



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(in Block Letters)	Dr. RAGHAVENDRA RAO R.
2.	Qualification	B.E., M.Tech. (Thermal Power Engineering), Ph.D.
3.	Date of joining the service at MCE	25-08-2010
4.	Department	Mechanical Engineering
5.	Current Designation & Experience in MCE	Assistant Professor, 13 Years 2 months
6.	Teaching Experience: P.G. (in Years) : U.G. (in Years) :	U.G-13 Years 2 months
Research Experience (in Years)		
7.	a) Total Number of years b) Years spent in M. Phil. / 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	9 years 7 Years Nil 12 01 05 12 4 -
8.	Awards /Prizes/ Honor's / Recognitions	Nil
9.	Fields of Specialization under the Subject / Discipline	Thermal Power Engineering, Material Science, Composite Materials
10.	Orientation/Refresher Course/Summer School / Winter School/Workshops attended:	Total 29 Programmes are attended Very important one is 1 year IUCEE International Engineering Educator certification programme Spring 2020 from 01-02-2020 to 30-12-2020

PART-B

1. List of Publications:

Sl. No.	Title	Name of the Journal, Vol. No., Year	ISSN/ISBN/Number
1.	Measurement of Thermo chemical properties of some metal hydrides-Titanium (Ti), MISCH Metal (Mm) and Lanthanum (La) based alloys-A Review	Journal of Scientific Research, Vol.12 and No.1, 2015	ISSN Print- 2070-0237
2.	A review on metal hydride based hydrogen energy storage	International journal of Engineering research and advanced Technology, in Special Issue of Volume-2, Issue-1,2016	ISSN: 2454-6135
3.	Review on Exhaust gas heat recovery for I.C. Engine using Refrigeration systems	Emerging Technologies (IJET) ,2016	E-ISSN: 2249-3255.
4.	Friction Stir welding of Aluminium metal matrix composites-A review	International Journal OF Engineering Sciences &Management Research, , ICAMS: March 2017	ISSN 2349-6193
5.	Mechanical properties evaluation of friction stir welded AA6061-AA7075 alloys for different tool pin geometries.	Applied Mechanics and Materials Submitted: 2019-01-13, Vol. 895, pp 295-300 Accepted: 2019-02-22 © 2019 Trans Tech Publications Ltd, Switzerland Online: 2019-11-01	ISSN: 1662-7482
6.	Processing and Evaluation of Mechanical properties of coconut coir and Rice husk reinforced natural hybrid composites	Applied Mechanics and Materials Submitted: 2019-01-14, Vol. 895, pp 176-180 Accepted: 2019-02-22 © 2019 Trans Tech Publications Ltd, Switzerland Online: 2019-11-01	ISSN: 1662-7482
7.	Studies on Mechanical Properties of Ultra High Molecular Weight Poly Ethylene (UHMWPE)-Basalt Fiber Reinforced Hybrid Polymer Matrix Composites.	Journal of Polymer & Composites 2019; 7(3): 8–19p	ISSN: 2321-2810 (Online), ISSN: 2321-8525 (Print)
8.	Effect of Silicon Carbide on the Mechanical Properties of the Rice Husk, Corn Cob Polymer Matrix Composites	Journal of Polymer & Composites, Vol no. 08,issue 1, pp39-45, 2020	ISSN: 2321-2810 (Online), ISSN: 2321-8525 (Print)
9.	Impact of heat treatment on the mechanical performance of hot extruded Al6061-BN	Bulletin of the Polish Academy of Sciences: Technical Sciences, Vol no. 69,issue 3, pp e137014-e137014,2021	ISSN 2300-1917 (Online)

