**Scopus Index**
17.	Sintering of Mechanically Alloyed Powders	IGI Global	**2024**	**Scopus Index**
18.	Comparison of Wet and Dry Milling	IGI Global	**2024**	**Scopus Index**
19.	Lightweight and Sustainable Composite Materials: Preparation, Properties and Applications	Elsevier	**2024**	**Scopus Index**
20.	Metallic lightweight materials: properties and their applications.	Elsevier	**2023**	**Scopus Index**
21.	Machinability Studies on Boron Carbide and Graphite Reinforced Al7029-Based Hybrid Composites	Springer -Lecture Notes in Mechanical Engineering	**2023**	**Scopus Index** **Q4**

1.List of Publications:

Sl. No.	Title	Name of the Journal, Vol. No., Year	ISSN/ISBN/ Number
1.	High Temperature Tensile Behaviour of Ceramic-Hybridized Metal Matrix Composites for Above-Room-Temperature Applications.	Silicon. **2023 Nov 10:1-2**.	https://doi.org/10.1007/s12633-023-02746-3 18769918, 1876990X
2.	Evaluation of dry sliding wear behavior of thermally sprayed andmicrowavepost-Processed TiO_2 reinforced tungsten carbide composite coating.	Welding in the World. **2023 Nov 9:1-3**	https://doi.org/10.1007/s40194-023-01617-0 00432288
3.	Wear behaviour of hybrid (boron carbide- graphite) aluminium matrix composites under high temperature.	Journal of Engineering and Applied Science. **2023 Dec;70(1):124**	https://doi.org/10.1186/s44147-023-00294-6. 18187803, 1816949X
4.	Artificial-neuralnetworks for predicting mechanical properties ofAl2219-B4C-Gr composites with multi reinforcements.	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science. 2023:09544062231196038	https://doi.org/10.1177/09544062231196038 20412983, 09544062
5.	Experimental and artificial neural network-based slurry erosion behavior evaluation of cast iron	International Journal on Interactive Design and Manufacturing (IJIDeM). **2023 Nov** 13:1-1	https://doi.org/10.1007/s12008-023-01618-9 1955-2505
6.	Enhancing tribological performance: A review of ceramic reinforced aluminium hybrid composites for high-temperature engineering applications.	Hybrid Advances. **2023 Oct** 1:100094	https://doi.org/10.1016/j.hybadv.2023.100094 773-207X
7.	Mechanical characterization of B_4C- Gr Al2618 based composites synthesized. by stir casting method.	Applied Science and Engineering Progress. **2023 Aug 23;16(3):6579**	https://doi.org/10.14416/j.asep.2022.12.005 26730421, 26729156
8.	Predictive Analysis ofSlurry Erosion Behaviour in Aluminium-Based Hybrid Metal Matrix Composites: Experimental and Machine Learning Approach.	Journal of Bio-and Tribo-Corrosion. 2023 Dec;9(4):70.	https://doi.org/10.1007/s40735-023-00793-2 21984220, 21984239

