

Biography of Dr. Ashish Kumar Shukla

Dr. Ashish Kumar Shukla is a distinguished academician and researcher in the field of Mathematics, specializing in **Fluid Dynamics**, **Functional Analysis**, **Abstract Algebra**, **Topology**, **Real and Complex Analysis**, and **Integral Equations**. He has made significant contributions to the study of Magnetohydrodynamic (MHD) flows, with a deep research focus on **Soret-Dufour effects**, **chemical reactions**, **Hall currents**, and **radiative heat transfer** in porous media.

Dr. Shukla began his teaching career at Raja Sri Krishna Dutt PG College, Jaunpur on 11th August 2017, where he served with dedication until 3rd June 2025. From 4th June 2025, he has been serving as an Assistant Professor in the Department of Mathematics at D.B.S. College, Kanpur, continuing his commitment to teaching and research excellence.

He has mentored **four Ph.D. scholars** at **Veer Bahadur Singh Purvanchal University, Jaunpur**, all of whom have successfully worked on cutting-edge topics in the domain of MHD fluid dynamics. His students have gone on to establish themselves in teaching and academic research roles.

Dr. Shukla is proficient in **C programming, Mathematica, Matlab, and LaTeX**, which he actively uses in his computational and numerical research. His research outputs are widely recognized and published in reputed **peer-reviewed and refereed international journals**.

Dr. Shukla serves as the *Editor-in-Chief* of the following peer-reviewed, multidisciplinary international journals:

- 1. **International Journal of Science and Social Science Research** (ISSN: 2583-7877) https://www.ijsssr.com/j
- 2. **International Journal of Educational Innovations and Research** (ISSN: 3049-4052) https://www.shimej.com/ijeir
- 3. **International Journal of Science and Engineering Science Research** (ISSN: 3049-2793) https://www.shimej.com/ijsesr

These journals are dedicated to the advancement of research and innovation across diverse disciplines and are indexed in reputed databases. Dr. Shukla's leadership ensures academic rigor, quality peer review, and ethical publishing standards in all three journals.

Ph.D. Supervision (Awarded/Submitted)

1. Aneesh Jayshwal

Title: Study of Flow problems of Viscous and Viscoelastic fluids

Awarded: 07-10-2024 | University: Veer Bahadur Singh Purvanchal University, Jaunpur Post-PhD Placement: Teaching

2. Yogendra Kumar Dwivedi

Title: Numerical investigation of some MHD flow problems *Awarded:* 20-05-2025| *University:* Veer Bahadur Singh Purvanchal University, Jaunpur *Post-PhD Placement:* Teaching

3. Shubham Dubey

Title: Numerical study of Some MHD flow problems

Awarded: 26-09-2024 University: Veer Bahadur Singh Purvanchal University, Jaunpur

Post-PhD Placement: Teaching

4. Santosh Kumar Chauhan

Title: Some Physical or Chemical effects on MHD flow problems *Status:* Submitted (05-08-2024) | *University:* Veer Bahadur Singh Purvanchal University, Jaunpur

Research Publications (Peer-reviewed Journals)

Below is a selection of Dr. Shukla's notable research publications. All articles are peer-reviewed and explore analytical and numerical studies of MHD flow, with varying physical parameters and fluid models.

1. Soret-Dufour Effect on Casson Flow Past Infinite Plate through Porous Medium with Hall Current

International Journal of All Research Education & Scientific Methods

ISSN: 2581-7175

Link

2. Numerical simulation of changes in Soret-Dufour number, Radiation, chemical reaction and viscous dissipation on unsteady MHD flow past an inclined porous plate embedded in porous medium with heat generation or absorption

International Journal of Advances in Applied Mathematics and Mechanics

ISSN: 2347-2529

Link

3. Numerical investigation for viscoelastic fluid flow past a vertical porous plate with variable suction under the impact of Soret Dufour effects, second-order chemical reaction and radiation

International Journal of Statistics and Applied Mathematics

ISSN: 2456-1452

Link

4. Analysis of Unsteady MHD Flow of Jeffery Fluid in A Porous Enclosure Bounded By A Vertical Oscillating Cylindrical Surface

International Journal of All Research Education & Scientific Methods

ISSN: 2455-6211

Link

5. COMBINED EFFECTS OF SORET-DUFOUR, WITH HIGHER ORDER CHEMICAL REACTION IN MHD CASSON FLUID FLOW WITH VISCOUS DISSIPATION THROUGH VERTICAL PLATE WITH HEAT SOURCE /SINK

International Journal of Progressive Research in Engineering Management and Science

ISSN: 2583-1062

Link

6. A Numerical Simulation of Soret-Dufour effect on Unsteady MHD Casson Fluid Flow past a vertical plate with Hall current and viscous dissipation

