




P.E.S. College of Engineering, Mandya - 571401

(An Autonomous Institution, affiliated to VTU, Belagavi)

Faculty Profile

General

Name	Dr. Mohammad Rafi H Kerur	
Designation,	Assistant Professor	
Department & Affiliated Institution	Department of Mechanical Engineering, P.E.S College of Engineering, Mandya – 571 401	
Research Area	Tribology (Fluid film Bearing)	
Contact Number	+91 8884019786	
Email ID	mhkerur@gmail.com , mhkerur@pesce.ac.in	

Academic Profile

Educational Qualifications

Degree	College	University	Year of Passing	% ge	Class
Ph. D	PESCE, Mandya	VTU, Belagavi	2021	-	-
M. Tech.,	BEC, Bagalkot	VTU, Belagavi	2007	72.3	FCD
B. E.,	BEC, Bagalkot	Karnataka University, Dharwad	1997	62.2	FC

Professional Experience

Organization and Department	Designation	Period	Total Experience
P.E.S. College of Engineering, Mandya	Assistant Professor	08-06-2009 to till date	12 year 6 months

Reports on Academic and Research Activities

Academic Activities

Teaching Records (Details of courses taught)	<u>Undergraduate:</u> Elements of Mechanical Engineering, Kinematics of Machines, Dynamics of Machines, Finite Element Methods, Cad/Cam, Mechanics of Materials.
	<u>Postgraduate: (M. Tech):</u> Theory of Elasticity, Theory of Plasticity, Experimental Stress Analysis

Research Guidance (Candidates Awarded / Pursuing Ph. D / M.Sc., Engg. / M.Phil.)

Degree	Ph. D.	M.Sc., Engg.	M.Phil.
Awarded	Nil	Nil	Nil
Pursuing	Nil	Nil	Nil

Sponsored Research Projects (List of Projects taken up /completed and funds receiver & funding sources)

Project Title	Project Funded by	Grants Sanctioned	Grants Received
----	-----	---	----

Research Publications in Refereed Journals and Conferences/Symposia

Number of Publications in	National	International
Journals	---	10
Conferences/Symposia	01	09

Other Important Responsibilities Held in the College

1. PG Coordinator for Autonomous Examination Section	3. BoS Member (PG)
2. Department Placement Coordinator	4. BOE chairman (PG)

List of Books

1. **Modeling and Analysis of Gas Turbine Engine** by **Mohammad Rafi H Kerur**, Punith. B; Publisher LAMBERT Academic Publishing, 2021, ISBN: 978-620-4-18319-0.
2. A text on **Additive Manufacturing** by **Dr. Mohammad Rafi H Kerur**, Avinash M and Nouman Khan; Publisher-Notion Press, published on 22nd April 2022, ISBN-13: 979-8886678260.
3. **Computer Aided Modelling & Analysis lab solution** by **Dr. Mohammad Rafi. H. Kerur**, Dr. Vikram. C. K and Muddassir Hassan: Publisher- LAMBERT Academic Publishing, 2023, ISBN: 9786205639436.

List of Conferences

1. National Tribology conference (NTC-2014) organized by PES University, Bangalore from 15-18th December 2014, the presented paper is “Performance Analysis of Porous Journal Bearing using Finite Element Method”.
2. Malaysian International Tribology Conference (MITC 2015) organized by Centre for Advanced Research on Energy, Universiti Teknikal Malasia from 16-17th November 2015 Penang Malaysia the paper is “**3D Surface Roughness effects on Porous journal bearing performances**”.
3. International conference on Advances in Mechanical Engineering Sciences (ICAMES-17) organized by P.E.S. College of Engineering, Mandya 21-22nd April 2017 the paper is “Study on Thermo-Hydrodynamic Performance of a Finite Journal Bearing”.
4. 9th International Conference on Industrial Tribology (ICIT-2017) organized by Balmer Lawrie & Co under aegis of Tribology Society of India at VEDI Village Spa Resort Kolkata from 6-9th December 2017 and the paper is “Performance of Porous Journal Bearing with Surface Roughness and Thermal Effects”.
5. 10th International conference on Industrial Tribology (IndiaTrib-2019) organized by Department of mechanical engineering, IISc, Bangalore from 1-4th December 2019 and presented the paper “Performance of Porous journal bearing with non-Newtonian lubricant”
6. International Virtual conference on Recent Innovations in Science & Technology (RIST 2021) organized by ERNAD Knowledge city technical campus, Malppuram, Kerala on 19-20th June 2021 the paper is “Vibration Analysis of Healthy and Faulty Gear of a Parallel shaft Drive system”.
7. International Conference on Advances in Mechanical Engineering Transcending Boundaries-2021 organized by Mangalam college of engineering, Trivandrum, Kerala on 22-23rd July 2021 the paper is “Frequency Response Analysis of Spur Gear pair using FEA”.
8. International Conference on Sustainable Materials, Manufacturing and Industrial Engineering (ICSMMIE) 2022 Hosted by Dept. of IEM, SIT Tumkur on 1-2nd July 2022, the paper is Modeling and Fabrication of IoT based Pesticides Spraying Equipment.
9. International conference on Advances in Civil and Mechanical Engineering (ACME-2022) conducted by