9.	Effects of tertiary ceramic additives on the micro hardness and wear characteristics of Al2618+ Si3N4-B4C-Gr hybrid composites for automotive applications.	Journal of Alloys and Metallurgical Systems.2023 May 31:100014.	https://doi.org/10.1016/j.jalmes.2023.100014
10.	Conjectured hybrid power with artificial intelligence and single-axis solar tracking wind turbine.	International Journal of Energy and Water Resources. **2023 Jan 24:1-7.**	https://doi.org/10.1007/s42108-023-00234-3.
11.	Biopolymer-Based Composites: An Eco-Friendly Alternative from Agricultural Waste Biomass	Journal of Composites Science**. 2023 Jun 11;7(6):242.**	https://doi.org/10.3390/jcs7060242
12.	Effect of B_4C/Gr on Hardness and Wear Behavior of Al2618 Based Hybrid Composites through Taguchi and Artificial Neural Network Analysis	Catalysts. **2022 Dec 15;12(12):1654.**	https://doi.org/10.3390/catal12121654
13.	Characterization and Evaluation of Mechanical Properties of Al-Zn Based Hybrid Metal Matrix Composites	Applied Science and Engineering Progress**. 2022 Nov 2;16(1):5804**	https://doi.org/10.14416/j.asep.2022.03.008
14.	Multi Ceramic Particles Inclusion in the Aluminium Matrix and Wear Characterization through Experimental and Response Surface-Artificial Neural Networks	Materials. **2021 Jan**;14(11):2895	https://doi.org/10.3390/ma14112895
15.	Study On Effect of Boron Carbide, Aluminium Oxide and Graphite on Dry Sliding Wear Behaviour of Aluminium Based Metal Matrix Composite at Different Temperature	Tribologia - Finnish Journal of Tribology **38 (1−2):35−46**	https://doi.org/10.30678/fjt.9993.
16.	Study on effect of ceramics on dry sliding wear behaviour of Al-Cu-Mg based metal matrix composite at different temperature	Materials Today: Proceedings. **2021**	https://doi.org/10.1016/j.matpr.2021.04.034
17.	Machinability Studies on Boron Carbide and Graphite Reinforced Al7029-Based Hybrid Composites.	In Materials, Design and Manufacturing for Sustainable Environment 2023 (pp. 511-522).	https://doi.org/10.1007/978-981-19-3053-9_38

18.	Machinability studies on boron carbide and graphite reinforced aluminium hybrid composites	Materials Today: Proceedings. **2021 Apr 23**	https://doi.org/10.1016/j.matpr.2021.04.036
19.	Investigating the adhesion strength of electrodeposited Ni- Al_2O_3 nano composite on Al-2618 substrate byusing the scratch test technique.	Materials Today: Proceedings. 2021 Dec 1	https://doi.org/10.1016/j.matpr.2021.11.336 22147853
20.	Microstructure and Wear Behavior of Microwave Treated WC-10Co-4Cr Composite Coating on AISI 4140 Alloy Steel."	Materials Science and Engineering, vol. 1189, no. 1, p. 012012. IOP Publishing, 2021	doi:10.1088/1757-899X/1189/1/012012 17578981, 1757899X
21.	Evaluation of Mechanical Properties of Ceramic Reinforced Aluminium-7029 Hybrid Composite.	Materials Science and Engineering, vol. 1189, no. 1, p. 012019. IOP Publishing, 2021	doi:10.1088/1757-899X/1189/1/012019.
22.	Mechanical and Tribological Characteristics of Aluminium 2618 Matrix Composite Reinforced with Boron Carbide	Bio interface Research in Applied Chemistry 2021. Volume 12, Issue 4, 2022, 4544 – 4556	https://doi.org/10.33263/BRIAC124.45444556
23.	Tribological Suitability of aluminium hybrid composite above atmospheric temperature.	Materials Science and Engineering, vol. 1189, no. 1, p. 012018. IOP Publishing, 2021	doi:10.1088/1757-899X/1189/1/012018.
24.	Study on scratch behavior of Ni-Al_2O_3 coating composition on Al-2219 substrate by electro deposited technique".	Materials Today: Proceedings. 2021 May 4	https://doi.org/10.1016/j.matpr.2021.04.033 22147853
25.	Effect of Boron Carbide on wear resistance of graphite containing Al7029 Based Hybrid Composites and its Dry Sliding Wear Characterization Through Experimental, Response Surface Method and ANOVA	Tribologia-Finnish Journal of Tribology 38, no. 3− 4 **(2021):** 48-60	https://doi.org/10.30678/fjt.111905
26.	Experimental Study on Dry Sliding Wear Behaviour of Al-B_4C-Gr Metal Matrix Composite at Different Temperatures	J. Applied Mechanics and Materials, 895, pp. 96-101.	https://doi.org/10.4028/www.scientific.net/AMM.895.96

