

## C. POORNIMA

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

Contact: 9739207384

Email: poornimac@sit.ac.in

Vidwan ID: 91183

Scopus ID: 57214679598

OrcID: 0000-0002-8561-9544

Faculty ID: SITS0536



### 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-B<sub>4</sub>C 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.