



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. Kalavathi G K
2.	Qualification	M.Sc., M.Phil., Ph.D.
3.	Date of joining the service at MCE	02/02/2012
4.	Department	Mathematics
5.	Current Designation & Experience in MCE	Associate Professor & Associate Dean- SA 11.09 Years
6.	Teaching Experience: P.G. (in Years) : U.G. (in Years) :	19 years
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	10 05 03 15 - 02 03 - -
8.	Awards /Prizes/ Honor's / Recognitions	-
9.	Fields of Specialization under the Subject / Discipline	a) Fluid mechanics b) Numerical Simulations. c) Tribology. d) Energy Harvesting

10. Orientation/Refresher Course/Summer School / Winter School/Workshops attended:

Sl. No.	Name of Course/Summer/Winter School	Place	Duration	Sponsoring Agency
1.	Five days FDP on SCI-Lab, Maxima and Python	department of Mathematics and Computer science, P. C. JABIN Science College, Huballi.	17th to 21st October 2020	
2.	Five days webinar series on Research & Innovation held	department of Information Science and Engineering, VVCE, Mysuru.	17th to 21st October 2020	
3.	One day workshop on Indo-German Research Proposal Writing Workshop	KSTA, Bengaluru.	30th August 2019	Karnataka Government
4.	Two week FDP on Gaining Insight into Data Science and Data Analytics	Malnad College of Engineering, Hassan	15/07/2019 to 27/07/2019.	AICTE
5.	One day workshop on Training the Proctors for effective Counselling	Malnad College of Engineering, Hassan	23/03/2019	TEQIP- III
6.	Two days workshop on Being a Great Teacher	Malnad College of Engineering, Hassan	03/11/2018 and 04/11/2019.	TEQIP- III
7.	Two days workshop on Outcomes based education (OBE).	Malnad College of Engineering, Hassan	04/08/2018 and 05/08/2018	TEQIP- III
8.	One week FDP on Advanced Mathematical Tools in Engineering	Malnad College of Engineering, Hassan	02/07/2018 to 06/07/2018.	TEQIP-III
9.	One week FDP on Recent Trends in Automotive Technology	Malnad College of Engineering, Hassan	25/02/2018 to 29/02/2018.	TEQIP-III
10.	One week FDP on Total Quality Management	Malnad College of Engineering, Hassan	28 May to 01 June 2018.	TEQIP-III

PART-B

1. List of Publications:

Sl. No.	Title	Name of the Journal, Vol. No., Year	ISSN/ISBN/Number
1.	E. L. Pradeesh, S. Udhayakumar, M. G. Vasundhara, G. K. Kalavathi , Experimental and numerical analysis on different beam geometries for vibration based piezoelectric energy harvester, Ferroelectrics.	Taylor & Francis, April 2023, VOL. 606, 219–23 https://doi.org/10.1080/00150193.2023.2189838	00150193
2.	E. L. Pradeesh, S. Udhayakumar, M. G. Vasundhara, G. K. Kalavathi , A review on piezoelectric energy harvesting, Microsystem and Technologies, https://doi.org/10.1007/s00542-022-05334-4	Springer, 28, 1797–1830, June 2022.	1432-1858
3.	G K Kalavathi , Yuvaraja B K, Dinesh P A, Vasundhara M G, Theoretical Study of influence of MHD in an infinitely long rough Porous Journal Bearing. doi:10.1088/1757-899X/1189/1/01203	IOP Conf. Series: Materials Science and Engineering 1189 (2021)	012030
4.	Kalavathi G K , Vasundhara M G, Pradeesh E L, Prakash H R, Numerical Simulation Of Electromechanical Shape Memory Alloy Based Tunable Vibration PZT Energy Harvester Without Tip Mass	Journal of Huazhong University of Science and Technology, Vol. 50 (6)	1671-4512.
5.	Kalavathi, G. K. , Najar, F. A., & Vasundhara, M. G., Performance characteristics of journal bearings (porous type): A coupled solution using Hartmann number and roughness parameter. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, Vol. 234(5) 668–675, https://doi.org/10.1177/1350650119886709 .	Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, Vol. 234(5) 668–675,	1350-6501
6.	M. G. Vasundhara, M. Senthilkumar, G. K. Kalavathi , A Distributed Parametric Model of Shape Memory Alloy based Resonant Frequency Tunable Cantilevered PZT Energy Harvester with tip mass, , https://doi.org/10.1007/s41683-019-00034-0 .	ISSN Journal of Micro and Smart Systems, Springer, Vol. 8, 13-24, 2019	2509-7997
7.	G. K. Kalavathi , M Somashekhar, Vasundhara M G, Yogesha K K, Analytical study of roughness on tilted pad thrust slider bearing improved by the boundary slippage,	Applied Mechanics and Materials, Vol. 895, pp. 70-75. Trans Tech Publications Ltd. https://doi.org/10.4028/www.scientific.net/AMM.895.70 , Feb 2019.	1662-7482
8.	M. G. Vasundhara, M. Senthilkumar, G. K. Kalavathi , (2019). A distributed parametric model of Brinson shape memory alloy based resonant	International Journal of Mechanics and Materials in Design, 15(3), 555-568.	1573-8841

