Faculty Profile

Dr. Mahantesh M Math is a faculty member in the Mechanical Engineering
Department at R V College of Engineering, Bangalore, with over 16 years
of teaching and research experience. He holds a Ph.D in Ergonomics from
VTU University and has authored over 31 publications in Ergonomics,
Material Science, Design, and Manufacturing. He has also
written Introduction to Human Factors and Ergonomics, contributing to
advancements in engineering and manufacturing. His research focuses on enhancing human wellbeing, material applications, and innovative design solution

Personal Information

• Name: Dr. Mahantesh M Math

• **Designation:** Assistant Professor(Selection Grade)

Department: ,Mechanical Engineering]

Email: mahanteshm@rvce.edu.in

• **Phone:** 9972401440

:https://scholar.google.com/citations?user=TmbftwgAAAAJ&hl=en/

:https://www.researchgate.net/profile/Mahantesh-Math /

LinkedIn: https://in.linkedin.com/in/dr-mahantesh-m-math-90002998/https://orcid.org/0000-0001-8337-9113

Domain of Expertise

Industrial Engineering

Research Focus

- Primary Area: Product Design & Development
- Allied Areas:
 - Ergonomics
 - Engineering Materials
 - Applied Thermodynamics
 - Manufacturing
 - Design Optimization

Academic Qualifications

- Ph.D.: [Mechanical Engineering], VTU, 2023 (DESIGN OF WORKSTATION FOR INFORMATION TECHNOLOGY SECTOR USING ERGONOMICS APPROACH)
- M.Tech: PRODUCTION MANAGEMENT, VTU, 2008
- B.E.: Mechanical Engineering, VTU, 2005
- Postdoctoral Research: NA

Professional Experience

- Serving as Assistant Professor (Selection Grade) in Department of Mechanical Engg. R.V.College of Engineering, from Dec 2022 till date.
- Served as Assistant Professor in Department of Industrial Engineering & Management Department. R.V.College of Engineering, from August 2008 to December 2022.
- Organized Five day FDP on 3D experience from Oct14-19 conducted by EDS technologies 2019.
- Organized Two Days Seminar on Industrial Internet on Things (IIOT)-Indian Context (10-11 November 2017) Sponsored by All India Council for Technical Education (AICTE).
- Served as **Assistant Professor** in Department of Mechanical Engg. R.V.College of Engineering, from July 2018 to November 2022.
- Served as **Lecturer** in Department of Mechanical Engineering, BTL college of Engineering, from March-2007 to July 2008.
- Served as Lecturer in Department of Mechanical Engineering, BTL college of Engineering, from Feb-2008 to July- 2008.

Experience			
S.No	Institute/College/Industry	Job Title	Duration(From-To)
1.	BTL college of Engineering	Lecturer	Feb-2008 to July 2008.

Publications & Patents

Journal Publications

- 1) Gangadhar, T. G., Pavan Kumar, M. V., Bangalore Thimmaiah, M., Jagadeesha, T., Math, M. M., & Saravanakumar, G. (2025). Photocatalytic performance of silver-doped titanium dioxide (TiO₂) nanoparticles for environmental applications. Materials Technology, 40(1). https://doi.org/10.1080/10667857.2025.2502960
- **2)** Danappa, G.T., Nagaraj, C., Mahesh, K.D. *et al.* Enhancement of Material Properties of AZ80 Mg Alloy Processed by Combined Severe Plastic Deformation. *J Bio Tribo Corros* **11**, 15 (2025). https://doi.org/10.1007/s40735-024-00935-0
- 3) SundaraRaj, C.P., Math, M.M., Girisha, V.A. et al. Machinability Study of Multilayer Coated Tungsten Carbide Inserts Using Chemical Vapor Deposition Techniques. J. Inst. Eng. India Ser. D 105, 1619–1633 (2024). https://doi.org/10.1007/s40033-023-00604-5

