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. PRASANNA A. A.
2.	Qualification	M.Sc., Ph. D.
3.	Date of joining the service at MCE	**26.02.2018**
4.	Department	**Physics**
5.	Current Designation & Experience in MCE	**Professor and HOD (8 Years)**
6.	**Teaching Experience:** P.G. (in Years) : U.G. (in Years) :	**29**
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. ofConferences/Seminar/Workshop Attended** i. International ii. National iii. State Level	**a) 29** **b) 04** **c) 10** **d) Total No. of papers Published in** i. International Journals:17 ii. National Journals:2 iii. Conference Proceedings:21 **e) Total No. of Conferences/Seminar/Workshop Attended** iv. International:14 v. National:8 State Level
8.	**Awards /Prizes/ Honor's / Recognitions**	1. Best poster presentation in Research Scholars Day (held on 29 Dec.2010, IIT Kharagpur). **2.** Best oral presentation in International Conference on Nanoscience, Engineering, and

		Technology (held during Nov. 28-30, 2011, Sathyabama University, Chennai, India).
9.	**Fields of Specialization under the Subject / Discipline**	**Materials Science**
10.	**Orientation/Refresher Course/Summer School / Winter School/Workshops attended:**	**Listed below**

Sl. No	Name of Course/Summer/Winter School	Place	Duration	Sponsoring Agency
01	FDP on Design Thinking and Proptotyping in AICTE IDEA lab	AICTE IDEA Lab, Malnad College of Engineering, Hassan	**21-29, Oct. 2022 (TWO WEEKS)**	AICTE
02	Elementary FDP on "Quantum and Photonics"	Online portal	**29/11/2021** to **03/12/2021 (ONE WEEK)**	ATAL
03	Faculty Development Program for 'Students Induction Program'	Online portal	**21-25, Sept. 2020 (ONE WEEK)**	AICTE
04	Electrical characterization of materials and devices	Online portal (WEBINAR)	**6 August 2020 (ONE DAY)**	Tektronix & STARCOM
05	Online Course on 'Online Teaching'	Online portal	**27 July – 21 Sept. 2020 (EIGHT WEEKS)**	IUCEE
06	Digital Transformation in Teaching Learning Process	Online portal	**6-22 April 2020 (TWO AND A HALF WEEKS)**	TEQIP-III & NPIU
07	Course on Accreditation and Outcome Based Learning	Online portal	**26 Aug – 23 Sept. 2019 (EIGHT WEEKS)**	NPTEL-SWAYAM

08	Faculty Development Program for 'Students Induction Program' for AICTE Approved institutions	Dept. of E&CE, Sri Venkateswara College of Engineering, Bengaluru.	**23-29, July 2019** **(ONE WEEK)**	AICTE
09	Short-Term Programme on Smart Grid and Smart City: Recent Trends (SmaRT-2019)	Dept. of E&EE, MCE, Hassan	**8-13, July 2019** **(ONE WEEK)**	AICTE
10	Faculty Development Program on Students Induction	VTU Belagavi	**24-26, June 2019** **(3-DAYS)**	AICTE
11	Faculty Development Programme on 'Research Opportunities and Challenges in Advance Materials and Manufacturing'	Dept. of Mech. Engg., MCE, Hassan	**17-22, Dec. 2018** **(ONE WEEK)**	TEQIP-III
12	Workshop on Outcome Based Education.	The Heritage (Organized by MCE), Hassan	**04-05, August 2018** **(2 DAYS)**	TEQIP-III
13	Interdisciplinary Faculty Development Programme on Recent Developments in Solar & Wind energy System for On/Off Grid Applications.	Dept. of E &EE, MCE, Hassan	**9-13, July, 2018** **(ONE WEEK)**	TEQIP-III
14	Workshop on New Model Curriculum	Sahyadri Engg. College, Mangalore	**19 May 2018** **(ONE DAY)**	VTU, Belagavi
15	Faculty Development Programme on Challenges in Nonconventional Energy Sources	Dept. of Automobile Engg., MCE, Hassan	**9-13 April, 2018** **(ONE WEEK)**	TEQIP-III
16	School on 'Physics with Low Temperature and High Magnetic Field'	UGC-DAE Consortium of Scientific research, University Campus, Indore (M. P.)	**14-18, March 2011** **(ONE WEEK)**	UGC-DAE
17	Short Term Course on Chemical Synthesis of Ferroic Ceramics: Understanding on the Structure–Property Correlation and Industrial Applications.	Materials Science Centre, IIT Kharagpur.	**05-16, November 2007** **(TWO WEEKS)**	AICTE

