



Name : Dr. Roopa D N

Title : Assistant Professor

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Academic Qualification

Degree	Year	Subject	University/Institution	% of marks
Ph. D.	2023	Mechanical Engineering Sciences	Visvesvaraya Technological University, Belagavi, Karnataka, India.	Awarded
M. Tech.	2012	Engineering Management (MBA Equivalent)	Visvesvaraya Technological University, Belagavi, Karnataka, India.	82
B. E.	1995	Material Science	Karnataka Regional Engineering College, Surathkal.	58

Experience:

- Assistant Professor – Department of Mechanical Engineering, JSS Academy of Technical Education, Bengaluru, July 2015 – June 2025.
- Assistant Professor – Department of Industrial and Production Engineering, Sri Jayachamarajendra College of Engineering (SJCE), Mysuru – from July 2025 to till date.

Professional

- Subjects taught
 - Organizational Behaviour
 - Human Resource Management
 - Operations Management
 - Operations Research
 - Managerial Economics
 - Engineering Economics
 - Total Quality Management
 - Supply Chain Management
 - Research Methodology & IPR
 - Applied Probability and Statistics
 - Digital Marketing
 - Innovation and Design Thinking

Professional Memberships and Recognitions

- **Institution of Engineers** – M-1718104
- **Quality Circle Forum of India** – 49921123561
- Invited Jury Member for Chapter Convention on Quality Concepts (CCQC – 2023)

Skills

- Python programming
- Use of AI tools for increased productivity.
- Proficient in Microsoft Office Suite (Word, Excel, PowerPoint, Outlook)
- Advanced Excel skills (formulas, pivot tables, data analysis)
- Proficient in using Statistical Package for the Social Sciences (SPSS)

Funds received:

Received a fund of Rs. 6500/- for the project “Design and Development of an IOT based mobility rehabilitation device integrated with Gait pattern recording device for elderly and physically challenged.” from *Karnataka State Council for Science and Technology (KSCST)*, Indian Institute of Science, Bangalore – 560012. (2021-22)

AWARD

Received the best project award for the project “Design and Development of an IOT based mobility rehabilitation device integrated with Gait pattern recording device for elderly and physically challenged.” From VTU, Belgaum, this project was sponsored by *Karnataka State Council for Science and Technology (KSCST)*, Indian Institute of Science, Bangalore – 560012.

Publications / Conference

1. Kulkarni, S., Biradar, M., Roopa, D. N., Hemanth, B. R., Mallad, S. K., Santhosh, M., Bindushree, B. S., Bavan, S. D., Krishnamurthy, S., Pasha, N., & Ravitej, Y. P. (2026). *Synergistic role of S-glass and graphene on the wear performance of Al6061: Experimental study and explainable machine learning analysis. Canadian Metallurgical Quarterly*. Advance online publication. <https://doi.org/10.1080/00084433.2026.2668303>
2. Kulkarni, V. V., Deshpande, A., Roopa, D. N., Chethan, S., Mallad, S. K., Chandra, B. T., Bhalarao, V. Y., Srinivas, A., Bindhu Shree, B. S., Ravitej, Y. P., Tadkal, S., & Shashidhar, L. C. (2026). *Experimental and data-driven investigation of dry sliding wear behaviour in Al 6061-graphite composites. Canadian Metallurgical Quarterly*. Advance online publication. <https://doi.org/10.1080/00084433.2026.2662795>
3. Roopa, D. N. (2025). *Measuring employee commitment in textile industry: Scale development and validation*. Paper presented at the **12th International Conference on Business Analytics and Intelligence (ICBAI 2025)**, Madurai Kamaraj University, Madurai, India, December 15–17.
4. Manjunatha, B., Beloor, V., Roopa, D. N., Skanda, M. G., & Raghu, S. (2025). Prediction of tool life and surface roughness on machining EN24 steel alloy using tungsten carbide tool inserts. *Journal of Dalian University of Technology*, 32(11), 703–709. ((Scopus - Q4)
5. Roopa D N, Vanishree Beloor (2025). *The Impact of Social Media Algorithms among College Students: A Literature Review*, *Journal of Technology*, 13(9), 1074-1081, *Journal of Technology*, 13(8), 1074-1081. National Taiwan University of Science and Technology. DOI:18.15001/IOT.2025/V13I9.25.17703 (Scopus - Q4).
6. Roopa, D. N., Bharath, H. G., Bhavya, J., Abhishek, J., Chiranth, P. S., Bhoomika, P., & Akash. (2024). *Integrating artificial intelligence techniques in agricultural robotics: Revolutionizing the field of agriculture*. In *Proceedings of the International Conference on*

Data Science & Exploration in Artificial Intelligence, MAHE, 2024.
<https://doi.org/10.1201/9781003589273> (Scopus)