International Journal of Chemistry, Mathematics and Physics

ISSN: 2456-866X

Link

7. Soret-Dufour effect and higher-order chemical reaction on MHD Casson fluid flow past over a vertical plate with heat source/sink

Asia Mathematika ISSN: 2457-0834

<u>Link</u>

8. Effects of Soret-Dufour and radiation absorption with viscous dissipation on an unsteady MHD Casson Fluid Flow past a vertical plate through porous medium

International Journal of Research in Engineering and Science

ISSN: 2320-9364

Link

9. Numerical Investigation Of Soret-Dufour Effect And Hall Current On Casson Flow Through Porous Medium

Journal of Emerging Technologies and Innovative Research

ISSN: 2320-2882

Link

10. Second order chemical reaction on MHD flow past a vertical porous plate with Soret and Dufour effects

International Journal of Advances in Applied Mathematics and Mechanics

ISSN: 2347-2529

Link

11. Effect of Soret and Dufour on Unsteady MHD Jerry flow past a vertical porous plate with suction and chemical reaction

International Journal for Research Trends and Innovation

ISSN: 2456-3315

Link

12. Unsteady MHD Casson Fluid Flow past a vertical plate through porous medium in presence of Soret-Dufour effect and radiation absorption with heat source/sink

Journal of Emerging Technologies and Innovative Research

ISSN: 2349-5162

Link

13. Amazing Effects of Second Order Chemical Reaction, Radiation, and Soret-Dufour on MHD Flow of Walter's B Viscoelastic Fluid Past a Vertical Porous Plate

International Journal of Mathematics And its Applications

ISSN: 2347-1557

Link

14. An Unsteady MHD Flow Past a Vertical Porous Plate Under a Variable Suction Velocity with Soret-Dufour and Second-order Chemical Reaction

International Journal of Mathematics And its Applications

ISSN: 2347-1557

<u>Link</u>

15. Soret-Dufour and Radiation Effects on Unsteady MHD Flow of Dusty Fluid over Inclined Porous Plate Embedded in Porous Medium

International Journal of Mathematics Trends and Technology

ISSN: 2231-5373

Link

16. Numerical analysis of Soret-Dufour, Radiation and chemical reaction effects on Unsteady MHD flow of Viscoelastic Dusty fluid over Inclined Porous Plate

Journal of Emerging Technologies and Innovative Research

ISSN: 2349-5162

<u>Link</u>

17. Soret-Dufour and Radiation effect on unsteady MHD flow over an inclined porous plate embedded in porous medium with viscous dissipation

International Journal of Advances in Applied Mathematics and Mechanics

ISSN: 2347-2529

Link

18. SORET-DUFOUR, RADIATION AND HALL EFFECTS ON UNSTEADY MHD FLOW OF A VISCOUS INCOMPRESSIBLE FLUID PAST AN INCLINED PLATE EMBEDDED IN POROUS MEDIUM

TWMS Journal of Applied and Engineering Mathematics

ISSN: 2146-1147

Link

19. Effects of Soret-Dufour, Hall current, radiation, chemical reaction, viscous dissipation and heat generation/absorption on MHD flow of dusty fluid over inclined porous plate

International journal of basic and applied research

ISSN: 2278-0505

20. Effect of radiation and chemical reaction on an unsteady Walter's-B viscoelastic MHD flow past a vertical porous plate

International Journal of Advances in Applied Mathematics and Mechanics

ISSN: 2347-2529

Link

21. Effects of Thermophoresis, Dufour, Hall and Radiation on an Unsteady MHD Flow past an Inclined Plate with Viscous Dissipation, Chemical Reaction and Heat Absorption and Generation

Journal of Applied Fluid Mechanics

ISSN: 1735-3572

Link

22. Soret-Dufour and Radiation Effects on Unsteady MHD Flow past an Impulsively Started Inclined Porous Plate with Variable Temperature and Mass Diffusion

INTERNATIONAL JOURNAL OF MATHEMATICS AND SCIENTIFIC COMPUTING

ISSN: 2231-5330

<u>Link</u>

23. Effects of Thermophoresis, Dufour, Hall and Radiation on an Unsteady MHD flow past an Inclined Plate with Viscous Dissipation

INTERNATIONAL JOURNAL OF MATHEMATICS AND SCIENTIFIC COMPUTING

ISSN: 2231-5330

<u>Link</u>

24. Combined effects of Soret-Dufour, Radiation and Chemical reaction on Unsteady MHD flow of Dusty fluid over inclined porous plate embedded in porous medium

International Journal of Advances in Applied Mathematics and Mechanics

ISSN: 2347-2529

Link

Dr. Shukla's work has not only advanced the theoretical understanding of fluid dynamics but has also contributed practical numerical insights into various industrial and engineering systems involving MHD flows. His commitment to excellence in both teaching and research continues to impact the academic and scientific community profoundly.