	reinforced metal matrix composites		
10.	Experimental Investigation of effect of hybridization of UHMWPE fibers on the mechanical and physical properties of Basalt fiber reinforced polymer matrix composites	IOP Conference Series: Materials Science and Engineering, Vol no. 1189, issue 1, pp012025, 2021	ISSN 1757-8981 (Print)
11.	Investigation of mechanical properties of ECAP processed AL7068 Aluminium alloy	IOP Conference Series: Materials Science and Engineering, Vol no. 1189, issue 1, pp012027, 2021	ISSN 1757-8981 (Print)
12.	Effect of processing route on grain refinement and mechanical properties in equal channel angular pressing of aluminium alloy AA7068	Journal of Mines, Metals and Fuels, Vol no. 69, issue 12A, pp01-07, 2021	Print ISSN : 0022-2755
13.	Effect of fiber orientation on the mechanical properties of unidirectional basalt fiber reinforced polymer matrix composites	Journal of Mines, Metals and Fuels, Vol no. 69, issue 12A, pp97-101, 2021	Print ISSN : 0022-2755
14.	Comparative Study of the Mechanical and Water Absorption Behaviour of Basalt Fiber Reinforced Polymer Matrix Composites with Different Epoxies as Matrix for Biomedical Applications	Advances in Materials Science and Engineering, Volume 2021, https://doi.org/10.1155/2021/3499645	ISSN online- 1687-8442
15.	Synthesis of nanostructured ternary Ti based alloy for bio-medical applications	Materials Today: Proceedings, Elsevier Vol no. 54, pp372-377, 2022, https://doi.org/10.1016/j.matpr.2021.09.429	ISSN online- 2214-7853
16.	Study on mechanical properties of AZ91 magnesium alloy	Materials Today: Proceedings, Elsevier Vol no. 54, pp291-294, 2022, https://doi.org/10.1016/j.matpr.2021.09.171	ISSN online- 2214-7853

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.	College Level Cultural Coordinator
2.	Department level- Mentoring Coordinator
3.	Department level- Student feedback/Result Analysis Coordinator
4.	Member-GRC
5.	Department level-Placement In charge

6.	Department MEA Coordinator
7.	Department level-Sports/Cultural coordinator
8.	Member-BOS
9.	Member-BOE
10.	Member-Anti ragging committee
11.	NAAC-AQAR Preparation
12.	NBA-AQAR preparation

3. Details of Teaching Related Activities

Sl. No.	Academic Year	(B. E/M.Tech)	Course Title	Activities conducted
1	2022-23	B.E.	Geometric Dimensioning and Tolerancing	Preparation of models, Quizzes
2	2022-23	B.E.	Fluid Power System	Preparation of models, Lab sessions
3	2022-23	B.E.	Finite Element Method	Problem solving using Ansys software, Quizzes
4	2021-22	B.E.	Geometric Dimensioning and Tolerancing	Preparation of models, Quizzes
5	2021-22	B.E.	Fluid Power System	Preparation of models, Lab sessions
6	2021-22	B.E.	Finite Element Method	Problem solving using Ansys software, Quizzes
7	2020-21	B.E.	Geometric Dimensioning and Tolerancing	Online classes and quizzes
8	2020-21	B.E.	Fluid Power System	Preparation of models, Lab sessions
9	2020-21	B.E.	Finite Element Method	Problem solving using Ansys software, Quizzes

Professional Development Activities		
	Membership in profession related committees at state and national level a) At International b) At national level: c) At state :	01
	Participation in subject associations, conferences, seminars without paper presentation	02
	Participation in short term training courses less than one week duration in educational technology, curriculum development, professional development, Examination reforms, Institutional governance	01
	Membership/participation in State/Central Bodies/Committees on Education, Research and National Development	-
	Publication of articles in newspapers, magazines, or other publications (not covered in category 3); radio talks; television programmes	-
	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	Measurement of Thermo chemical properties of some metal hydrides-Titanium (Ti), MISCH Metal (Mm) and Lanthanum (La) based alloys-A Review	Journal of Scientific Research, Vol.12 and No.1, 2015	ISSN Print- 2070-0237	Yes	4	Mentor