27.	Advancing the Performance of Ceramic - Reinforced Aluminum Hybrid Composites: A Comprehensive Review and Future Perspectives	Applied Science and Engineering Progress	10.14416/j.asep.2023.10.001
28.	"Metallic lightweight materials: properties and their applications.	Lightweight and Sustainable Composite Materials: Preparation, Properties and Applications (2023): 47.	https://doi.org/10.1016/B978-0-323-95189-0.00003-2
29.	Lightweight and sustainable materials for aerospace applications	Lightweight and Sustainable Composite Materials: Preparation, Properties and Applications (2023): 157	https://doi.org/10.1016/B978-0-323-95189-0.00007-X

2. Responsibilities in the Department and Institute / University: (DAC, DPC, BOS, BOE etc., Institutional Governance responsibilities like, Dean, Chief warden, Warden, HOD's, School/CentreChairperson, IQAC Coordinator etc.)

Sl. No	**Responsibilities**
1.	Institutional Research Advisory Committee (**IRAC**) Member
2.	Institutional collaborations and **MOUs**
3.	Member CDC
4.	Member Anti-ragging Committee
5.	**Research Coordinator** (Mechanical engineering)
6.	Worked as **Coordinator** with the department for achieving accreditation from national board of accreditation **(NBA) & NAAC**
7.	Coordinator IEM
8.	Project Coordinator
9.	Member BOS
10.	Member BOE
11.	Faculty Advisor
12.	Mentor

3.Details of Teaching Related Activities

Sl. No.	(B. E/M.Tech)	Course Title
1.	B.E.	Elements of Mechanical Engineering
2.	B.E.	Computer Aided Engineering Drawing
3.	B.E.	Introduction to Mechanical Engineering
4.	B.E.	Engineering Drawing
5.	B.E.	Manufacturing Science-I
6.	B.E.	Physical and Mechanical Metallurgy
7.	B.E.	Kinematics of machines
8.	B.E.	Machine Drawing
9.	B.E.	Dynamics of machines
10.	B.E.	Theory of machines
11.	B.E.	Manufacturing Science-II
12.	B.E.	Operation Research
13.	B.E.	Basic Workshop
14.	B.E.	Machine Shop I/II
15.	B.E.	Fluid Mechanics Laboratory
16.	B.E.	Material Testing Laboratory
17.	B.E.	Measurement and Metrology Laboratory
18.	B.E.	Foundry and Forging Laboratory
19.	B.E.	CAD CAM Laboratory
20.	B.E.	Energy Conversion Laboratory
21.	B.E.	CAM and CAEA Laboratory
22.	B.E.	Design Laboratory
23.	B.E.	HP Laboratory
24.	B.E.	HT Laboratory

Professional Development Activities		
1.	Membership in profession related committees at state and national level a) At International b) At national level: c) At state :	01
2.	Participation in subject associations, conferences, seminars without paper presentation	-
3.	Participation in short term training courses less than one week duration in educational technology, curriculum development, professional development, Examination reforms, Institutional governance	04
4.	Membership/participation in State/Central Bodies/Committees on Education, Research and National Development	01
5.	Publication of articles in newspapers, magazines, or other publications (not covered in category 3); radio talks; television programmes	-
6.	Invited Expert Talks	-

PART-C

RESEARCH, PUBLICATIONS AND ACADEMIC CONTRIBUTIONS

1.Published Papers in Journals

Sl. No.	Title	Journal with Vol. Year & Page No.	ISSN/ISBN/ Number	Whether peer reviewed . Impact factor, if any	No. of Co-authors	Whether you are the main author or Guide /mentor
1.	High Temperature Tensile Behaviour of Ceramic-Hybridized Metal MatrixComposites for Above-Room-Temperature Applications.	Silicon. **2023 Nov 10:1-2**.	https://doi.org/10.1007/s12633-023-02746-3 18769918, 1876	**[SCIE] [Q2]**	06	Main Author

