Faculty Profile

Personal Information

• Name: Dr P R Venkatesh

Designation: Associate Professor
 Department: Mechanical Engineering
 Email: venkateshpr@rvce.edu.in

Phone: 080-68188143/44

Google Scholar Id: Ax1bWCQAAAAJ

LinkedIn: www.linkedin.com/in/p-r-venkatesh-865780311

ORCID: [Link]: https://orcid.org/0000-0002-4450-4433

Domain of Expertise: Mechanical Engineering (Machine Design)

Research Focus

• **Primary Area:** Vibrations & Acoustics

Allied Areas:

o Modal testing, Machine condition Monitoring

o Acoustic scattering, Damage assessment in structures

Academic Qualifications

• **Ph.D.**: [Mechanical Engineering (Computational Acoustics), JNTU, Anantapur, 2012

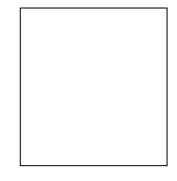
• Thesis Title: Acoustic scattering from arbitrarily shaped 3-Dimesnional bodies

• M.E: Machine Design, Bangalore University, 1995

• **B.E:** Mechanical Engineering, Mysore University, 1987

Professional Experience

Experience					
S. No	Institute/College/Industry	Job Title	Duration (From- To)		
	M/s Goetze India Limited (Now Federal Mogul)	Quality Control Engineer	Jan 1988- Dec 1993		
	Dept. of Mech Engg, PESIT, Bengaluru	Lecturer	Sept 1995 – Oct 1997		
	Dept. of Mech Engg, Sir MVIT, Bengaluru	Senior Lecturer	October 1997– Oct 2008		
	Department of Mechanical Engineering,	Assistant Professor	April 2008 - Dec 2012		
	RVCE, Bengaluru	Associate Professor	Jan 2013 -Till date		



Publications & Patents

Journal Publications

- Mohammed Asif Kattimani, Venkatesh P R, Kirthan L J, "Design and Optimization of Fatigue Life Studies on Induction Hardened IN718 Alloy for Gas Turbine Applications", Advances in Materials and processing Technologies (AMPT), September 2023, 1-13. https://doi.org/10.1080/2374068X.2023.2256121 (Taylor & Francis).
- Mohammed Asif Kattimani, Venkatesh P R, "Design and Numerical Analysis of Tensile Deformation and Fracture Properties of Induction Hardened Inconel 718 Superalloy for Gas Turbine Applications" International Journal on interactive Design and Manufacturing (IJIDeM) – 2023, 17 (4), 1-11. https://doi.org/10.1007/s12008-023-01452-z (Springer).
- 3. Pylo, M.A., **Dr. Venkatesh P.R**, Naseerahusen Yatageeri "OPTIMIZATION OF AUTOMOTIVE HOT END EXHAUST BRACKETS BY MODAL AND FREQUENCY RESPONSE ANALYSIS" International Journal of Recent Advances in Multidisciplinary Research, Vol. 10, Issue 09, pp.8879-8887, September, 2023
- Mohammed Asif Kattimani, Venkatesh P R, Kirthan L J, "Influence of Induction Hardening on Microstructure and Hardness of Nickel-Based Super Alloy Inconel 718" Journal for Basic Sciences-2022,22 (12),1004-1012. https://doi.org/10.37896/JBSV22.12/1637 (Scopus)
- 5. Mohammed Asif Kattimani, **Venkatesh P R**, Kirthan L J, "Functionally Graded Material for Aircraft Turbine Disc on Fatigue Failure-An Overview" Fatigue, Durability, and Fracture Mechanics, Lecture Notes in Mechanical Engineering, **2019**, 423-440. https://doi.org/10.1007/978-981-15-4779-9 28 (Springer)
- 6. Jagadish, **P R Venkatesh** "Dynamic analysis and testing of Micro wind turbine" ISSN 2348-6406, JAERD (International Journal of Advanced Engineering Research & Development) **June 2014** PP [61-67], Volume 1, Issue No 06.
- 7. Naveen L Hugar, **P R Venkatesh** "Shaker based operating deflection shape (ODS) testing of two-wheeler chassis" ISSN 2348-6406, IJAERD (International Journal of Advanced Engineering Research & Development) **June 2014** PP [61-67], Volume 1, Issue No 06.
- 8. B.Anand, Ramesh S.Sharma*, N.V. Nanjundaradhya, **P.R. Venkatesh** "A review on recent developments in bio-nanocomposites for biomedical applications" ISSN: 0974 7494 NSNTAIJ (Nano Science and Nano Technology) **January 2012** PP[9-13], Volume 6, Issue No 01
- 9. **P.R. Venkatesh**, B. Chandrasekhar, M.M. Benal "Comparative study of face, edge and node-based basis functions used in solution of acoustic Scattering problems" ISSN 0974-231X, IJMAE (International Journal of Mechanical & Automobile Engineering) March 2011- **May 2011** PP [51-62], Volume 13, Issue No 01

- 10. **P.R.Venkatesh**, B. Chandrasekhar, M.M. Benal "A New Approach to Model Acoustic Radiation and Scattering from Thin Bodies using Boundary Element Method", International Journal of Applied Engineering Research ISSN 0973-4562 Volume 6, Number 6 (2011) pp 1261-1277
- 11. **P.R.Venkatesh**, Chandrasekhar, M.M.Benal "Computation of Acoustic Far field scattering cross section from Plain and intersecting thin bodies" CMES, Vol 52, No.1, pp 83-103, **2009**

