K. S. SCHOOL OF ENGINEERING & MANAGEMENT

15, Mallasandra, Off. Kanakapura Road, Bengaluru-560109, Karnataka, INDIA.

Faculty Name	Dr Pavithra K M	
Designation	Assistant Professor	
Educational Qualification	M.Sc. Ph.D.	
Experience in Years	Teaching: 11years 6months	
Areas of Interest	▪ Fluid Dynamics ▪ Heat and Mass Transfer ▪ Nanofluids ▪ Bio fluids	
E-mail	pavithrakm@kssem.edu.in	

Educational Details

Examination/ Degree	College / University	Year of Passing
UG	Gulbarga University	2009
PG	Kuvempu University	2011
B.Ed.	Dharwad University	2013
PhD	REVA University	2025

Publications

Journal Publications:

1. "Thermal Radiation and Mass Transfer Analysis in an Inclined Channel Flow of a Clear Viscous Fluid and H2O/EG-Based Nanofluids through a Porous Medium." **Sustainability** Vol 15, no. 5, pp 4342, 2023(28th Feb 2023), ISSN 2071 -1050, H index 136, **Impact factor 3.889, Q1**, Scopus, SCI.

2. “The Impacts of Shape Factors in a Chemically Reacting Two-Passage Vertical Channel Filled with Kerosene based Graphene Oxide and Mos2 Mixture in a Porous Medium”, **Results in engineering**, Vol 18, 101050, pp 1-18, 2023(27th March 2023), ISSN 2590-1230, H index 15, **Impact factor 4.059**, **Q2**, SCI, Scopus.

3.“A free convective two-phase flow of optically thick radiative ternary hybrid nanofluid in an inclined symmetrical channel through a porous medium”. **Symmetry**, Vol 15(8), 1615,2023(21st August 2023), ISSN 20738994, H-index 76, Impact factor 2.7, **Q2**, Scopus, SCI.

4. Heat Transfer Analysis of MHD Oscillatory SWCNT/MWCNT-H2O Hybrid Nanofluid Flow in a Channel. **ZAMM-Journal of Applied Mathematics and Mechanics/Zeitschrift für Angewandte Mathematik und Mechanik**, e202300366, ISSN 00442267, 15214001, H index 56, **Q2**, Scopus, WoS, SCIE.

5. Dynamics of activation energy in natural convective radiative hybrid nanofluid flow through vertical porous channel with an aligned magnetic field, **The European Physical Journal Plus**, H index 84, **Q2**, Scopus, WoS,

6. “Electromagnetic mixed convective flow of dusty hyperbolic tangent hybrid nanofluid over a stretching surface: A quadratic regression analysis using RSM”, **International Journal of Thermofluids**, 2024, H-index 34,100803, **Q1**, Scopus.

7. Magnetized Electroosmotic Drug Delivery of Au-SiO2 Nanocarriers through Blood-based Jeffrey Hybrid Nanofluid in a Microchannel: Caputo Fabrizio Derivative Modeling, **Heliyon,** H index 88, **Q1,** Scopus, WoS.

8. "Hybrid nanofluid flow over a vertical plate through porous medium in a conducting and chemically reacting field with radiation absorption and variable suction**."** ***Results in Engineering*** **24 (2024): 103070**, **Q1**.

9. Impacts of Shape Factors on Conducting Field and oscillatory thermal variations into an Optically Thin Radiant Unsteady Hybrid Nanofluid in a Channel. ***Journal of Porous Media*****,** ***28*****(6)**, H index-43, **Q2**.

10. Thermal scrutinization of MHD Darcy–Forchheimer flow of hybrid nanofluid over a stretching sheet with Richardson number and quadratic thermal radiation: hyperbolic tangent model. ***Multiscale and Multidisciplinary Modeling, Experiments and Design*****,** *8*(3), 171, H index 14, **Q3**.

Awards

Best poster presentation award for “The impacts of Shape Factors in a chemically reacting two passage channel filled with Kerosene based graphene oxide and MoS2 mixture in a porous medium” at the international conference on Global trends in applied sciences Medical and Health sciences (ICGTAMH-202 from 28-29 October 2022.