			990X			
2.	Evaluation of dry slidingwear behavior of thermally sprayed andmicrowave post-Processed TiO_2 reinforced tungsten carbide composite coating.	Welding in the World.**2023 Nov 9:1-3**	https://doi.org/10.1007/s40194-023-01617-0 00432288	**[SCIE] [Q2]**	04	Co Author
3.	Wear behaviour of hybrid (boron carbide- graphite) aluminium matrix composites underhigh temperature.	Journal of Engineering and Applied Science. **2023 Dec;70(1):124**	https://doi.org/10.1186/s44147-023-00294-6. 18187803, 1816949X	**[Scopus Index] [Q4]**	06	Main Author
4.	Artificial-neural networks for predicting mechanical properties ofAl2219-B4C-Gr composites with multi reinforcements.	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science. 2023:0954406223 1196038	https://doi.org/10.1177/09544062231196038 20412983, 09544062	**[SCIE] [Q2]**	06	Main Author
5.	Experimental and artificial neural network-based slurry erosion behavior evaluation of cast iron	International Journal on Interactive Design and Manufacturing (IJIDeM). **2023 Nov** 13:1-1	https://doi.org/10.1007/s12008-023-01618-9 1955-2505	**[Scopus Index] [Q2]**	06	Co Author
6.	Enhancing tribological performance: A review of ceramic reinforced aluminium hybrid composites for high-temperature engineering applications.	Hybrid Advances. **2023 Oct** 1:100094	https://doi.org/10.1016/j.hybadv.2023.100094 773-207X		03	Main Author
7.	Mechanical characterization of B_4C- Gr Al2618 based composites synthesized. by stir casting method.	Applied Science and Engineering Progress. **2023 Aug 23;16(3):6579**	https://doi.org/10.14416/j.asep.2022.12.005 26730421, 26729156	**[Scopus Index] [Q2]**	06	Main Author

8.	Predictive Analysis of Slurry Erosion Behaviour in Aluminium-Based Hybrid Metal Matrix Composites: Experimental and Machine Learning Approach.	Journal of Bio- and Tribo-Corrosion. 2023 Dec;9(4):70.	https://doi.org/10.1007/s40735-023-00793-2 21984220, 21984239	**[Scopus Index]** **[Q2]**	06	Main Author
9.	Effects of tertiary ceramic additives on the micro hardness and wear characteristics of Al2618+ Si3N4-B4C-Gr hybrid composites for automotive applications.	Journal of Alloys and Metallurgical Systems.2023 May 31:100014.	https://doi.org/10.1016/j.jalmes.2023.100014		06	Main Author
10.	Conjectured hybridpower with artificial intelligence and single-axis solar tracking wind turbine.	International Journal of Energy and WaterResources. **2023 Jan 24:1-7.**	https://doi.org/10.1007/s42108-023-00234-3.		06	Main Author
11.	Biopolymer-Based Composites: An Eco-Friendly Alternative from Agricultural Waste Biomass	Journal of Composites Science**. 2023 Jun 11;7(6):242.**	https://doi.org/10.3390/jcs7060242	**[SCIE]** **[Q2]**	06	Main Author
12.	Effect of B_4C/Gr on Hardness and Wear Behavior of Al2618 Based Hybrid Composites through Taguchi and Artificial Neural Network Analysis	Catalysts. **2022 Dec 15;12(12):1654.**	https://doi.org/10.3390/catal12121654	**[SCIE]** **[Q2]**	06	Main Author
13.	Characterization and Evaluation of Mechanical Properties of Al-Zn Based Hybrid Metal Matrix Composites	Applied Science and Engineering Progress**. 2022 Nov 2;16(1):5804**	https://doi.org/10.14416/j.asep.2022.03.008	**[Scopus Index]** **[Q2]**	06	Main Author
14.	Multi Ceramic Particles Inclusion in the Aluminium Matrix and Wear Characterization through Experimental and Response Surface-Artificial Neural Networks	Materials. **2021 Jan**;14(11):2895	https://doi.org/10.3390/ma14112895	**[SCIE]** **[Q2]**	06	Main Author
15.	Study On Effect of Boron Carbide, Aluminium Oxide and Graphite on Dry Sliding Wear Behaviour of Aluminium Based Metal	Tribologia - Finnish Journal of Tribology **38 (1–2):35–46**	https://doi.org/10.30678/fjt.9993.	**[Scopus Index]** **[Q2]**	06	Main Author