- 4) Mahantesh, M.M., Rao, K.V.S.R., Chandra, A.C.P. *et al.* Design and modeling using finite element analysis for the sitting posture of computer users based on ergonomic perspective. *Int J Interact Des Manuf* **18**, 5875–5891 (2024). https://doi.org/10.1007/s12008-023-01383-9
- 5) Kattimani, M. A., Venkatesh, P. R., Kirthan, L. J., Math, M. M., Prapul Chandra, A. C., Hegde, R., ... Kumar, S. (2023). Design and optimization of fatigue life studies on induction hardened IN718 alloy for gas turbine applications. *Advances in Materials and Processing Technologies*, *10*(4), 3607–3619. https://doi.org/10.1080/2374068X.2023.2256121
- 6) Anjaneya, G., Sunil, S., Kakkeri, S. *et al.* Numerical simulation of microchannel heat exchanger using CFD. *Int J Interact Des Manuf* **18**, 5847–5863 (2024). https://doi.org/10.1007/s12008-023-01376-8
- 7) Kattimani, M.A., Venkatesh, P.R., Masum, H. *et al.* Design and numerical analysis of tensile deformation and fracture properties of induction hardened inconel 718 superalloy for gas turbine applications. *Int J Interact Des Manuf* **18**, 5939–5949 (2024). https://doi.org/10.1007/s12008-023-01452-z
- 8) Dokku, S.R., Shivaraj, B.W., Harshith Raj, A. *et al.* Hydrothermal Synthesis, Characterization of WO₃ Nanoparticles for Ethanol Gas Sensor Application. *J. Inst. Eng. India Ser. D* **105**, 1007–1013 (2024). https://doi.org/10.1007/s40033-023-00543-1
- 9) Math, M.M., Rao, K.V.S.R., Gururaja, M.N. *et al.* Enhanced Tribological Properties of Nano-TiO₂ Reinforced Polymer Composites Fabricated via Stereolithography. *J. Inst.* Eng. India Ser. D (2024). https://doi.org/10.1007/s40033-024-00752-2
- 10) CONCEPTUAL DESIGN OF TUBULAR CHASSIS OF A CUSTOM ELECTRIC ALL-TERRAIN VEHICLE Srujan Patil, Narayanan Girish Iyer, Rahul Srinivasan, Utkarsh Sagar, Dr. Mahantesh M. Math* and Dr. Prapul chandra AC
- 11) Dhar, Kanishka, et al. "Development of Robotic Vehicle with GPS System for Landmine Detection." *International Journal of Scientific Research in Mechanical and Materials Engineering* 8.3 (2024): 50-54.
- 12) Maruthi Prasanth B H, Ramesh S, Shivakumar Gouda P S, Naik G M, Sharma P, Jagadeesh C, Math M M and Anne G 2024 Impact of ply stacking sequence on the mechanical response of hybrid Jute-Banana fiber phenoplast composites *Mater. Res. Express* 11 055301
- 13) Jabiulla, S., Kirthan, L.J., Kumaraswamy, G.N. *et al.* Evaluation of the Reliability of Computational Fracture Mechanics Approaches for Compact Tension Specimen. *J. Inst. Eng. India Ser. D* (2024). https://doi.org/10.1007/s40033-024-00697-6
- 14) Jabiulla, S., Kirthan, L.J., Kumar, R.G. *et al.* Experimental and Numerical Evaluation of Inplane Tensile Mode Stress Intensity Factor for Edge Crack Using Empirical Formulation of Displacement Extrapolation Method. *J. Inst. Eng. India Ser. D* (2024). https://doi.org/10.1007/s40033-024-00640-9
- 15) Chakraborty, S., Math, M.M., Vijaykumar, R.S. *et al.* Analysis and Optimization of Process Parameters to Develop Nanohybrid Composites of Vanadium Pentoxide/Reduced Graphene Oxide. *J. Inst. Eng. India Ser. D* **106**, 197–205 (2025). https://doi.org/10.1007/s40033-023-00618-z