2	A review on metal hydride based hydrogen energy storage	International journal of Engineering research and advanced Technology, in Special Issue of Volume-2, Issue-1,2016	ISSN: 2454-6135	Yes	4	Mentor
3	Review on Exhaust gas heat recovery for I.C. Engine using Refrigeration systems	Emerging Technologies (IJET) ,2016	E-ISSN: 2249-3255.	Yes	4	Mentor
4	Friction Stir welding of Aluminium metal matrix composites-A review	International Journal OF Engineering Sciences &Management Research, , ICAMS: March 2017	ISSN 2349-6193	Yes, Impact factor 2.805	5	Main author
5	Mechanical properties evaluation of friction stir welded AA6061-AA7075 alloys for different tool pin geometries.	Applied Mechanics and Materials Submitted: 2019-01-13, Vol. 895, pp 295-300 Accepted: 2019-02-22 © 2019 Trans Tech Publications Ltd, Switzerland Online: 2019-11-01	ISSN: 1662-7482	Yes	3	Main author
6	Processing and Evaluation of Mechanical properties of coconut coir and Rice husk reinforced natural hybrid composites	Applied Mechanics and Materials Submitted: 2019-01-14, Vol. 895, pp 176-180 Accepted: 2019-02-22 © 2019 Trans Tech Publications Ltd, Switzerland Online: 2019-11-01	ISSN: 1662-7482	Yes	4	Contributor
7	Studies on Mechanical Properties of Ultra High Molecular Weight Poly Ethylene (UHMWPE)-Basalt Fiber Reinforced Hybrid Polymer Matrix Composites.	Journal of Polymer & Composites 2019; 7(3): 8–19p	ISSN: 2321-2810 (Online), ISSN: 2321-8525 (Print)	Yes	4	Main author
8	Effect of Silicon Carbide on the Mechanical	Journal of Polymer & Composites, Vol no. 08,issue 1,	ISSN: 2321-2810 (Online), ISSN: 2321-8525 (Print)	Yes	3	Mentor

	Properties of the Rice Husk, Corn Cob Polymer Matrix Composites	pp39-45, 2020				
9	Impact of heat treatment on the mechanical performance of hot extruded Al6061-BN reinforced metal matrix composites	Bulletin of the Polish Academy of Sciences: Technical Sciences, Vol no. 69,issue 3, pp e137014-e137014,2021	ISSN 2300-1917 (Online)	Yes	7	Contributor
10	Experimental Investigation of effect of hybridization of UHMWPE fibers on the mechanical and physical properties of Basalt fiber reinforced polymer matrix composites	IOP Conference Series: Materials Science and Engineering, Vol no. 1189,issue 1, pp012025, 2021	ISSN 1757-8981 (Print)	Yes	5	Main author
11	Investigation of mechanical properties of ECAP processed AL7068 Aluminium alloy	IOP Conference Series: Materials Science and Engineering, Vol no. 1189,issue 1, pp012027, 2021	ISSN 1757-8981 (Print)	Yes	3	Contributor
12	Effect of processing route on grain refinement and mechanical properties in equal channel angular pressing of aluminium alloy AA7068	Journal of Mines, Metals and Fuels, Vol no. 69,issue 12A, pp01-07, 2021	Print ISSN : 0022-2755	Yes	4	Contributor
13	Effect of fiber orientation on the mechanical properties of unidirectional basalt fiber reinforced polymer matrix composites	Journal of Mines, Metals and Fuels, Vol no. 69,issue 12A, pp97-101, 2021	Print ISSN : 0022-2755	Yes	4	Main author
14	Comparative Study of the Mechanical and Water Absorption Behaviour of Basalt Fiber Reinforced Polymer Matrix Composites with Different Epoxies as Matrix for Biomedical Applications	Advances in Materials Science and Engineering, Volume 2021, https://doi.org/10.1155/2021/3499645	ISSN online- 1687-8442	Yes	7	Main author
15	Synthesis of nanostructured	Materials Today: Proceedings,	ISSN online- 2214-7853	Yes	4	Contributor

	ternary Ti based alloy for bio-medical applications	Elsevier Vol no. 54, pp372-377, 2022, https://doi.org/10.1016/j.matpr.2021.09.429				
16	Study on mechanical properties of AZ91 magnesium alloy	Materials Today: Proceedings, Elsevier Vol no. 54, pp291-294, 2022, https://doi.org/10.1016/j.matpr.2021.09.171	ISSN online- 2214-7853	Yes	4	Contributor