	Matrix Composite at Different Temperature					
16.	Study on effect of ceramics on dry sliding wear behaviour of Al-Cu-Mg based metal matrix composite at different temperature	Materials Today: Proceedings. **2021**	https://doi.org/10.1016/j.matpr.2021.04.034	**[Scopus Index] [Q2]**	06	Main Author
17.	Machinability Studies on Boron Carbide and Graphite Reinforced Al7029-Based Hybrid Composites.	In Materials, Design and Manufacturing for Sustainable Environment 2023 (pp. 511-522).	https://doi.org/10.1007/978-981-19-3053-9_38	**[Scopus Index] [Q2]**	06	Main Author
18.	Machinability studies on boron carbide and graphite reinforced aluminium hybrid composites	Materials Today: Proceedings. **2021 Apr 23**	https://doi.org/10.1016/j.matpr.2021.04.036	**[Scopus Index] [Q2]**	06	Main Author
19.	Investigating the adhesion strength of electrodeposited Ni-Al_2O_3 nano composite on Al-2618 substrate byusing the scratch test technique.	Materials Today: Proceedings. 2021 Dec 1	https://doi.org/10.1016/j.matpr.2021.11.33622147853	**[Scopus Index] [Q2]**	06	Main Author
20.	Microstructure and Wear Behavior of MicrowaveTreated WC-10Co-4Cr Composite Coating on AISI 4140 Alloy Steel."	Materials Science and Engineering, vol. 1189, no. 1, p. 012012. IOP Publishing, 2021	doi:10.1088/1757-899X/1189/1/012012 17578981, 1757899X	**[Scopus Index]**	06	Co Author
21.	Evaluation of Mechanical Properties of Ceramic Reinforced Aluminium-7029 Hybrid Composite.	Materials Science and Engineering, vol. 1189, no. 1, p. 012019. IOP Publishing, 2021	doi:10.1088/1757-899X/1189/1/012019.	**[Scopus Index]**	06	Co Author
22.	Mechanical and Tribological Characteristics of Aluminium 2618 Matrix Composite Reinforced with Boron Carbide	Bio interface Research in Applied Chemistry 2021. Volume 12, Issue 4, 2022, 4544 – 4556	https://doi.org/10.33263/BRIAC124.45444556	**[Scopus Index] [Q2]**	04	Co Author