- 16) N, R., M, V.K. & Math, M.M. A parametric study and performance investigation of thermoelectric refrigeration system using computational fluid dynamics. *Int. J. Air-Cond. Ref.* **31**, 14 (2023). https://doi.org/10.1007/s44189-023-00031-x
- 17) AC, Prapul Chandra, et al. "Comparison of Mechanical Properties of ABS and ABS/Wollastonite (CaSiO." *Journal of Mines, Metals and Fuels* 71.2 (2023): 157-162.
- 18) Madhav, Sriram, et al. "Exploring Effective Approaches To Minimize Downtime In Final Assembly Line Of Braking Systems." *Journal of Namibian Studies* 33 (2023).
- 19) Mandal, Jaydeep Kumar, and Mahantesh M. Math. "Biomechanical and RULA Analysis of an Office Chair for Computer Users—A Case Study in Indian Context." *International Research Journal of Engineering and Technology* 8.1 (2021): 985-989.
- 20) Math, M. Mahantesh M., and M. N. Shruthi. "Ergonomic Evaluation of Workstations in an IT Industry."
- 21) Gupta, Udit, L. J. Kirthan, Ramakrishna Hegde, VL Jagannath Guptha, and Mahantesh M. Math. "ASSESSMENT OF FATIGUE CRACK GROWTH ON COMPACT TENSILE MILD STEEL SPECIMEN UNDER SUDDEN LOAD."
- 22) Math, Mahantesh M., Rajeswara Rao KVS, B. W. Shivaraj, Prapul Chandra AC, and Girish DP. "Modelling of Office Chair for Laptop Users from Ergonomics Perspective."

Conference Papers

- **1)** Sheebu, Lloyd, et al. "Application of value stream mapping on office furniture industry-A case study." *AIP Conference Proceedings*. Vol. 3122. No. 1. AIP Publishing, 2024.
- **2)** Mahantesh, M. Math, KVS Rajeswara Rao, and Jaydeep Mandal. "Human digital modeling and RULA analysis for an office chair user in computer work environment—A case study in Indian context." *AIP conference proceedings*. Vol. 2316. No. 1. AIP Publishing LLC, 2021.
- **3**) Ghalea, Ambresh, et al. "Design validation of high inertia generator rotor." *AIP Conference Proceedings*. Vol. 2316. No. 1. AIP Publishing, 2021.
- **4)** Math, Mahantesh M., Rajeswara Rao KVS, and Kirthan LJ. "Analysis of ergonomic office chair for information technology work environment-a case study in indian context." *Proceedings of International Conference on Sustainable Computing in Science, Technology and Management (SUSCOM), Amity University Rajasthan, Jaipur-India.* 2019.
- 5) Gogi, Vivekanand S., V. Ravishankar, Mahantesh M. Math, and M. N. Shruthi. "Design & Optimization of A Platform For Workflows In Industries—A Case Study."

Books/Book Chapters

 Dr. Mahantesh M Math, Dr. Shailaja V N., Dr. M Rajesh, Dr. Vikram N Bahadurdesai, Introduction to Human Factors and Ergonomics, AG Publishing House, 2024.

Patents[Filed / Published / Granted]

1. Flat Plate Solar Collector with Elliptical Sectioned Riser Tubes/13-04, 424857-001, 26/07/2024.

R & Grants & Consultancy Projects-NA

Ongoing & Completed Research Projects-NA

- [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-NA

- [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

1. Life Member, ISTE.

Awards & Recognitions-NA

Student Supervision

- Ph.D. Candidates: NIL
- M.Tech/M.Sc. Students: 06
- Undergraduate Research Mentees: 42

Professional Roles-NA

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

Teaching

- ME123ATE Fundamentals of Mechanical Engineering
- HSI14CT Fundamentals of Indian Constitution
- ME112GL Computer Aided Engineering Graphics

Advanced/Lab Courses:

- CADTools:3Dexperience, CATIA, Unigraphics Nx 6, SOLID WORKS 2020
- Statistical Tools: MinitabV16, Origin8.1.
- Analysis Tools: Ansys 17.0.

Professional Roles

Responsibilities

- ➤ Placement Co-coordinator for the academic year 2023.
- NBA Program Coordinator for Under Graduate in Mechanical Engineering at RVCE which led to 6 years of Accreditation from 2022-2028.

- ➤ NB A Coordinator for PG Program in Product Design and Manufacturing from academic year from 2018-2021 for Autonomous batch.
- ➤ NBA Coordinator for PG Program in Computer integrated Manufacturing, from academic year from 2021-2023.
- Website coordinator for the Industrial Engineering & Management.
- Time table officer for the Industrial Engineering & Management.
- Worked as the Unit coordinator in Exam section.
- Worked as Residential Warden

External Connect

Board of Examinations for IV Sem Mechanical Engineering for the Academic Year 2023-24. Vidyavardhaka College of Engineering (VVCE) inMysore