



Faculty Profile

Brief Profile

Anupama Venkatesh Joshi is an Assistant Professor in the Department of Chemical Engineering at RV College of Engineering. With academic qualifications in Chemical Engineering and Intellectual Property Rights, she is currently pursuing a PhD on heat transfer nanofluids for solar thermal power plants. Her professional journey spans eight years in industry including her roles in process engineering, consulting and training. She also serves as a technical advisor at TrashCon Labs, while co-founding Anuna Labs, an e-waste recycling startup. Her interests include nanotechnology, computational fluid dynamics, chemical process design, and waste management. She has delivered invited lectures at academic and industrial forums and balances her professional life with personal passions such as playing the Veena, studying ancient Kannada inscriptions.

Personal Information

- **Name:** Anupama V Joshi
- **Designation:** Assistant Professor
- **Department:** Chemical Engineering
- **Email:** anupamavj@rvce.edu.in
- **Phone:** 080-68188440

Google Scholar / ResearchGate / LinkedIn: <https://www.linkedin.com/in/anupama-joshi-97366a4b/>
ORCID: <https://orcid.org/0000-0001-8804-390X>

Domain of Expertise

Research Focus

- **Primary Area:** Thermal energy storage, E-waste recycling
- **Allied Areas:**
 - Nanomaterials, Computational Fluid Dynamics

Academic Qualifications

- **Ph.D.:** Chemical Engineering, Visvesvaraya Technological University, (Pursuing)
- **M.Sc./M.Tech:** [Chemical Engineering], Visvesvaraya Technological University, 2015
- **B.E./B.Tech:** Chemical Engineering, Visvesvaraya Technological University, 2007

Professional Experience

Experience			
S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	RV College of Engineering	Assistance Professor	Sept 2015 - Present
2.	Magnus Global Tech	Consultant (Process Engineering)	November 2011 – August 2015
3	Infosys Technologies Limited	Senior Software Engineer	July 2007 – Sept 2010

Publications & Patents

Journal Publications

1. Joshi, A.V., Shastry, K., Velur, G. *et al.* Nanoparticle Doped Polymers for Radiation Shielding: A Review. *Korean J. Chem. Eng.* **41**, 2985–3003 (2024). <https://doi.org/10.1007/s11814-024-00256-5>
2. Glen Cletus DSouza, Ryna Shireen Sheriff, Varun Ullanat, Aniruddh Shrikrishna, Anupama V. Joshi, Lingayya Hiremath, Keshamma Entoori, Fungal biodegradation of low-density polyethylene using consortium of *Aspergillus* species under controlled conditions, *Heliyon*, Volume 7, Issue 5, 2021, e07008, ISSN 2405-8440, <https://doi.org/10.1016/j.heliyon.2021.e07008>
3. AV Joshi, V Kallur, Analysis of Vertical Thermosyphon Reboiler using CFD, *RVJSTEAM*, Volume 1, 2023

Conference Papers

1. Anupama V Joshi, Vinod Kallur, "Enhancement of specific heat capacity of silica nanofluids synthesized in nitrate-nitrite ternary salt for concentrated solar power applications" *International Conference on Thermo-fluids and System Design (ICTFSD)*, 2024.
2. K R Sathya Krishna , Sameer Kulkarni, Khushi Shrivastava, Devendhu Thattat, Anupama V Joshi, R Suresh, Vinod Kallur, “ Synthesis and Characterization of High ERBP Borate Ester for Automobile Brake Fluid Applications” , *IChE-CHEMCON 2023- An International Conference on Energy Transition: Challenges and Opportunity*.
3. Gagana Velur, Bhoomika R Holla, Anupama V Joshi, Karthik Shastry, “ Nanodoped polymers for radiation shielding applications” , *IChE-CHEMCON 2023- An International Conference on Energy Transition: Challenges and Opportunity*.

Books/Book Chapters

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

Patents [Filed / Published / Granted]

Granted:

1. A segregation unit for a solid waste management system and a method of segregating

thereof, 329796, DoF ; 24/08/2017, DoG: 21/01/2020

Published :

1. Synthesis of Copper Nanoparticles from Copper Recovered from E-waste, 202341024905, 31/03/2023. (Published on 16/06/2023)

Filed:

1. Method for synthesizing copper micro powder from E-waste ,202541000960, Date of filing – 04/01/2025

R & Grants & Consultancy Projects

Ongoing & Completed Research Projects

- **Study of Heat Storage Capacity of Heat Transfer Fluids in Solar Thermal Power Plants using Nanoparticles** – Funding Agency: DST –SERB, Duration: [2018–2022], Role: PI.

Ongoing & Completed Consultancy Projects

- **Development and design of a process to synthesize borate ester for brake fluid applications**– Funding Agency: REFSOL International Pty Ltd, South Africa Duration: [2022–2025], Role: PI.
- **Basic engineering design of 1MLD and 3MLD sewage treatment plant**– Funding Agency: Supreme Water Works, Bengaluru, Duration: 2022–2023, Role: PI.
- **Desulphurization of fuel oils**– Funding Agency: Mitahara International Pvt Ltd, Duration: 2025–2028, Role: PI.

Professional Memberships

- Life member of Indian Institute of Chemical Engineers

Student Supervision

- M.Tech/M.Sc. Students: 03
- Undergraduate Research Mentees: 09

Professional Roles

- **Industry Advisor:** Trashcon Labs
Anuna Labs

Teaching

Core Courses:

- CH124ATD – Global Climate Change

Advanced/Lab Courses:

- Heat Transfer Lab

Professional Roles

Responsibilities

- **Academic:** Placement Coordinator – Chemical Engineering
- **Administrative:** Lab-in-charge – Momentum Transfer Laboratory
Transport Phenomena Laboratory