23.	Tribological Suitability of aluminium hybrid composite aboveatmospheric temperature.	Materials Science and Engineering, vol. 1189, no. 1, p. 012018. IOP Publishing, 2021	doi:10.1088/1757-899X/1189/1/012018.	**[Scopus Index]**	04	Main Author
24.	Study on scratch behavior of Ni-Al_2O_3 coating composition onAl-2219 substrate byelectro deposited technique".	Materials Today: Proceedings. 2021 May 4	https://doi.org/10.1016/j.matpr.2021.04.03322147853	**[Scopus Index] [Q2]**	04	Co Author
25.	Effect of Boron Carbide on wear resistance of graphite containing Al7029 Based Hybrid Composites and its Dry Sliding Wear Characterization Through Experimental, Response Surface Method and ANOVA	Tribologia-Finnish Journal of Tribology 38, no. 3− 4 **(2021):** 48-60	https://doi.org/10.30678/fjt.111905	**[Scopus Index] [Q4]**	04	Co Author
26.	Experimental Study on Dry Sliding Wear Behaviour of Al-B_4C-Gr Metal Matrix Composite at Different Temperatures	J. Applied Mechanics and Materials, 895, pp. 96-101.	https://doi.org/10.4028/www.scientific.net/AMM.895.96		03	Main Author
27.	Advancing the Performance of Ceramic - Reinforced Aluminum Hybrid Composites: A Comprehensive Review and Future Perspectives	Applied Science and Engineering Progress	10.14416/j.asep.2023.10.001	**[Scopus Index] [Q2]**	06	Main Author
28.	"Metallic lightweight materials: properties and their applications.	Lightweight and Sustainable Composite Materials: Preparation, Properties and Applications (2023): 47.	https://doi.org/10.1016/B978-0-323-95189-0.00003-2	**[Scopus Index]**	08	Co Author
29.	Lightweight and sustainable materials for aerospace applications	Lightweight and Sustainable Composite Materials: Preparation, Properties and Applications (2023): 157	https://doi.org/10.1016/B978-0-323-95189-0.00007-X	**[Scopus Index]**	04	Main Author

2.Training Courses, Teaching-Learning-Evaluation Technology Programs, Faculty development Programmes

Sl. No.	Title	Duration	Venue
1.	Refresher Course on **"Current Trends in Metal Additive Manufacturing"**	07th July to 8th July **2025.** (02 Weeks)	Malaviya Mission Teacher Training Centre, **IIT(ISM) Dhanbad, Jharkhand**
2.	Faculty Development Programme on "**3D Printing and design"**	17-Mar-2025 To 31-Mar-**2025** (02 Weeks)	Skilldzire in collaboration with AICTE
3.	International Online Faculty **Development Program on "Advanced Materials for Defence and Aerospace Applications"**	27th January to 01st February, 2025	Ballari Institute of Technology & Management, Ballari, Karnataka
4.	Faculty Development Program on **Next-Gen Data Science: Deep Learning, NLP and Responsible AI**	16/06/2025 to 20/06/**2025** (02 Weeks)	Department of CSE, CMR Institute of Technology,
5.	Industrial / Professional Training Programme on **" All types of Heavy-Duty Milling, Ferrous & Non-Ferrous Castings"**	16-08-2024 to 30-08- 2024 (02 Weeks)	Andrahalli Main Road, Peenya 2nd Stage, Bangalore, Karnataka
6.	Faculty Development Programme on **"Engineering Pedagogy**	15th May to 26th May 2023 (02 Weeks)	National Institute of Technical Teachers' Training and Research (NITTTR) Kolkata
7.	Refresher course on **Advanced Pedagogy"**	24th May to 4th May 2022 (02 Weeks)	National Institute of Technical Teachers' Training and Research (NITTTR) Kolkata
8.	FEEL Teacher	June 6th to 11th2016 (02 Weeks)	MCE, Hassan,Karnataka

Online Certification Courses (SWAYAM/NPTEL/MOOC's etc..)

Sl. No.	Title	Duration	Venue
1.	Educational Leadership	Jul-Sep 2019 (8 Weeks)	IIT Kharagpur