R R Institute of Technology, Bengaluru on 30th -31st July 2022, the paper is Railway track crack detection robot.

List of Published Papers

1. **Mohammedrafi H. Kerur**, T. Nagaraju. (2014), Performance Analysis of Porous Journal bearing using Finite Element Method.
2. Asharani, **Mohammed Rafi H. Kerur** (2017) “Design and Performance Analysis of a 5 speed Manual Transmission system for Indian drive cycle” International Research Journal of Engineering and Technology (IRJET), Vol.4, Issue 6,2017, pp. 2870-2874.
3. Punith B., **Mohammed Rafi H Kerur** (2017) “Static Structural, Fatigue and Buckling analysis of Jet Pipe Liner by Inducing Corrugation”, International Research Journal of Engineering and Technology (IRJET), Vol.4, Issue 6,2017, pp. 1812-1818.
4. Divyarathi., **Mohammed Rafi H Kerur** (2017) “Design and Fatigue Life Estimation of Diesel Engine Piston using Ansys and FeSafe”, International Research Journal of Engineering and Technology (IRJET), Vol.4, Issue 6,2017, pp. 3307-3312.
5. **Mohammedrafi H. Kerur**, T. Nagaraju. (2015). 3D Surface Roughness effects on Porous Journal bearing performances, Malaysian International Tribology Conference 2015,16-17 Nov, pp.1-2.
6. **Mohammedrafi H. Kerur**, T. Nagaraju and M. Ravi Prakash “Study on ThermoHydrodynamic Performance of a Finite Porous Journal Bearing” International Journal of Engineering Research in Mechanical and Civil Engineering (IJERMCE), Issue 4, Vol.2, (ISSN: 2456-1290), April 2017, pp. 654-660.
7. **Mohammedrafi H. Kerur**, T. Nagaraju and M. S. Pradeep Performance “Analysis of Porous Journal Bearing with Surface Roughness and Thermal Effects”, JETIR, Issue 1, Vol. 6, (ISSN-2349 5162), 2019, pp.60-63.
8. Ashok Kumar R. Tavadi, **Mohammad Rafi H. Kerur**, Yuvaraj Naik, Sadanand S, Rudresha, Vasantha Kumar, N. Mohan, S. Vigneshwaran, and Amith Kumar Gajakosh “Adhesive wear studies of Fiber reinforced Filler filled polymer Based composites- A systematic Review” International Journal of Mechanical Engineering, (ISSN: 0974-5823), Spl Issue, Vol.6, Nov-Dec. 2021, pp. 1268- 1283.
9. Siddesh Kumar N. M., **Mohammad Rafi H. Kerur**, Nouman Khan and Shashank T. N. “Vibration Analysis of Healthy and Faulty Gear of Parallel Shaft drive System” AIP Conference proceedings, 10.1063/5.0080184,2022, 020055, pp. 2463-2473.
10. Ramesh Kurbet, V. Doddaswamy, C. M. Amruth, **Mohammad Rafi H. Kerur** and S. Ghanaraja “Frequency Response Analysis of Spur Gear pair using FEA” Materials Toady Proceedings, Vol.52, 2022, pp.2327-2338.
11. **Mohammad Rafi H Kerur**, M. N. Dinesh, Mahamad Nawazpeer, Manjunath Elavi, Manoj H. V. and Mohammad Ayaan ‘Railway track crack detection robot’ International Journal of Engineering Research and Technology, Vol.10, Issue 10, 2022, pp.