



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	BE., 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	Assistant Professor (9.8 Years in MCE)
6.	Teaching Experience: P.G. (in Years) : U.G. (in Years) :	9.8
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 ii. National Journals iii. Conference Proceedings e) Total No. of Conferences/Seminar/Workshop Attended i. International ii. National iii. State Level	08 Years 05 Years Nil 43 43 Nil 03 30 03 Nil Nil
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 Department of Aerospace Engineering, Indian Institute of Science (IISc), Bengaluru

9.	Fields of Specialization under the Subject / Discipline	Materials & Manufacturing Science
10.	Orientation/Refresher Course/Summer School / Winter School/Workshops attended:	04

Book Editor- Elsevier (on going-**2025**)

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

Achievements - journals/book chapter Published- 58

International Journals with MCE affiliation	Book Chapters	SCIE Indexed	Scopus Indexed	Quartile of Q-Index	FDP/NPTL	Patents	
						Granted	Applied
43	15	18	22	Q1= 02 Q2= 25 Q3= 1 Q4= 3	30/1	03	01

Journals / book chapter to be Published (under review)-10+2=12

International Journals with MCE affiliation	Book Chapters	SCIE Indexed	Scopus Indexed	Quartile of Q-Index	Total Citations = 538
					H- index- 14 I10- index- 19
10	02	6	3	Q2= 6 Q4= 7	

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**

Applied patent:

- **Indian patent-Handy concrete thermal conductivity meter**

Editorial Board Member

- **Scientific Reports -Nature Portfolio, a division of Springer Nature Ltd. ISSN 2045-2322**
<https://www.nature.com/srep/>
- **Discover Mechanical Engineering-Springer, Electronic ISSN 2731-6564**
<https://link.springer.com/journal/44245/editorial-board>
- **Discover Materials- Springer- Electronic ISSN 2730-7727**
<https://link.springer.com/journal/43939>
- **Advances in Materials (AM). ISSN Print: 2327-2503; ISSN Online: 2327-252X.**
<https://www.sciencepg.com/j/am>

Review Board Member

- **PriMera Scientific Engineering (PSEN) (ISSN: 2834-2550)**
<https://primerascientific.com/psen/editorialboard>
- **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>
- **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**

Reviewer for Journals

- Reviewer in Journal of Asian Ceramic Societies-**Tylor & Francis online**
- Reviewer in Surface Topography: Metrology and Properties -**IOP science**
- Reviewer in Engineering Research Express-**IOP science**
- Reviewer in Silicon Journal-**Springer**
- Reviewer in Biomass Conversion and Biorefinery-**Springer**
- Reviewer in The Journal of The Minerals, Metals & Materials Society (TMS)
-Springer
- Reviewer in Multiscale and Multidisciplinary Modeling, Experiments and Design-**Springer**
- Reviewer in International Journal of Energy and Water Resources-**Springer**
- Reviewer in Materials Research Express-**IOP science**
- Reviewer in -**Journal of Manufacturing, Materials, and Mechanical Engineering.**
 - Reviewer in -Journal of The Institution of Engineers (India): Series D-**Springer**
 - Reviewer in - Journal of Engineering Materials and Technology-**ASME**
 - Reviewer in - **Engineering Applications of Artificial Intelligence**
 - Reviewer in - **Journal of Advanced Research in Applied Mechanics**
 - Reviewer in - **Advanced Engineering Informatics**
 - Reviewer in - Journal of Tribology- **ASME**
 - Reviewer in -**Advanced Engineering Materials**

Membership in Technical Societies

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

PART-B

International Journals with MCE affiliation- 43

Sl. No.	Title of the paper	Name of the Journal	Published Year	Quartile of Q-Index
1.	Artificial intelligence and machine learning in mechanical engineering: Current trends and future prospects.	Engineering Applications of Artificial Intelligence	2025	SCIE Q1
2.	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
3.	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
4.	The Effect of Tertiary Ceramic Particle Reinforcement on the Mechanical Characteristics of Hybrid Composites Based on Al7029	Journal of Materials Engineering and Performance	2024	SCIE Q2
5.	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
6.	Gamma radiation-induced degradation of mechanical properties in Carbon/Kevlar hybrid epoxy composites for aerospace applications	Journal of Polymer Research	2024	SCIE Q2
7.	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

