

Faculty Profile

Personal Information

- **Name:** Dr. Sushma M Puranik
- **Designation:** Assistant Professor
- **Department:** Applied Science and Humanities (Mathematics)
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Google Scholar: <https://scholar.google.com/citations?user=Bp2DC-QAAAAJ&hl=en>

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Domain of Expertise

- Linear Algebra
- Discrete Mathematical Structures
- Numerical Methods and MATLAB Simulation
- Probability and Statistics
- Differential Calculus

Research Focus

- **Primary Area:** Fluid Mechanics, Analytical and Numerical Solutions of flow, Heat and Mass Transfer in a doubly connected region,

Academic Qualifications

- **Ph.D.:** Mathematics, VTU, 2023
- **M.Sc.:** Mathematics, Bangalore University, 2011
- **B.Sc. :** Mathematics, Electronics and Computer Science, 2009

Professional Experience

Experience			
S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	RV institute of Technology and Management	Assistant Professor	17th Oct 2022 – Till Date

2.	Vemana Institute of Technology	Assistant Professor	July 2019 – December 2020
3.	Nitte Meenakshi institute of Technology	Assistant Professor	July 2012 – December 2018
4.	ACS college of engineering	Lecturer	September 2011 – January 2012

Publications & Patents

Journal Publications

1. Sushma M Puranik, Indira Rama Rao, K.R. Sreegowrav, “Flow and heat transfer in eccentric annulus”, Journal of Engineering Mathematics, 127, No. 21, 2021, <https://doi.org/10.1007/s10665-021-10103-9>
2. Sushma M Puranik, Indira Rama Rao, K.R. Sreegowrav, “Effect of Heat Transfer on Newtonian Flow Between Concentric Elliptical Regions”, International Journal of Heat and Technology, Volume 39, No. 3, 2021. <https://doi.org/10.18280/ijht.390339>.
3. Sushma M Puranik, Indira Rama Rao, K.R. Sreegowrav, Fehmi Gamaoun, Umair Khan, Sayed M. Eldin, Konduru Sarada, Jasgurpreet Singh Chouhan, Abdulkafi Mohammed Saeed, “Effect of heat transfer on peristaltic flow of Newtonian fluid through eccentric cylinders”, Case Studies in Thermal Engineering, Volume 45, 102912, 2023, ISSN 2214-157X, <https://doi.org/10.1016/j.csite.2023.102912>.
4. Sushma M. Puranik, R. Indira, K.R. Sreegowrav, Koushik V. Prasad, Fehmi Gamaoun, K.V. Nagaraja, R. Naveen Kumar, Raman Kumar, The unsteady diffusive mass transfer in doubly connected region bounded by concentric ellipse, Ain Shams Engineering Journal, Volume 15, Issue 12, 2024. <https://doi.org/10.1016/j.asej.2024.103113>.
5. K.R. Sreegowrav, R. Indira, Sushma M. Puranik, S. Jagadeesha, S.J. Vishwanatha, K. Ganesh Kumar, Numerical study of bioheat transfer in a vascular bed with counter-flow mechanisms, Case Studies in Thermal Engineering, Volume 67, 105811, 2025. <https://doi.org/10.1016/j.csite.2025.105811>

Books/Book Chapters

1. Book chapter titled “Analytical Study of Peristaltic Flow in a Doubly Connected Region with Heat Transfer Effects” by Sushma M Puranik, Indira Rama Rao, Sreegowrav K R, chapter 7, Scientific Research: New Technologies and Applications Vol. 9, BP international, India-UK, 2024.

Print ISBN: 978-93-48388-71-1, DOI: <https://doi.org/10.9734/bpi/srnta/v9/>

Awards & Recognitions

- Excellent performer from RSST from 3 consecutive years(2022-23, 2023-24, 2024-25)

Teaching

Core Courses:

- Linear Algebra
- Probability and statistics
- Numerical Methods
- Calculus and Linear Algebra
- AV-Mathematics III for ECE stream
- Mathematics- 1 and Mathematics- 2 for CSE stream

Responsibilities

- **Academic:**
- SLCM Co-Ordinator
- Website Co-Ordinator from AS&H department
- NDLI Club Co-Ordinator
- Women's Empowerment Cell Co-ordinator, AS&H department