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. Pradeep D G**
2.	Qualification	**BE., M.Tech., Ph.D.**
3.	Date of joining the service at MCE	**07-09-2013**
4.	Department	**Mechanical Engineering**
5.	Current Designation & Experience in MCE	**Assistant Professor (10 Years in MCE)**
6.	**Teaching Experience:** P.G. (in Years) : U.G. (in Years) :	 **10**
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** **19** **15** **Nil** **05** **02** **02** **Nil** **Nil**
8.	**Awards /Prizes/ Honor's / Recognitions**	**-**
9.	**Fields of Specialization under the Subject / Discipline**	Manufacturing Science, Automation & Management
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.	Review on Tribological and Mechanical Behavior in HVOF Thermal-sprayed Composite Coatings.	Journal of Bio-and Tribo-Corrosion. 2022 Mar;8(1):1-9.	https://doi.org/10.1007/s40735-022-00631-x 21984220, 21984239
2.	Evaluation of High Temperature Dry Sliding Wear Behaviour of Thermal Sprayed and Microwave Fused WC12Co and CeO_2 Modified WC12Co Composite Coatings.	Applied Science and Engineering Progress, Vol. 16, No. 1, 2023, 5846.	https://doi.org/10.14416/j.asep.2022.03.007 26730421, 26729156
3.	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
4.	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
5.	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
6.	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	https://doi.org/10.1016/j.matpr.2021.11.336 22147853
7.	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.
8.	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.
9.	Machinability Studies on Boron Carbide and	In Materials, Design and Manufacturing for	https://doi.org/10.1007/978-981-19-3053-9_38

	Graphite Reinforced Al7029-Based Hybrid Composites.	Sustainable Environment 2023 (pp. 511-522).	978-981-19-3053-9.
10.	Comparative analysis of CoCrAlY coatings at high-temperature oxidation behavior using different reinforcement composition profiles.	Welding in the World. 2023 Mar;67(3):585-92.	https://doi.org/10.1007/s40194-022-01405-2 ISBN: 00432288
11.	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.
12.	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
13.	Mechanical characterization of B4C-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
14.	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. 2023:09544062231196038	https://doi.org/10.1177/09544062231196038 20412983, 09544062
15.	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
16.	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
17.	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. **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.	Exam Staff Dean
2.	Malnad Eco Club Convener
3.	Member CDC
4.	Member Anti-ragging Committee
5.	Coordinator MEA
6.	Coordinator News Letter
7.	Coordinator Placement/Higher Studies
8.	Department Placement In charge
9.	Member BOS
10.	Member BOE
11.	Faculty Advisor
12.	Mentor
13.	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.	Manufacturing Science II
4.	B.E.	Measurement Science
5.	B.E.	Project Management
6.	B.E.	Automotive Engineering
7.	B.E.	Machine Drawing
8.	B.E.	Industrial Management & Engineering Economics
9.	B.E.	Product Design and Manufacturing
10.	B.E.	Project Management (Open Elective)
11.	B.E.	Geometrical Dimensioning and Tolerance
12.	B.E.	Production Drawing
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
25.		

Professional Development Activities		
1.	Membership in profession related committees at state and national level a) At International b) At national level: c) At state :	-
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	02
4.	Membership/participation in State/Central Bodies/Committees on Education, Research and National Development	02
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 No.	Whether peer reviewed. Impact factor, if any	No. of Co-authors	Whether you are the main author or Guide / mentor
1.	Review on Tribological and Mechanical Behavior in HVOF Thermal-sprayed Composite Coatings.	Journal of Bio- and Tribo-Corrosion. 2022 Mar;8(1):1-9.	https://doi.org/10.1007/s40735-022-00631-x	Q2 SJR 2022 0.42	02	Main Author
2.	Evaluation of High Temperature Dry Sliding Wear Behaviour of Thermal Sprayed and Microwave Fused WC12Co and CeO_2 Modified WC12Co Composite Coatings.	Applied Science and Engineering Progress, Vol. 16, No. 1, 2023, 5846.	https://doi.org/10.14416/j.asep.2022.03.007	Q2 SJR 2022 0.35	02	Main Author
3.	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	-	04	Main Author
4.	Evaluation of dry sliding wear behavior of thermally sprayed and microwave post-processed TiO2 reinforced tungsten carbide composite coating.	Welding in the World. 2023 Nov 9:1-3	https://doi.org/10.1007/s40194-023-01617-0	Q2 SJR 2022 0.49	03	Main Author
5.	Study on scratch behavior of Ni-Al2O3 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	Impact Factor: 31.04	04	Main Author
6.	Investigating the adhesion strength of electrodeposited Ni-Al2O3 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	Impact Factor: 31.04	04	Main Author