7. Roopa, D. N., Hitesh, N. P., Ankith, D., Vishnu, S. V. S., & Poornachandra, A. N. (2024). *Revolutionizing textile quality assurance: A comprehensive exploration of fabric defect detection through AI and machine learning. Journal of Technology, 12(8), 795-804.* National Taiwan University of Science and Technology. (Scopus - Q4).
8. Roopa, D. N., & Palled, A. (2023). *Supply Chain Innovation–5W1H.* Rivista Italiana di Filosofia Analitica Junior, 14(2)(WOS)
9. Swamy, D. R., & Roopa, D. N. (2021). *Comparative study of organizational culture, leadership style, and job satisfaction in accredited and non-accredited technical institutions. GIS.Science - Die Zeitschrift für Geoinformatik, 8(6), 638-674.* Wichmann Verlag (Scopus)
10. Roopa, D. N., Swamy, D. R., & Nanjundeswara Swamy, T. S. (2021). *Does leadership behavior mediate between organizational culture and job satisfaction? – A case study. Adalya Journal, 10(9), 93-106.* KOC University Suna & Inan Kırac Research Center for Mediterranean Civilizations (AKMED). (WOS)
11. Roopa, D. N., Keshavamurthy, P. S., Manoj, S., Kavya, B., & Ramyashree (2021). *Value stream mapping – Demonstration of lean tool to save cost in a small-scale industry. International Research Journal of Engineering and Technology (IRJET), 8(11), 1636.*
12. Devappa, T. M., Roopa, D. N., & Hiremath, S. (2018). Effect of Structural Changes on Microstructure, Mechanical Properties and Fractographical Analysis of Binary Al-12si Base Alloy. *International Journal of Research and Scientific Innovation (IJRSI), 2321-2705.*
13. Roopa, D. N., Nanjundeswaraswamy, T. S., & Swamy, D. R. (2016). An exploratory study on counterproductive work behaviors of nurses. *International Journal of Engineering and Management Research (IJEMR), 6(3), 685-692.*

(https://scholar.google.co.in/citations?view_op=list_works&hl=en&hl=en&user=ZeBp7p4AAAAJ)

Workshop/FDP Organized/Webinars Conducted

- Conducted FDP on “INNOVATIONS AND APPLICATIONS OF ENERGY MANAGEMENT AND RENEWABLE ENERGY IN BUILDINGS’ in the department of Industrial and Production Engineering, SJCE, JSSSTU, Mysuru from 1st September to 2nd September 2026
- Conducted student development program on “Geometrical Dimensioning & Tolerancing and employability skills” 27th & 28th July 2023
- Conducted student development program on “Coping with Stress for Success” on 15-12-2023
- Conducted IGNITE 2023, Department Techno Cultural fest, 02-06-2023 & 03-06-2023.
- Alumni Interaction on “Do Justice with Your Time” by Mr. Vinyas, 04-11-2023.
- Conducted student development program on “Geometrical Dimensioning & Tolerancing” 25th & 26th July 2022

- Conducted online faculty development programme (FDP) on Industrial Automation and Robotics, 1 – 13 August, 2022 in association with Electronics & ICT Academy, NIT Warangal
- Organized a webinar on “Way to wellness” delivered by Dr. Vijayalakshmi Balekundri, Prof of Pediatric Cardiology at Bengaluru Medical College & Research Institute on 5th June 2021.
- Organized a national level webinar on “Industry 4.0: Technological Transformation in Action” delivered by Dr. Narasima Venkatesh, Associate Professor, RVITM, Bengaluru on 12-06-2021.

Workshop/FDP Attended

- 1 week FDP on “Application of Artificial Intelligence & Machine Learning in 3D Printing for Next-Gen Materials and Industry 4.0/5.0 at K.S. INSTITUTE OF TECHNOLOGY from 19/01/2026 to 24/01/2026.
- Successfully completed workshop on “Forecasting using machine learning tools” by Dr Natarajan Goutam, Syracuse University, conducted by IIT, Madras.
- 2 weeks FDP on “Opportunities and challenges in Entrepreneurship” from 15-03-2021 to 27-03-2021 at JSSATE STEP, Bengaluru.
- 1-week workshop on “Advanced ICT tools for higher education” from 13th to 17th Sept 2021 at RVCE, Bengaluru.
- 1-week AICTE ATAL FDP on “Non-destructive testing and evaluations” from 26th to 30th July 2021 by NIT, Srinagar.
- 1 week FDP on “Inculcating universal human values in technical education” from 26th to 30th Oct 2020 by AICTE.
- 1-week FDP on “Tools and Techniques for Data Analysis in Academic Research” from 20th to 24th July 2020 by MSRIT, Bengaluru.
- 2 weeks FDP “Recent development and challenges in Materials and Manufacturing Process – RDCMMP 2018” from 01-01 2018 to 13-01-2018