2. Training Courses, Teaching-Learning-Evaluation Technology Programs, Faculty development Programmes **IS IT CONDUCTED OR ATTENDED**

Sl. No.	Name of Course/Summer/Winter School	Duration	Organized By	Attended/Organized
1.	Advanced Engine Technologies for Combustion & Emission Control”	1 week	IIT, Kanpur	Attended
2.	work shop titled “Recent Advances in Thermal Engineering and its Applications (RATA-13)”	1 week	MCE, Hassan	Attended
3.	work shop titled “Comprehensive Course on Solar PV System Design, Installation & Troubleshooting” conducted by CSD, India.	1 week	MCE, Hassan	Attended
4.	work shop titled “Analytical and Numerical Techniques in applied Mathematics and Engineering”	1 week	MCE, Hassan	Attended
5.	k work shop titled “Essential skills for Mechanical Engineers”	1 week	MCE, Hassan	Attended
6.	work shop titled “Advances in Bio lubricants and cutting fluids”	1 week	MCE, Hassan	Attended
7.	FDP on “Materials and processes for high temperature applications”	1 week	IIT Roorkee.	Attended
8.	Pedagogical Training Programme	1 week	MCE, Hassan	Attended
9.	FDP on” Emerging trends in Materials and Manufacturing Technology”	1 week	MCE, Hassan	Attended
10.	Work Shop on “Geometric dimensioning & tolerancing”	1 week	CMTI, Bengaluru	Attended
11.	short term course on “Advances in Welding and Materials Processing”	3 Days	PSG, Coimbatore	Attended
12.	FDP on “Advanced Manufacturing Processing	1 week	MCE, Hassan	Attended

	Techniques”			
13.	FDP on “Challenges in Non-Conventional Energy Sources”	1 week	MCE, Hassan	Attended
14.	Hands on training program for Mechanical Engineering Faculty members on Thermo Mechanical Simulator”	4 Days	IIT Roorkee	Attended
15.	FDP on “Design of Thermal systems”	1 week	MCE, Hassan	Attended
16.	FDP on “Light weight structures for Engineering applications through Composites and Topology optimization”	2 Weeks	MCE, Hassan	Attended
17.	FDP on “Digital transformation in teaching learning process”	2 Weeks	IIT, Bombay/ Swayam	Attended
18.	FDP on " Advance Material Technology"	1 week	MCE, Hassan	Attended
19.	online webinar series on" Computational fluid dynamics"	3 Days	Ramaiah University of applied sciences	Attended
20.	FDP on ""Basic concepts in Turbo machinery and its applications"	1 week	The National Institute of Engineering, Mysuru	Attended
21.	AICTE sponsored phase 1 online STTP on ""Creating smart and green Society through advanced technology of green energy"	1 week	MCE, Hassan	Attended
22.	AICTE sponsored phase 2 online STTP on ""Creating smart and green Society through advanced technology of green energy"	1 week	MCE, Hassan	Attended
23.	IUCEE International Engineering Educator certification programme Spring 2020	1 year	MCE, Hassan	Attended
24.	FDP on "Augmented reality & Virtual reality"	1 week	AISSMS College of Engineering	Attended
25.	National level FDP on "Renewable Energy for sustainable development"	1 week	Bharatratna Indira Ghandhi college of Engineering, Solapur	Attended
26.	FDP on "ICT tools for Innovative Teaching & Learning Process"	1 week	RV Institute of Technology & Management, Bengaluru	Attended
27.	National level FDP on "Academic writing"	1 week	St. Joseph Engineering College, Mangaluru	Attended

28.	National level FDP on “ Application of Geoinformatics and remote sensing in Engineering and Technology”	1 week	Bharatratna Indira Gandhi college of Engineering, Solapur	Attended
29.	National level FDP on “ Python Programming and its Applications”	1 week	Bharatratna Indira Gandhi college of Engineering, Solapur	Attended
30.	work shop titled “Recent Advances in Thermal Engineering and its Applications (RATA-13)”	1 Week	MCE, Hassan	Organized
31.	students training programme titled “Industrial Practices in Product Design”	1 Day	MCE, Hassan	Organized
32.	work shop titled “ Emerging trends in Mechanical Engineering”	2 Days	MCE, Hassan	Organized
33.	workshop on “Geometric dimensioning and Tolerancing (GD&T)”	2 Days	MCE, Hassan	Organized