7.	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.	Impact Factor: 31.04	03	Co Author
8.	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.	Impact Factor: 31.04	03	Co Author
9.	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_38 978-981-19-3053-9.	-	04	Co Author
10.	Comparative analysis of CoCrAlY coatings at high-temperature oxidation behavior using different reinforcement composition profiles.	Welding in the World. 2023 Mar;67(3):585-92.	https://doi.org/10.1007/s40194-022-01405-2 ISBN: 00432288	Q2 SJR 2022 0.49	04	Co Author
11.	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.	-	05	Co Author
12.	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	-	05	Co Author
13.	Mechanical characterization of B4C-Gr Al2618 based composites synthesized by stir casting method.	Applied Science and Engineering Progress. 2023	https://doi.org/10.144	Q2 SJR 2022	04	Co Author

		Aug 23;16(3):6579	16/j.asep.2022.12.005	0.35		
14.	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. 2023:09544062231196038	https://doi.org/10.1177/09544062231196038	Q2 SJR 2022 0.42	04	Co Author
15.	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.	-	05	Co Author
16.	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	Q2 SJR 2022 0.42	04	Co Author
17.	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	Q2 SJR 2022 0.49	05	Co 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

7.	Virtual Laboratory	February 16th 2017	MCE, Hassan, Karnataka
8.	Technology Involved in Rapid Prototyping and Reverse Engineering	February 20th 2017	MCE, Hassan, Karnataka
9.	Emerging Trends in Materials and Manufacturing Technology	February 27th to March 3rd 2017	MCE, Hassan, Karnataka
10.	Advances in Tribology and Surface Engineering	March 20th to 21st 2017	MCE, Hassan, Karnataka
11.	Research Methodology and Intellectual Property Rights	March 23rd to 25th 2017	MCE, Hassan, Karnataka
12.	Challenges in Non-Conventional Energy Sources	April 9th to 13th 2018	MCE, Hassan, Karnataka
13.	Total Quality Management	May 28th to June 1st 2018	MCE, Hassan, Karnataka
14.	Recent Trends in Automotive Technology	June 25th to 29th 2018	MCE, Hassan, Karnataka
15.	Being a Great Teacher	November 3rd to 4th 2018	MCE, Hassan
16.	Research trends in the Thermal Engineering	June 9th to 13th 2020	BITM Bellari
17.	A Paradigm Shift in Management	June 16th to 20th 2020	BITM Bellari
18.	Intellectual Property Rights and Innovations	June 23rd 27th 2020	EWIT Bengaluru
19.	Advanced Materials Technology	July 1st to 5th 2020.	MCE Hassan
20.	Trends in Energy conversion Technologies	July 6th to 11th 2020	VVCE Mysuru.
21.	Recent advances in tribology and surface engineering	Sep to Dec 2020	AICTE
22.	Creating smart and green society through advance technology of green energy- Phase I	12.10.2020 to 17.10.2020	MCE Hassan
23.	Creating smart and green society through advance technology of green energy- Phase II	10.12.2020 to 15.12.2020	MCE Hassan
24.	Automotive friction materials	17.12.2020 to 22.12.2020	SRMIST, Tamilnadu
25.	Refresher course on advanced pedagogy	13.12.2021 to 17.12.2021	NITTR. Kolkata
26.	Renewable energy for sustainable development	24.01.022 to 04.02.2022	BIGCE, Solapur
27.	Academic writing	01.03.2022 to 05.03.2022	St. Josephs Engg. College Mangaluru
28.	Applications of Geoinformatics and Remote Sensing in Engineering and Technology	19.09.2022 to 23.09.2022	BRIGCE Solapur Maharastra
29.	Advanced Tools and Technique for Best Research	26.09.2022 to 30.09.2022	RV Institute of Technology and Management Bengaluru.

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

Sl. No.	Title	Duration	Venue
1.	Educational Leadership	Jul-Sep 2019 (8 Weeks)	IIT Kharagpur
2.	Refresher Course on Teacher and Teaching in Higher Education	12-Weeks 2020	Savitribai Phule Pune University
3.	Engineering Metrology	Sep to Dec 2020 (12 Weeks)	IIT Kanpur
4.	Leadership and governance in higher education. Level 2	Dec to March 2021	Savitribai Phule Pune University
5.	Fundamentals of Automotive Systems	Jan to April 2023 (12 Weeks)	IIT Madras

3. 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