1. Papers presented in Conferences, Seminars, Workshops, Symposia

Sl. No.	Title	Title of Conference/ Seminar etc.	Dates of the Event	Organized by	Whether International/ National/State/ Regional/University/College Level
1.	Microstructure and Wear Behavior of Microwave Treated WC-10Co-4Cr Composite Coating on AISI 4140 Alloy Steel."	Materials Science and Engineering, IOP Publishing,	2021	Dept. of Mech. Engg. MCE Hassan	International
2.	Tribological Suitability of aluminium hybrid composite above atmospheric temperature.	Materials Science and Engineering, IOP Publishing,	2021	Dept. of Mech. Engg. MCE Hassan	International
3.	Evaluation of Mechanical Properties of Ceramic Reinforced Aluminium-7029 Hybrid Composite.	Materials Science and Engineering, IOP Publishing,	2021	Dept. of Mech. Engg. MCE Hassan	International
4.	Study on scratch behavior of Ni-Al_2O_3 coating composition on Al-2219 substrate by electro deposited technique".	Materials Today: Proceedings.	2021 May 4	VIT Tamil Nadu	International
5.	Investigating the adhesion strength of electrodeposited Ni-Al_2O_3 nano composite on Al-2618 substrate by using the scratch test technique.	Materials Today: Proceedings.	2021 Dec 1	NMIT Bengaluru	International

FDP/Webinar/Technical Talk Organized

1. Organizing Technical talk on **"Staying within the Core"** in association with The Institution of Engineers (India) Mysore Local Center, Mysore. 13th December 2025. Organized by Department of Mechanical Engineering at Malnad College of Engineering, Hassan.
2. Organizing Technical talk on **"Career Opportunities and Key Insights in the Oil and Gas Industry"** in association with The Institution of Engineers (India) Mysore Local Center, Mysore. 8th March 2025. Organized by Department of Mechanical Engineering at Malnad College of Engineering, Hassan.
3. Organizing Technical talk on **"Career Building Opportunities in Mechanical Engineering"** in association with The Institution of Engineers (India) Mysore Local Center, Mysore. 4th January 2024. Organized by Department of Mechanical Engineering at Malnad College of Engineering, Hassan.

4. Organizing Webinar on **"Exploring Career Opportunities in Mechanical Engineering"** in association with The Institution of Engineers (India) Mysore Local Center, Mysore. 16th December 2023. Organized by Department of Mechanical Engineering at Malnad College of Engineering, Hassan.
5. Organizing Webinar on **"Solid Works Showdown"** in association with The Institution of Engineers (India) Mysore Local Center, Mysore. 21st of December 2023. Organized by Department of Mechanical Engineering at Malnad College of Engineering, Hassan.
6. Organizing Webinar on **"ANSA is an advanced multidisciplinary CAE pre- processing tool."** in association with The Institution of Engineers (India) Mysore Local Center, Mysore. 29th May 2023. Organized by Department of Mechanical Engineering at Malnad College of Engineering, Hassan.
7. Organizing Technical talk on **"Exam Stress, Fear & Related Causes"** in association with The Institution of Engineers (India) Mysore Local Center, Mysore. 26th Nov 2022. Organized by Department of Mechanical Engineering at Malnad College of Engineering, Hassan.
8. Organizing Two Day Faculty Development Program on **"Geometric Dimensioning and Tolerancing" 28th September 2022**. Organized by Department of Mechanical Engineering at Malnad College of Engineering, Hassan.
9. Organizing Technical talk on **"Recent developments in industrial and process automation"** in association with The Institution of Engineers (India) Mysore Local Center, Mysore. 16th June 2022 Organized by Department of Mechanical Engineering at Malnad College of Engineering, Hassan.
10. Organizing Technical talk on **"Digital Disruption"** in association with The Institution of Engineers (India) Mysore Local Center, Mysore. 11th June 2022. Organized by Department of Mechanical Engineering at Malnad College of Engineering, Hassan.
11. Organizing Technical talk on **"Exam Stress & Ways to Manage it"** in association with The Institution of Engineers (India) Mysore Local Center, Mysore. 17th Jan 2021. Organized by Department of Mechanical Engineering at Malnad College of Engineering, Hassan.
12. Organizing One Day Faculty Development Program on **"Product Development and manufacturing"** in association with The Institution of Engineers (India) Mysore Local Center, Mysore. 16th June 2021. Organized by Department of Mechanical Engineering at Malnad College of Engineering, Hassan.