Other Accomplishments

CONFERENCE AND WORKSHOPS ATTENDED:

Conferences:

1.Presented a paper entitled, "Thermal Radiation and Mass Transfer Analysis in an Inclined Channel Flow of a Clear Viscous Fluid and H2O/EG-Based Nanofluids through a Porous Medium", **xxx congress of Aptsms & International Conference on Mathematics & its Relevance to Science and Engineering (icmrse-2022) Osmania University, Hyderabad-500007 during 12-14 march 2022.**

2. Presented a paper entitled "Heat and mass transport analysis in radiative chemically reactive two-phase flow of Kerosene – GO and Kerosene –GO +MoS_2 through a porous medium" at International conference on recent developments in Mathematics **Canadian University Dubai (UAE) online during August 24-26, 2022.**

3. Presented a paper titled "Thermal Radiation and Mass transfer Analysis in an Inclined Channel flow of a Clear Viscous fluid and H_2O/EG based Nanofluids Through a Porous Medium" at the third **International Conference on Recent Trends in Applied and Computational Mathematics (ICRTACM-2022), REVA university, Bengaluru on 10th and 11th of October 2022.**

4. Presented a poster titled "The impacts of Shape Factors in a chemically reacting two passage vertical channel filled with Kerosene based graphene oxide and MoS_2 mixture in a porous medium" at the **second international conference on Global trends in applied sciences Medical and Health sciences (ICGTAMH-2022), held from 28-29 October 2022.**

5. Presented a paper entitled "The radiation and chemical reaction effects on two-phase flows of nanofluids and hybrid nanofluids in a porous medium" at **REVA research Conclave-2022 held on 16th and 17th December 2022.**

6. Presented a paper entitled "Heat transfer analyses of MHD oscillatory SWCNT/MWCNT-H_2O hybrid nanofluid flow in a channel" at the **International Conference on Modelling, Simulation, and Optimization of Energy Systems held at Canadian University, UAE during June 17-18, 2023.**

7. Presented a paper titled "The impacts of Shape Factors in a chemically reacting two passage vertical channel filled with Kerosene based graphene oxide and MoS_2 mixture in a porous medium" at the International Conference on **Innovations and Developments in Mathematical Sciences and Technology held at Sri Krishnadevaraya University, Ananthapuram, A.P during 28th to 30th June.**

8. Presented a paper titled "A free convective two-phase flow of optically thick radiative ternary hybrid

nanofluid in an inclined symmetrical channel through a porous medium" in **Fourth International Conference on Recent Trends in Applied and Computational Mathematics-ICRTACM-2023"** held on 30th & 31st October 2023 organized by department of mathematics., REVA University, Bengaluru.

9. Presented a paper titled "Magnetized Electroosmotic Drug Delivery of Au-SiO_2 Nanocarriers through Blood-based Jeffrey Hybrid Nanofluid in a Microchannel: Caputo Fabrizio Derivative Modeling" in **ICRTACM-2024 held on 7th and 8th of November 2024**, organized by department of mathematics., REVA University, Bengaluru.

10. Presented a paper titled "Magnetized Electroosmotic Drug Delivery of Au-SiO_2 Nanocarriers through Blood-based Jeffrey Hybrid Nanofluid in a Microchannel: Caputo Fabrizio Derivative Modeling" in **NCMIA-2024 held on 22nd and 23rd of December 2024**, organized by department of mathematics, S.V. University, Tirupati, A.P.

WORKSHOPS:

1. Attended a faculty development program on **"Computational fluid dynamics using Ansys-Fluent" organized by the School of Mechanical Engineering, REVA University.**

2.Attended a workshop on Basic simulations of **"Thermo-fluid problems using Finite element method" organized by the Department of Mathematics, SVC Engineering College Tirupati on 13.12.2022.**

3. Attended a workshop on **"Computational techniques in fluid dynamics" organized by the Department of Mathematics, Bangalore City University, on January 24-25, 2023.**

4. Attended an online national workshop **on "Computational fluid dynamics tools-COMSOL and ANSYS Fluent" organized by the Division of Mathematics, Advanced School of Sciences, VIT, Chennai on the 27th and 28th of March 2023.**

5. Attended the Online short-term course on **Mathematical Modeling and Numerical simulations(MMNS-2023) held on July 24-28,2023 organized by the Department of Mathematics, Dr. B R Ambedkar National Institute of Technology Jalandhar, Punjab, India**.

6. Attended a workshop on "Computational Fluid Dynamics Simulation using COMSOL Multiphysics Software" **from 8-9-2023 to 15-9-2023 organized by the Department of Mathematics, REVA University, Bengaluru.**

7. Attended an online FDP on "International Faculty Development Programme on Recent Advances in Mathematical Modelling & Optimization" held from 08-01-2024 to 12-01-2024 organized by the **Department of Mathematics CSSR & SRRM Degree & PG College Kamalapuram, YSR, A.P., India. -516289.**

Contact Details

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