



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., Ph.D.
3.	Date of joining the service at MCE	21-08-2015
4.	Department	Mechanical Engineering
5.	Current Designation & Experience in MCE	Assistant Professor (8.3 Years in MCE)
6.	Teaching Experience: P.G. (in Years) : U.G. (in Years) :	8.3
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	06 Years 05 Years Nil 26 26 Nil 03 10 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).
9.	Fields of Specialization under the Subject / Discipline	Materials & Manufacturing Science
10.	Orientation/Refresher Course/Summer School / Winter School/Workshops attended:	04

PART-B

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 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
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 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. 2023:09544062231196038	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 Al ₂ 618 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 B4C/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	Tribologia-Finnish Journal of Tribology 38, no. 3– 4 (2021): 48-60	https://doi.org/10.30678/fjt.111905

	Dry Sliding Wear Characterization Through Experimental, Response Surface Method and ANOVA		
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	[SCIE] [Q2]	06	Main Author

			18769918, 1876 990X			
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 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 Al ₂ 618 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.jalms.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	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 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	[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/BRIAC124.4544556	[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 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.	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