.PART-B

1. List of Publications:

Sl. No.	Year	Articles	Title of the paper
	Journal articles **(Impact Factor up to 3.7)**		
1	**2025**	Journal of Reinforced Plastics and Composites 2025, Vol. 0(0) 1–18	Effects of reinforcement percentages in AWJM of zirconia coated MWCNTs reinforced HDPE composites
2	2023	Journal of Materials Research, Online First Article, July, 2023	Superparamagnetic and spin glass characteristics with Griffiths phase in Ni50Mn30−xFexSn20−ySby (1 ≤ x ≤ 4 and 2 ≤ y ≤ 8) Heusler alloys
3	**2023**	Journal of Materials Research, Volume 38 Issue 8 April 2023 **ISSN** 2044-5326	Near Room Temperature Martensitic transition in Ductile $Ni_{50}Mn_{30-x}Fe_xSn_{20-y}Sb_y$ (1≤x≤4 and 2≤y≤8) Heusler alloys
4	**2023**	Journal of Composite Science, Vol. 7, 1 and pp.1-15, ISSN 2504-477X	Martensitic Transformation and Magnetic Properties of Ni-Mn Quinary Heusler Alloy
5	**2023**	Journal of Composite Science, Vol.7,5 and pp. 1-14, ISSN 2504-477X	Investigation on Magnetization, Magnetocalory, Magnetoresistance, and Electric Properties of Ni-Mn Based Heusler Alloy
6	**2022**	*Engineered Science,* **17**, pp. 303-308, ISSN 2576988X, 25769898	Microstructure and Mechanical Properties of Annealed Quinary Ni-Mn-Sn-Fe-In Heusler Alloy
7	**2022**	*Manufacturing Review,* 9, 4, pp. 1-5, ISSN 22654224	Vickers micro-hardness variation during change in concentration of constituent elements in $Ni_{50-x}Fe_xMn_{30}Sn_{20-y}In_y$, Heusler alloys,

8	**2021**	Journal of Physics: Conference Series, 2070, 012231, ISSN 1742-6588 (print) 1742-6596 (web)	Martensitic transformation behavior and structural characteristics of annealed Ni-Mn-Sn-Fe-In Heusler alloy
9	**2021**	Advances in Sustainability Science and Technology, Springer Nature, pp. 155, ISSN 2662-6829 ISSN 2662-6837 (electronic) ISBN 978-981-16-1118-6 ISBN 978-981-16-1119-3 (eBook)	Magnetoelastic Transition in Energy Efficient Magnetic Refrigerant $Ni_{50}Mn_{32}Sn_{18}$ Heusler Alloy
10	**2020**	International Journal of Mechanical and Production Engineering Research and Development, Vol. 10, Issue 4, 29–46, ISSN (P): 2249–6890; ISSN (E): 2249–8001	Analysis on magnetocaloric and structural properties of Heusler alloys used in magnetic refrigeration
11	2013	*Science and Technology of Advanced Materials*, Vol. 14, pp.015004(13).	Local strains, calorimetry, and magnetoresistance in adaptive martensite transition in multiple nanostrips of $Ni_{39+x}Mn_{50}Sn_{11-x}$($x\leq2$) alloys
12	2013	*Journal of Nanoscience and Nanotechnology*, Vol. 13, pp. 5351-5359.	Consecutive magnetic and magnetocaloric transitions in a Heusler $Mn_{50}Ni_{41}Sn_9$ alloy of herringbone nanostructure
13	2013	*Advanced Nanomaterials and Nanotechnology,* Springer Proceedings in Physics, 143, pp. 441-448	Herringbone nanostructure and thermal properties in martensite transition in ferromagnetic $N_{i39+x}M_{n50}S_{n11-x}$ Heusler alloys
14	2012	*Journal of Emerging Trends in Engineering and Applied Sciences*, Vol. 3, pp. 601-607	Attenuating large magneto-entropy, heat-capacity and adiabatic temperature change in Heusler $Ni_{41-x}Mn_{50}Sn_{9+x}$($x\leq1.5$) alloys