	frequency tunable cantilevered PZT energy harvester.	https://doi.org/10.1007/s10999-018-9429-2 .	
9.	M. Senthilkumar, M. G. Vasundhara, G. K. Kalavathi , (2019). Electromechanical analytical model of shape memory alloy based tunable cantilevered piezoelectric energy harvester.	International Journal of Mechanics and Materials in Design, 15(3), 611-627. https://doi.org/10.1007/s10999-018-9413-x .	1573-8841
10.	Nagraj C, Dinesh P. A., Kalavathi G. K. , “Combined Effects of Electric Field and Magnetic Field on Electro Hydrodynamic Dispersion of Macromolecular Components in Biological Bearing”.	Defect and Diffusion Forum, 2018; 388: 361-377	1662-9507
11.	Kalavathi G. K. , Dinesh P. A. and Gururajan K., “Numerical Study of Magnetic Field on Rough Porous Narrow Journal Bearing with Heterogeneous Surface”.	Materials Today: Proceedings, 4, pp. 10539 - 10543, 2017.	2214-7853
12.	Yuvaraja B K, Kalavathi G.K. , Dinesh P.A., K. Gururajan, “Effects of Magneto Hydrodynamic Fluids in a narrow Porous rough Journal Bearing”.	International journal of Scientific and Innovative Mathematical Research, 2017.	2347-3142
13.	Kalavathi, G.K. , Dinesh, P.A., K. Gururajan, “Influence of Roughness on Porous Finite Journal Bearing with Heterogeneous slip/ no-slip surface”.	Tribology International, Elsevier, 102, pp. 174-181, 2016.	1879-2464
14.	Kalavathi, G.K. , Dinesh, P.A., K. Gururajan, “Numerical Study of Effect of Roughness on Porous Long Journal Bearing with Heterogeneous Surface”.	Journal of Nigerian Mathematical Society. 35, pp. 468 – 487, 2016.	978-31635-0-7.
15.	Kalavathi G K. , K. Gururajan, Dinesh P. A., Gurubasavaraj G., “Effect of surface roughness in a Narrow Porous Journal Bearing with a Heterogeneous Slip/No-Slip Surface”.	International journal of Scientific and Innovative Mathematical Research. 2- 12: pp. 944-959, 2014.	2347-3142

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.)

SI.No	Responsibilities
1.	Serving as Associate Dean (SA) and First year coordinator in Malnad College of Engineering since May 2023 to till today
2.	Serving as Institute level NBA - Criteria 8 coordinator in Malnad College of Engineering in 2023 .
3.	Serving as Institute level NAAC - criteria 4 coordinator in Malnad College of Engineering from 2022 to 2023 .
4.	Served as department NBA, NAAC, IQAC, NIRF and Research coordinator in Malnad College of Engineering from 2015 to May 2023 .
5.	Served as department BOE Chairman from 2019 to 2023 in Malnad College of Engineering.
6.	Worked as Warden in Malnad college of Engineering Ladies Hostel, Hassan from 07 th February 2019 to 11 th January 2020.
7.	Served as department Contineo coordinator from 2017 to 2023 in Malnad College of Engineering
8.	Served as department Website coordinator from 2015 to 2020 in Malnad College of Engineering.
9.	Served as Mentor for I year Engineering students in Malnad College of Engineering, Hassan, 2018.
10.	Served as Faculty Advisor for I year Engineering students in Malnad College of Engineering, Hassan, 2017.
11.	Serving as department BOS & BOE member in Malnad College of Engineering, Hassan since 2014 to till today.
12.	Served as Coordinator for Internal Examination in Yagachi College of Engineering, Hassan, 2011-2012.

Completed Project:

- **05 Lakh** amount is sanctioned by **VGST, Government of Karnataka**, in the year 2017-18 for the topic “A Distributed Parameter Electromechanical model for Cantilevered Piezoelectric Energy Harvester with shape memory alloy”.

National and International conferences Attended

- International Conference ICTMES (August 06 – 08, 2020), Malnad College of Engineering, Hassan.
- International Conference on Green Trends in Mechanical Engineering Sciences 3-5 October, 2018, Malnad College of Engineering, Hassan, India

Presented papers in National and International conferences

- Presented a paper in International Conference ICARES 2022 held on 24 th & 25th November 2022 at Ramaiah Institute of Technology, Bangalore.
- Presented a paper in International Conference ICMEEP (December 10 – 11, 2021), Bannari Amman Institute of Technology, Sathyamangalam, Tamilnadu.
- Presented a paper in International Conference ICEMS (March 17 – 19, 2016), Jaipur National University, Jaipur, Rajasthan, India.