8.	Effect of microwave hybrid heating on high temperature dry sliding wear behavior of Al ₂ O ₃ reinforced WC–Co HVOF coating. Weld World (2024).	Welding in the world	2024	SCIE Q2
9.	Characterizing the effects of SiC and Al ₂ O ₃ on the mechanical properties of Al6082 hybrid metal matrix composites: An experimental and neural network approach	Advances in Production Engineering & Management	2024	SCIE Q2
10.	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
11.	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
12.	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
13.	Investigation on the wear characteristics of 3D printed graphene-reinforced PLA composites	Discover Materials	2024	Scopus Index
14.	Advancing the Performance of Ceramic-Reinforced Aluminum Hybrid Composites: A Comprehensive Review and Future Perspectives	Applied Science and Engineering Progress	2024	Scopus Index Q2
15.	A Review on the Potential Impact of Age Hardening on Aluminium Alloys and Hybrid Composites for Engineering Applications	Progress in Engineering Science	2024	

16.	High Temperature Tensile Behaviour of Ceramic-Hybridized Metal Matrix Composites for Above-Room-Temperature Applications	Springer-Silicon	2023	SCIE Q2
17.	Evaluation of dry sliding wearbehavior of thermally sprayed and microwave post-processed TiO ₂ reinforced tungsten carbide composite coating	Springer-Welding in theWorld	2023	SCIE Q2
18.	Artificial neural networks for predicting mechanical properties of Al ₂₂ 19-B ₄ C-Gr composites with multi reinforcements	Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science	2023	Scopus Index Q2
19.	Wear behaviour of hybrid (boron carbide-graphite) aluminium matrix composites under high temperature	Springer-Journal ofEngineering and Applied Science	2023	Scopus Index
20.	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
21.	Enhancing tribological performance: A review of ceramic reinforced aluminium hybrid composites for high-temperature engineering applications	Elsevier-Hybrid Advances	2023	DOA
22.	Mechanical Characterization of B ₄ C-Gr Al ₂ 618 Based CompositesSynthesized by Stir Casting Method.	Applied Science and Engineering Progress	2023	Scopus Index Q2
23.	Predictive Analysis of Slurry Erosion Behaviour in Aluminium-Based Hybrid Metal Matrix Composites: Experimental and Machine Learning Approach.	Springer-Journal of Bio-and Tribo-Corrosion	2023	Scopus Index Q2

24.	Effects of tertiary ceramic additives on the micro hardness and wear characteristics of Al ₂ O ₃ + Si ₃ N ₄ -B ₄ C-Gr hybrid composites for automotive applications.	Elsevier-Journal of Alloys and Metallurgical Systems	2023	Scopus Index
25.	Conjectured hybrid power with artificial intelligence and single-axis solar tracking wind turbine	Springer-International Journal of Energy and Water Resources	2023	Scopus Index
26.	Biopolymer-Based Composites: An Eco-Friendly Alternative from Agricultural Waste Biomass	Journal of CompositesScience.	2023	SCIE Q2
27.	Effect of B ₄ C/Gr on Hardness and Wear Behavior of Al ₂ O ₃ Based Hybrid Composites through Taguchi and Artificial Neural Network Analysis.	Catalysts.	2023	SCIE Q2
28.	Characterization and Evaluation of Mechanical Properties of Al-Zn Based Hybrid Metal Matrix Composites	Applied Science and Engineering Progress	2022	Scopus Index Q2
29.	Multi Ceramic Particles Inclusion in the Aluminium Matrix and Wear Characterization through Experimental and Response Surface-Artificial Neural Networks	Materials.	2021	SCIE Q2
30.	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	2021	Scopus Index Q4
31.	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

32.	Machinability studies on boron carbide and graphite reinforced aluminium hybrid composites	Elsevier-Materials Today: Proceedings	2021	Scopus Index
33.	Investigating the adhesion strength of electrodeposited Ni-Al ₂ O ₃ nano composite on Al-2618 substrate by using the scratch test technique	Elsevier-Materials Today: Proceedings	2021	Scopus Index
34.	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
35.	Evaluation of Mechanical Properties of Ceramic Reinforced Aluminium-7029 Hybrid Composite	In IOP Conference Series: Materials Science and Engineering	2021	Scopus Index
36.	Mechanical and Tribological Characteristics of Aluminium 2618 Matrix Composite Reinforced with Boron Carbide.	Bio interface Research in Applied Chemistry	2021	Scopus Index Q3
37.	Tribological Suitability of aluminium hybrid composite above atmospheric temperature	In IOP Conference Series: Materials Science and Engineering	2021	Scopus Index
38.	“Study on scratch behavior of Ni-Al ₂ O ₃ coating composition on Al- 2219 substrate by electro deposited technique	Elsevier-Materials Today: Proceedings	2021	Scopus Index
39.	"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 Q4