15	2011	*American Institute of Physics: Conference Proceedings*, Vol. 1447, pp. 980-981.	Giant Hall resistivity at low magnetic fields in nanocrystalline $Ni_{50}Mn_{32}Sn_{18}$ Heusler alloy
16	2011	*IEEE Xplore*, ISBN: 978-1-4673-0072-8, pp. 424-427.	Effect of crystallite size on Vickers microhardness in nanostructured Heusler $Ni_{39+x}Mn_{50}Sn_{11-x}$ ($x \leq 2$) alloys,
17	2011	*Functional Materials*, Ed. Jayakumar, S. Vaideki, K. and Balaji, R. (2011), McMillan Publishers Ltd: New Delhi. ISBN: 978-935-059-046-1, pp.195-198.	Large adiabatic temperature change in magnetoelastic transition in nanocrystallites of Heusler $Ni_{50}Mn_{32}Sn_{18}$ alloy
	Conference presentations		
1	2012	99th Indian Science Congress (held during Jan. 3-7, 2012, at Bubaneswar, India), MSP-54.	Nanostructured Heusler $Ni_{50}Mn_{25+x}Sn_{25-x}$ ($7 \leq x \leq 12$) alloys a potential magnetic coolant with structural magnetic transitions
2	2011	56th DAE-Solid State Physics Symposium (held during Dec. 19-23, 2011, at SRM University, Chennai, India), P-225, I-15	Giant Hall resistivity at low magnetic fields in nanocrystalline $Ni_{50}Mn_{32}Sn_{18}$ Heusler alloy,
3	2011	International Conference on Advanced Materials (held during Dec. 12-16, 2011, at PSG College of Technology, Coimbatore, India), G020, pp. 155.	Large adiabatic temperature change in magnetoelastic transition in nanocrystallites of Heusler $Ni_{50}Mn_{32}Sn_{18}$ alloy
4	2011	International Conference on Advances in Materials and Materials Processing (held during Dec. 9-11, 2011, at IIT Kharagpur, West Bengal, India), pp. 195	Coexistence of martensite and austenite states in a Heusler $Ni_{39+x}Mn_{50}Sn_{11-x}$ ($x \leq 2$) alloy of nanolaminates,
5	2011	International Conference on Advanced Nanomaterials and Nanotechnology (held during Dec. 8-10, 2011, at IIT Guwahati, Assam, India), pp. 393.	Irreversible caloric transitions in Heusler Ni-Mn-Sn alloys of granular nanostructure
6	2011	International Conference on Theoretical and Applied physics (held during Dec. 1-2, 2011, at IIT	Effect of residual local strains on functional properties in a granular nanostructure in Heusler $Ni_{39+x}Mn_{50}Sn_{11-x}$ ($x \leq 2$) alloys