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	“ Wall Temperature Analysis of Combustor for producer gas application using CFD”	Presented at Inter National conference	June 13 th 2014	NCET, Bangalore	Inter National
2	“ Numerical Analysis of Internal Combustion Engine for producer gas application with moving mesh approach using CFD”	Presented at Inter National conference	June 13 th 2014	NCET, Bangalore	Inter National
3	Design of Wall Temperature optimization of combustor for low calorific value gases application using Numerical Analysis	Presented at National conference	March 27 th & 28 th 2015	REVA Institute of Technology and Management, Bangalore	National
4	Measurement of Thermo chemical properties of some metal hydrides-Titanium (Ti), MISCH Metal (Mm) and Lanthanum (La) based alloys-A Review	Presented at National conference	March 27 th & 28 th 2015	held at Bheemanna Khandre Institute of Technology, Bhalki	National
5	A review on metal hydride based hydrogen energy storage	Presented at Inter National conference	May 29, 2016	JSS Academy of Technical Education, Bengaluru	Inter National
6	Review on Exhaust gas heat recovery for I.C. Engine using Refrigeration systems	Presented at Inter National conference	Nov 26, 2016	BKIT, Bhalki	Inter National
7	Friction Stir welding of Aluminium metal matrix composites-A review	Presented at International conference on advances in Mechanical Sciences	3 rd to 5 th March 2017	at MCE, Hassan	Inter National

		(ICAMS-2017)			
8	Mechanical properties evaluation of friction stir welded AA6061-AA7075 alloys for different tool pin geometries.	presented at International Conference on Green Trends in Mechanical Engineering Sciences (3-5 October 2018)	October 3 to 5 of 2018	Dept. of Mechanical Engg.,MCE, Hassan	Inter National
9	Mechanical Properties Evaluation of Friction Stir Welded AA6061- AA7075 Alloys for Different Tool Pin Geometries	presented at International Conference on Green Trends in Mechanical Engineering Sciences (3-5 October 2018)	October 3 to 5 of 2018	Dept. of Mechanical Engg.,MCE, Hassan	Inter National
10	Experimental Investigation of effect of hybridization of UHMWPE fibers on the mechanical and physical properties of Basalt fiber reinforced polymer matrix composites	Presented at International Conference on Trends in Mechanical Sciences (ICTMES 2020)	on 6 th & 7 th August 2020	held at MCE, Hassan	Inter National
11	Investigation of mechanical properties of ECAP processed AL7068 aluminium alloy	Presented at International Conference on Trends in Mechanical Sciences (ICTMES 2020)	6 th & 7 th August 2020	held on at MCE, Hassan	Inter National
12	Effect of processing route on grain refinement and mechanical properties in equal channel angular pressing of aluminium alloy AA7068	Presented at International Conference on Advanced Research in Mechanical, materials and manufacturing Engineering (ICAMMMME-21)	9 th & 10 th July 2021	held on at REVA University, Bengaluru	Inter National
13	Effect of fiber orientation on the mechanical properties of unidirectional basalt fiber reinforced polymer matrix composites	Presented at International Conference on Advanced Research in Mechanical, materials and manufacturing Engineering (ICAMMMME-21)	9 th & 10 th July 2021	held on at REVA University, Bengaluru	Inter National
14	Effect of addition of micro seashell powder on mechanical properties of Basalt fiber reinforced polymer matrix Composites	Presented paper at second International Conference on Advanced Trends in Mechanical Engineering & Automation Science (ATMA-2023) 2023)	from 24-26 March 2023	organized by Dept. of Mechanical Engg.,Dayanand Sagar University, Bengaluru	Inter National

Note: Do not leave any blank rows and columns. Add/Delete rows/columns appropriately.