# **Faculty Profile**

Faculty Photo

#### **Brief Profile**

Highly committed educator over 20 years of experience in academia and proven track record in teaching, student mentorship and research. Passionate about fostering inclusive learning environment and implementing innovative teaching learning methods. Highly dedicated in executing administrative responsibilities.

### **Personal Information**

Name: Dr. Ramakrishna HegdeDesignation: Assistant Professor

• **Department:** Mechanical Engineering

• **Email:** ramakrishna@rvce.edu.in

• **Phone:** 9481245532

https://scholar.google.co.in/citations?user=7ca2QloAAAAJ&hl=en

/ ResearchGate / LinkedIn: [Link if applicable]/ ORCID: [Link]

# **Domain of Expertise**

#### **Research Focus**

- Primary Area: Fracture and Fatigue of Materials
- Allied Areas:
  - Nanomaterials, Metal Cutting.

### **Academic Qualifications**

- Ph.D.: Mechanical Engineering, Karpagam University, 2018.
- M.Tech: Production Engineering and Systems Technology, VTU, Belagavi, 2003.
- **B.E.**: Mechanical Engineering, Mysore University, 1998.
- GATE 2000
- Professional Experience

Experience			
S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	PGP College of Engineering and Technology, Namakkal, Tamilnadu.	Senior Lecturer	August 2003 to January 2009
2.	RV College of Engineering, Bengaluru	Assistant Professor	February 2009 to Till Date.

### **Publications & Patents**

#### **Journal Publications**

- 1. MA Kattimani, PR Venkatesh, LJ Kirthan, MM Math, Ramakrishna Hegde, Design and optimization of fatigue life studies on induction hardened IN718 alloy for gas turbine applications, Advances in Materials and Processing Technologies 10 (4), (2024) 3607-3619
- 2. S Jabiulla, LJ Kirthan, RG Kumar, R Hegde, MM Math, VA Girisha, Experimental and Numerical Evaluation of In-plane Tensile Mode Stress Intensity Factor for Edge Crack Using Empirical Formulation of Displacement Extrapolation Method, Journal of The Institution of Engineers (India): Series D, (2024) 1-11
- 3. VA Girisha, MM Joshi, LJ Kirthan, A Bharatish, R Hegde, Thermal fatigue analysis of H13 steel die adopted in pressure-die-casting process, Sādhanā 44, (2019) 1-8
- 4. Ramakrishna Hegde, NM Sivaram, BS Ajaykumar, LJ Kirthan, Evaluation of heat treatment effect on fracture behavior of aluminum silicon carbide graphite hybrid composite, Int. J. Appl. Eng. Res 12 (5), (2017) 605-610
- 5. LJ Kirthan, R Hegde, VA Girisha, RG Kumar, Evaluation of mode 1 stress intensity factor for edge crack using displacement extrapolation method, International Journal of Materials and Structural Integrity 10 (1-3), (2016) 11-22
- 6. R Hegde, B Ajaykumar, L Kirthan, V Girish, Influence of heat treatment on fatigue behavior of aluminum silicon carbide graphite hybrid composite, Int J Appl Eng Res 11 (6), (2016) 4179-83
- 7. Int. J. Appl. Eng. Res 12 (5), 605-610, Computational analysis of fatigue crack growth based on stress intensity factor approach in axial flow compressor blades, LJ Kirthan, R Hegde, BS Suresh, RG Kumar Procedia Materials Science 5, (2014) 387-397

#### **Conference Papers**

- 1. V A Girishaa), Akashb), Bharatish A, L. Kirthan, J. Ramakrishna Hegde, "Thermal Fatigue Analysis of Stellite Coated P20 Tool Steel" AIP Conference Proceedings 2274, 030012 (2020)
- 2. L. J. Kirthan, A.S.Pradeep, Ramakrishna Hegde "Determination of Stress Intensity factor for cracks subjected to mode II loading in tungsten carbide tools using commercial code" International conference Advances In Materials, Manufacturing, And Management Technologies (AMMMT-2010) SIT, Tumkur, Karnataka.
- 3. L. J. Kirthan, A.S.Pradeep, Ramakrishna Hegde "Determination of SIF for mode I crack propagation using ANSYS in Tool Steel (AISI, A2) material" National Conference on 'Research trends in design and manufacturing for sustainability' 2010, Ramakrishna college of engineering, Coimbatore.

#### **Books/Book Chapters**

1. [Author(s)], [Book Title], [Publisher], [Year]. NIL

#### Patents [Filed / Published / Granted]

1. [Patent Title], [Patent No.], [Year]. NIL

### **R & Grants & Consultancy Projects**

### **Ongoing & Completed Research Projects**

- [Project Title] Funding Agency: [Name], Duration: [Year-Year], Role: [PI/Co-PI].
- [Project Title] Funding Agency: [Name], Duration: [Year-Year], Role: [PI/Co-PI]. NIL

### **Ongoing & Completed Consultancy Projects**

- [Project Title] Funding Agency: [Name], Duration: [Year-Year], Role: [PI/Co-PI].
- [Project Title] Funding Agency: [Name], Duration: [Year-Year], Role: [PI/Co-PI]. NIL

### **Professional Memberships**

[Membership Body, e.g., IEEE, ASME, IEI, etc.] NIL

## **Awards & Recognitions**

- [Award Name], [Organization], [Year] NIL
- [Achievement], [Details], [Year]

## **Student Supervision**

- Ph.D. Candidates: [Number] ([X] Graduated) NIL
- M.Tech/M.Sc. Students: 03
- Undergraduate Research Mentees:120

#### **Professional Roles**

- Editorial Board: [Journal Name] NIL
- Chair/Committee Member: [Conference Name, e.g., IEEE International Conference on Robotics]
- **Industry Advisor:** [Company/Startup Name]

## **Teaching**

#### **Core Courses: [Current semester]**

- ME245AI Manufacturing Technology
- ME242TB Material Science for Engineers

#### **Advanced/Lab Courses:**

• Manufacturing Technology Lab. Computer Aided Engineering Graphics Lab

### **Professional Roles**

## Responsibilities

- Academic: Valuation Unit Coordinator
- Administrative: Manufacturing Technology Lab In-charge.

### **External Connect**

Member of BoS / BoE / Academic Council / Governing Body etc NIL