		Kharagpur, West Bengal, India), p.146	
7	2011	International Conference on Nanoscience, Engineering, and Technology (held during Nov. 28-30, 2011, at Sathyabama University, Chennai, India), pp.492.	Effect of crystallite size on Vickers microhardness in nanostructured Heusler $Ni_{39+x}Mn_{50}Sn_{11-x}$ ($x \leq 2$) alloys
8	2011	National Conference cum Workshop on Recent Developments in Engineering Materials (held during May 12–14, 2011, at Birla Institute of Technology, Mesra, Ranchi, India), OP1, pp. 10.	Magnetic field dependence of martensite transition and magnetocalory in Heusler $Ni_{50}Mn_{32}Sn_{18}$ alloy
9	2011	National Conference on Sensors & Actuators: Science to Technology (held during March 11–12, 2011, at CGCRI, Kolkata, West Bengal, India), P46, pp. 92	Heusler $Ni_{50}Mn_{32}Sn_{18}$ alloy; a potential magnetic sensing material,
10	2011	National Conference on Magnetic Materials and Applications (held during Jan. 24-25, 2011, at S. N. Bose National Centre for Basic Sciences, Kolkata, India), PP32, pp. 121.	Successive phase transitions and inverse magnetocalory in $Ni_{41-x}Mn_{50}Sn_{9+x}$ Heusler alloys,
11	2010	International Symposium on Materials Chemistry (held during Dec. 7-11, 2010, at Bhabha Atomic Research Centre, Mumbai, India), F-11, pp. 255.	Ferromagnetism in austenite and martensite states in a new $Ni_{40.5}Mn_{50}Sn_{9.5}$ Heusler alloy of nanocrystallites,
12	2010	International Conference on Fundamental and Applications of Nanoscience and Technology (held during Dec. 9-11, 2010, at Jadhavpur University, Kolkata, West Bengal, India), P28, pp.154	Magnetoresistance in Ni-Mn-Sn nanocrystalline Heusler alloys,
13	2010	International Conference on Multifunctional Materials (held during Dec. 6-9, 2010, at Department of Physics, Banaras Hindu University, Utter Pradesh, India), PP110, pp. 230	Anomalous electrical and magnetotransport properties in Ni-Mn-Sn Heusler alloys,
14	2010	National Seminar on Ferroelectrics and Dielectrics-XVI (held during Dec. 2-4, 2010, at Guru Ghasidas University, Bilaspur, Chattisgarh, India), P34, pp. 65.	Heusler $Ni_{50}Mn_{50-x}Sn_x$ alloys a possible multiferroic material,

15	2010	International Conference on Advanced Materials, Manufacturing, Management and Thermal Sciences (held during Nov. 18-19, 2010	Magnetoresistance in ferromagnetic Ni-Mn-In Heusler alloys"
16	2010	National Metallurgists' Day-Annual Technical Meeting (held during Nov. 14-16, 2010, at Indian Institute of Science, Bangalore, India), P1.45, pp. 29.	Martensite transformation in $Ni_{40.5}Mn_{50}Sn_{9.5}$ nanocrystallites,
17	2010	International Conference on Nanomaterials (held during Apr. 27-29, 2010, at Mahatma Gandhi University, Kottayam, Kerala, India), IL86, pp. 80.	Anomalous change in electrical resistivity in martensite to austenite transition in Ni_2MnSn nanocrystallites of Heusler alloys

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.)

1. Dean of Examinations (Currently)
2. HOD of Physics (Currently)
3. Chairman of BOE Physics (Currently)
4. Chairman of BOS Physics (Currently)
5. Worked as Associate Dean of Examinations
6. Worked as NAAC coordinator (Physics)
7. Worked as Institute coordinator for academic activities.
8. Exam coordinator between odd semester 2019 (18.11.2019) and even semester of 2022 (12.10.2022).
9. Conducted KPSC SDA exam-2021 as Centre Chief Superintendent.
10. Conducted KPTCL Assistants exam-2022 as Centre Deputy Chief Superintendent.
11. Coordinator for first year timetable and curriculum development from 2020-21 to 2022-23.
12. Research coordinator of the department.
13. Worked as Member-MCE-MHRD IIC.
14. Worked as Member-IQAC
15. Worked as Student-mentor
16. Assisted First Year HOD for conduction of Induction Programmes since 2018.
17. Assisted First Year HOD for conduction of CIE-2020 through 2022.
18. Worked as antiragging squad member.
19. Worked as Member of Food Committee, during graduation day programmes.
20. Worked as Member of Stage Committee during graduation day- 2021 to 2023.
21. Worked as judge for activities of students-clubs.

3. Details of Teaching Related Activities

Sl. No.	Academic Year	(B. E/M.Tech)	Course Title
1	Since joining MCE	B.E.	Engineering Physics Courses

Professional Development Activities		
1	Membership in profession related committees at state and national level a) At national level:	1. Indian Society for Technical Education, New Delhi 2. Society for Materials Chemistry, BARC, India
2	Participation in short term training courses less than one week duration in educational technology, curriculum development, professional development, Examination reforms, Institutional governance	List attached above