40.	Experimental Study on Dry Sliding Wear Behaviour of Al-B ₄ C-Gr Metal Matrix Composite at Different Temperatures	Applied Mechanics and Materials	2019	
41.	mechanical and structural optimization of flax fiber reinforced composites through controlled gamma irradiation	I science	accepted	SCIE Q1
42.	Mechanical and Tribological Properties of Kenaf-Carbon Fibre Reinforced Vinyl Ester-Based Al ₂ O ₃ Filled Composites for Automotive and Aerospace Applications	Journal of Materials Engineering and Performance	accepted	SCIE Q2
43.	Carbon Nanotube-Infused Metal Matrix Composites: A Review of Recent Advances and Future Prospects for Engineering Use	Sadhana	accepted	SCIE Q2

Book chapters with MCE affiliation- 15

Sl. No.	Title of the Book chapter	Name of the Journal	Published Year	Quartile of Q-Index
1.	An introduction to metal matrix composites and their applications	Elsevier	2024	Scopus Index
2.	An introduction to polymer matrix composites and their applications	Elsevier	2024	Scopus Index
3.	Prospects of synthetic fiber-reinforced polymer composites in engineering and commercial applications	Elsevier	2024	Scopus Index
4.	Consolidation of lightweight alloy powders: Overcoming the problems during pressing and sintering of low dense alloy powders like aluminium, magnesium, titanium, and beryllium alloys	Springer	2024	Scopus Index
5.	Energy storage applications of mechanically alloyed materials Super capacitors, battery applications	Springer	2024	Scopus Index
6.	Fabrication of inter metallic alloys	Springer	2024	Scopus Index
7.	Comparative study of mechanical alloying and other conventional powder metallurgical methods	Elsevier	2024	Scopus Index
8.	Introduction to bio implants manufacturing	CRC Press- Taylor & Francis.	2024	Scopus Index
9.	Finite element analysis of polymeric materials in day-to-day applications	Elsevier	2024	Scopus Index
10.	Unveiling the Potential of Age Hardened Aluminum Alloys: Strengthening Solutions for Engineering Challenges	Springer	2024	Scopus Index
11.	Sintering of Mechanically Alloyed Powders	IGI Global	2024	Scopus Index

12.	Comparison of Wet and Dry Milling	IGI Global	2024	Scopus Index
13.	Lightweight and Sustainable Composite Materials: Preparation, Properties and Applications	Elsevier	2024	Scopus Index
14.	Metallic lightweight materials: properties and their applications.	Elsevier	2023	Scopus Index
15.	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 ₄ C- 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 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
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 ₄ C/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 ₂ O ₃ nano composite on Al-2618 substrate by using 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 ₂ O 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 ₄ C-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/Centre Chairperson, IQAC Coordinator etc.)

Sl. No	Responsibilities
1.	AICTE Activity Coordinator
2.	Online technical activities
3.	Member CDC

4.	Member Anti-ragging Committee
5.	Coordinator IEM
6.	Contineo Question Coordinator
7.	Member BOS
8.	Member BOE
9.	Faculty Advisor
10.	Mentor
11.	Main Project Coordinator

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 Matrix Composites for Above-Room-Temperature Applications.	Silicon. 2023 Nov 10:1-2.	https://doi.org/10.1007/s12633-023-02746-3 18769918, 1876 990X	[SCIE] [Q2]	06	Main Author
2.	Evaluation of dry sliding wear behavior of thermally sprayed and microwave 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 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	[Scopus Index] [Q4]	06	Main Author
4.	Artificial-neural networks for predicting mechanical properties of Al ₂₂ Ti ₁₉ -B ₄ C-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 ₄ C- 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 ₄ C/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 Matrix Composite at Different Temperature	Tribologia - Finnish Journal of Tribology 38 (1-2):35-46	https://doi.org/10.30678/fjt.9993	[Scopus Index] [Q2]	06	Main Author
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 ₂ O ₃ nano composite on Al-2618 substrate by using 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 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	[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 ₂ O 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 ₄ C-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	https://doi.org/10.1016/B978-0-323-95189-0.00003-2	[Scopus Index]	08	Co Author

		Applications (2023): 47.				
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.	Empowering Teachers	October 24th & 25th 2013	MCE, Hassan, Karnataka
2.	Hydraulic, Pneumatic Systems in Industrial Automation	January 27th to 29th 2014	MCE, Hassan, Karnataka
3.	Analytical and Numerical Techniques in Applied Mathematics and Engineering	July 28th to August 2nd 2014	MCE, Hassan, Karnataka
4.	Essential Skills for Mechanical Engineers (ESME-2014)	September 1st to 5th 2014	MCE, Hassan, Karnataka
5.	Advances in Bio-Lubricants and cutting Fluids	December 8th to 12th 2014	MCE, Hassan, Karnataka
6.	FEEL Teacher	June 6th to 11th 2016	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 ₂ O 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 ₂ O ₃ nano composite on Al-2618 substrate by using the scratch test technique.	Materials Today: Proceedings.	2021 Dec 1	NMIT Bengaluru	International