Conference Papers

- PR Venkatesh, Mohammed Asif Kattimani, Rohith S, "Design of a Sustainable IoT for LPG Monitoring and leakage Prevention" International Conference on Sustainable Technology (ICST -2025), 19th and 20th February-2025, at NIE Mysuru. Springer Lecture Notes in Mechanical Engineering [Scopus/Under Consideration]
- 2. S A Mohan Krishna, **P R Venkatesh**, Mohammed Asif Kattimani, "Developments in a Sustainable, Intelligent Multi-Level Battery Thermal Management System for Enhanced Safety and Performance in Electric Vehicles Using IoT", Bentham Science, (WoS, Under Review), 2nd International Conference on Development in Sustainable Materials, Infrastructure, Manufacturing and Energy Engineering (ICDSMIME), 13th and 14th **December 2024**, at CBIT -Hyderabad.
- 3. V. Srinivasa Chari, **P. R. Venkatesh**, Krupa Shankar, and Veena Dinesh, "Effect of processing parameters on FDM process" Advances in Mechanical Design, Materials and Manufacture, **December 2018**, AIP **Conf. Proc. 1943**, **020061-1–020061-8**; https://doi.org/10.1063/1.5029637 Published by AIP Publishing. 978-0-7354-1638-3
- 4. **P.R.Venkatesh** "Effect of Axial land geometry on the performance of Squeeze film dampers" presented at international conference at IIT Roorkee, **Dec 2003**.

Books:

- 1) Dr. Mohammed Asif Kattimani, Mr. Shaik Mohammed Ali, **Dr. P R Venkatesh**; "INTRODUCTION TO OPERATIONS RESEARCH & APPLICATION OF PYTHON" Infotech standards India Pvt. Ltd. New Delhi (India) ISBN: 978-93-49559-37-0, 2025
- 2) Dr Prasad H Nayak, Dr J Satheesh, Dr P R Venkatesh, Dr Shreekala N, "FLUID MECHANICS" Scientific International Publishing House" 2025, ISBN 978-93-6674-013-3

Patents [Filed]

1. "Wi-Fi Enabled Thermal Imaging Camera" Patent No. 449296-001, filed on 25/02/2025

R & Grants & Consultancy Projects: Nil

Completed Research Projects

- Experimental investigation of damage monitoring in sandwich structures using vibration data for aircraft applications AR & DB New Delhi, Structures Panel, Duration: Role: PI, Duration: 2019-2022 Funding received: 12.441 Lakhs
- Structural modeling of Rotating Systems— AR & DB New Delhi, Propulsion Panel Duration: 2001-2003, Role: Co-PI Funding received 6.09 Lakhs

Completed Consultancy Projects

SI No	Project Title & Role	Funded by	Grant (Lakhs)	Status
1	Energy harvesting by using triboelectric Nano generator (Team member)	M/s TE connectivity Bengaluru	10.00	Completed [2017]
3	Energy regeneration using Micro hydro turbine (Team member)	M/s TE connectivity Bengaluru	8.00	Completed [2017]
4	Large power generation (energy recovery) using Bruderer machine (Team member)	M/s TE connectivity Bengaluru	Concept developed	Completed [2017]
5	Machine Design laboratory experiments design & validation (Team Member)	M/s IND LAB Engineers, Bengaluru	0.3	Completed [2016]

Professional Memberships

• ISTE Life member

Awards & Recognitions

Sl. No.	Recognition	Details
1	Appointed for VTU LIC committee for the AY 2015-16	Inspected 3 Engg colleges as a part LIC team of VTU during for AY 2015-16
2	Recognized as resource person for Metrology & Measurements course by	Delivered expert lecture (8 sessions) under VTU EDUSAT Programme on Measurements & Metrology
	EDUSAT Programme of VTU	during Feb 2013.
3	Recognized as resource person for	Delivered a 2-hour lecture session covering Kinematics
	teaching Mechanical Engineering for Non-Mechanical Engineers at Bharat	& Dynamics for BEL employees on 31st October 2018
	Electronics, Bengaluru	

Student Supervision

• Ph.D. Candidates: 03; 01 Graduated

• M.Tech Students: 10 (graduated); 01 at present

• Undergraduate Research Mentees: 28 (Graduated), 3 at present

Professional Roles

• **Editorial Board:** Reviewer for "Journal of Thermoplastic Composite Materials" published by SAGE publications, USA. (Reviewed two papers till date) Impact Factor: 1.343

• Chair/Committee Member: NIL

Industry Advisor: M/s IND-LAB Engineers, Bengaluru

Teaching

Core Courses: [Current semester]

ME244AI; FLUID MECHANICS

HS248AT: UNIVERSAL HUMAN VALUES

ME122GL: COMPUTER AIDED ENGINEERING GRAPHICS

Advanced/Lab Courses:

• FLUID MECHANICS LAB

Professional Roles

Responsibilities

- Academic: Worked previously as Department TTO, CIE & SEE coordinator, CTTO (UG)
 Mech Dept Program coordinator (Present)
- Administrative: Worked previously as Lab In-charge for Design Lab

External Connect

- Member of BoS: BMS College of Engineering
- Member of BoE: UVCE, NMIT, Dr AIT, BMSCE & BMSIT, Bengaluru