

Faculty Profile

Brief Profile

Faculty Photo

Dr. Nagesh S, Assistant Professor in the Department of Mechanical Engineering, bringing expertise in advanced manufacturing technologies and industrial experimentation. Earned Ph.D. in Mechanical Engineering from Visvesvaraya Technological University in 2016, specialized in Laser Machining of Polymer Nano Composites with a focus on Industrial Experimentation and Gray Relational Analysis. Academic foundation strengthened by an M.Tech in Computer Integrated Manufacturing, VTU in 2008.

With a deep-rooted passion for **curriculum development** and the integration of **emerging technologies**, forefront in modernizing mechanical engineering education. Committed to advancing **automation, intelligent manufacturing, and digital production systems**, aligning academic programs with evolving industry demands. My technical expertise extends to **CNC machining, robotics integration, and AI-driven optimization of manufacturing processes**, ensuring that students are equipped with cutting-edge knowledge.

Beyond technical proficiency, I actively explore **Industry 5.0 applications, smart factory innovations, and experiential learning methodologies**, striving to bridge the gap between theoretical concepts and practical implementation. My dedication to fostering **research, innovation, and technology-driven education** makes him a pivotal force in shaping the future of mechanical engineering academia and industry collaborations.

Personal Information

- **Name:** Dr. NAGESH S
- **Designation:** Assistant Professor
- **Department:** Mechanical Engineering
- **Email:** nageshs@rvce.edu.in
- **Phone:** 08068188144

Google Scholar: <https://scholar.google.co.in/citations?user=6d6iz8IAAAAJ&hl=en&authuser=2>

ResearchGate: https://www.researchgate.net/profile/Nagesh-Shivanna?ev=hdr_xprf

ORCID: <https://orcid.org/0000-0001-5620-0050>

Domain of Expertise

- Automation & Robotics Integration – Application of robotic systems in manufacturing

processes.

- CNC Machining & Digital Manufacturing – Advanced control of machining operations using digital techniques.
- AI & Machine Learning in Manufacturing – Optimization of production processes through intelligent systems.
- Flexible Manufacturing Systems (FMS) – Designing adaptable and efficient production environments.
- Industrial IoT & Smart Factories – Implementation of interconnected manufacturing technologies.
- Process Optimization & Lean Manufacturing – Enhancing efficiency and reducing waste in production.

Research Focus

- **Primary Area:** AI & Machine Learning in Manufacturing, Robotics & Automation Integration]
- **Allied Areas:** Cybersecurity in Manufacturing Systems, Biomedical Applications in Manufacturing, Data Analytics & Manufacturing Intelligence

Academic Qualifications

- **Ph.D.:** Mechanical Engineering, Visvesvaraya Technological University, 2016 – “Laser Machining of Polymer Nano Composites Using Industrial Experimentation and Gray Relational Analysis”.
- **M.Tech:** Computer Integrated Manufacturing, Visvesvaraya Technological University, 2008.
- **B.E:** Mechanical Engineering, Visvesvaraya Technological University, 2006.
- **Postdoctoral Research:** N.A.

Professional Experience

Experience			
S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.			

Publications & Patents

Journal Publications

1. Nagesh S et. al., Road Lane and Object Detection in the Video Footage using Open CV and Python. International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181, Vol. 14 Issue 02, February-2025.
2. Nagesh S, Ratna Pal, Mohammed Nawaz. Multi-objective optimization of influential factors on CO2 laser cutting in Ni based superalloy using Box Behnken and ANN approach. TIJER – INTERNATIONAL RESEARCH JOURNAL. TIJER – INTERNATIONAL RESEARCH JOURNAL. a240-254, 2024. <http://doi.org/10.1729/Journal.41473>
3. S Nagesh, R Pal, KS Avinash, S Chinthan. Comparative Performance Evaluation of Single and Multilayer Coated Carbide Inserts During Dry Turning of AISI 4340 Steel. International Journal of Engineering Research & Technology 8 (9), 421-430. 2019. DOI 10.17577/IJERTV8IS090142
4. S Nagesh, HN Narasimha Murthy, R Pal, SD Supreeth Dev, M Krishna. Investigation of the effect of nanofillers on the quality of CO2 laser cutting of FRP nanocomposites. The International Journal of Advanced Manufacturing Technology 90, 2047-2061. 2017. <https://doi.org/10.1007/s00170-016-9535-y>
5. S Nagesh, HNN Murthy, R Pal, M Krishna, BS Satyanarayana. Influence of nanofillers on the quality of CO2 laser drilling in vinylester/glass using orthogonal array experiments and grey relational analysis. Optics & Laser Technology 69, 23-33. 2015. <https://doi.org/10.1016/j.optlastec.2014.12.002>
6. S Nagesh, HNN Murthy, M Krishna, H Basavaraj, Parametric study of CO2 laser drilling of carbon nanopowder/vinylester/glass nanocomposites using design of experiments and grey relational analysis, Optics & Laser Technology 48, 480-488, 2023. <https://doi.org/10.1016/j.optlastec.2012.11.013>

Conference Papers

1. [Author(s)], "[Title]," [Conference Name], [Year].

Books/Book Chapters

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

Patents [Filed / Published / Granted]

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

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].

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].

Professional Memberships

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

Awards & Recognitions

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

Student Supervision

- **Ph.D. Candidates:** Nil
- **M.Tech / M.Sc. Students:** 04
- **Undergraduate Research Mentees:** 02

Professional Roles

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

Teaching

Core Courses: **[Current semester]**

- Flexible Manufacturing Systems (FMS)
- Computer-Aided Design (CAD) & Computer-Aided Manufacturing (CAM)
- Automation & Robotics
- Manufacturing Informatics
- Finite Element Analysis (FEA)
- CNC Technology & Programming

Advanced/Lab Courses:

- Flexible Manufacturing Systems (FMS) Lab
- CNC Machining & Programming Lab
- Robotics & Automation Lab
- Additive Manufacturing Lab
- Mechatronics & Control Systems Lab
- Industry 4.0 & Digital Manufacturing Lab
- Metrology & Quality Control Lab

Professional Roles

Responsibilities

- **Academic:** Time Table Coordinator, Counsellor, Department Advisory committee
- **Administrative:** CAD/CAM Lab In-charge,

External Connect

- Alumni Coordinator

Summary sheet for faculty profile:

Designation: Assistant Professor

Qualification: Ph. D

Experience: 17

Area of Interest: Intelligent Manufacturing, Digital Production Systems, CNC machining, robotics integration, and AI-driven optimization of manufacturing processes

Date of Joining RVCE: 28.08.2008

Email: nageshs@rvce.edu.in

Project:

Number of UG projects guided: 05

Number of PG projects guided: 12

Number of Doctorate Students -

Completed: Nil

Guiding: Nil

Publications:

National Journals: Nil

National conferences: Nil

International Journals: 06

International conferences: Nil

Books published: Nil

Book chapters published: Nil

Patent Granted: Nil