

C. POORNIMA

Affiliation (Assistant Professor, Dept of Mechanical Engineering, SIT)

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Education

Sl. No.	Degree	Year	Institute	Specialization
1	PhD	2023	Siddaganga Institute of Technology, Tumakuru	Polymer Materials
2	M.Tech	2012	M.S. Ramaiah Institute of Technology, Bengaluru	Manufacturing Science
3	BE	1998	Siddaganga Institute of Technology, Tumakuru	Industrial Engineering & Management

Professional Experience

Sl. No.	Date (from-to)	Designation	Organization
1	Aug 2011 to till date	Assistant Professor	Siddaganga Institute of Technology, Tumakuru
2	Aug 2010 - Jun 2011	Lecturer	Siddaganga Institute of Technology, Tumakuru
3	Aug 2007-June 2008	Lecturer	Shridevi Institute of Technology, Tumakuru
4	Sep 2001- June 2004	Guest Lecturer	National Institute of Technology, Mysuru

(Please fill in reverse order. Current designation should be at the top)

Positions held

Department Library Coordinator from 2024

College magazine committee co-coordinator from 2024

Manufacturing Process Lab Coordinator from 2024

Coordinator for Department Test from 2023 to 2024

Courses Taught

Undergraduate Courses

- Manufacturing Process-I [6]
- Manufacturing Process-II [3]
- Rapid Prototyping [1]
- Metrology & Measurements [6]
- Computer Integrated Manufacturing [1]
- Foundry Technology [1]
- Engineering Economics [3]
- Metal Casting & Joining Processes [2]
- Machine Tools & Machining Processes [1]
- Management & Entrepreneurship [4]
- Fundamentals of Geometric Dimensioning & Tolerancing [2]
- Introduction to Mechanical Engineering [3]
- Introduction to Virtual Reality [1]
- Research Methodology & IPR [1]
- Indian Knowledge System [1]

Research Areas

- Advanced Polymer Materials
- Development and Characterization of Hybrid Composites

Publications

Journals

- C. Poornima, C. E. P. Sheshadri, and U. S. Mallik, “Effect of PP and PP/MWCNT-COOH Nanocomposites on Mechanical Properties,” *AIP Conf. Proc.*, vol. 2204, no. 040018, Jan. 2020. [Online]. Available: <https://doi.org/10.1063/1.5141591>
- C. Poornima, U. S. Mallik, A. G. Shivasiddaramaiah, N. Pushpalakshmi, and B. S. Puneeth, “Evaluation of Wear Characteristics of PP/MWCNT Nanocomposites,” *Mater. Today Proc.*, vol. 46, pt. 7, pp. 2477–2482, Jan. 2021. [Online]. Available: <https://doi.org/10.1016/j.matpr.2021.01.404>
- C. Poornima, U. S. Mallik, and S. Srinivas, “Influence of Basalt Fiber and Maleic Anhydride on the Mechanical and Thermal Properties of Polypropylene,” *Polym. Compos.*, vol. 44, no. 1, pp. 57–68, 2022. [Online]. Available: <https://doi.org/10.1002/pc.27026>
- C. Poornima, U. S. Mallik, and S. Suresh, “Thermal and Mechanical Characterization of Polypropylene/Basalt Fiber/Ethylene Propylene Diene Monomer Rubber Hybrid Composite,” *Mater. Res. Express*, vol. 10, no. 025302, pp. 1–11, 2023. [Online]. Available: <https://doi.org/10.1088/2053-1591/acb63f>

- [5] C. Poornima and T. V. Vineeth Kumar, “Characterizing Polylactic Acid/Basalt Fiber Composite: Synthesis, Characterization, and Mechanical Property Evaluation,” *Res. Eng. Struct. Mater.*, 2024. [Online]. Available: <https://doi.org/10.17515/resm2024.279me0512rs>

Conference Proceedings

- Poornima C., and U. S. Mallik, “Effect of Metal-Mold Interface Heat Flux on the Tribological Behavior of Aluminum Boron Carbide Composites,” in *Proc. Int. Conf. Advances in Tribology (ICAT14)*, NIT Calicut, India, Feb. 21–24, 2014.
- Poornima C., and U. S. Mallik, “Influence of Reinforcement Particulate Size and Weight Fraction on the Wear Properties of Chill Cast Al-B4C Composites,” in *Proc. Int. Conf. Advances in Tribology (ICAT14)*, NIT Calicut, India, Feb. 21–24, 2014.
- Poornima C., and U. S. Mallik, “Study of Impact Properties of Polypropylene Nanocomposite Filled with Multiwalled Carbon Nanotube: A Review,” in *Proc. Nat. Conf. Innovative Manufacturing and Industrial Management Practices (NCIMIMP-2019)*, Dr. Ambedkar Institute of Technology, Bengaluru, India, May 24–25, 2019.
- C. Poornima, U. S. Mallik, A. G. Shivasiddaramaiah, and M. H. P., “Abrasive Water Jet Machining of Polypropylene Reinforced with Basalt Fiber: A Research Study,” in *Proc. 2nd Int. Conf. Industrial and Manufacturing Systems (CIMS-2021)*, Nov. 11–13, 2021.