

1. Name: **Dr. Kultaran Kumari**

2. Designation: **Assistant Professor**

3. Mobile No. **7807912685**

4. **Qualification:**

- B.Ed. In 2010 from Himachal Pradesh University, Shimla.
- M.Sc. in 2012 from Himachal Pradesh University, Shimla.
- M.Phil. in 2013 from Himachal Pradesh University, Shimla.
- Ph.D. in 2020 from Himachal Pradesh University, Shimla.

5. **Awards/Fellowships:**

- Research Fellow (Under UGC Major Research Project) (from 2016-2017).
- Young Researcher Award 2022 by InSc.



5. **Membership :**

1. Himachal Mathematics Society
2. InSc - Institute of Scholars

6. **Academic Achievements:**

- HP TET 2016 and HP SET 2017.

8. **Teaching Experience : 06 years**

- Worked as Post Graduate Teacher in the Deptt. of Higher Education at Govt. Sen. Sec. School Balsa, Rohru, Distt. Shimla from 8<sup>th</sup> June 2017 to 27<sup>th</sup> Sep. 2018.
- Worked as Assistant Professor Mathematics at Government Degree College Sarkaghat Distt. Mandi Himachal Pradesh. from 28<sup>th</sup> Sep. 2018 to 07<sup>th</sup> Oct. 2022.
- Oct. 2022-till date in Department of Mathematics, Govt. College Bhoranj (Tarkwari) Hamirpur, Himachal Pradesh.
- Departmental Exam** (Financial Administration) cleared in 2022 Conducted by HIPA
- Workshops/Conferences/Seminars Attended-**12**
- Orientation Courses/Faculty induction Programmes attended -**02**
- Refresher Courses attended-**01**

9. **Research Publications-14**

- Jyoti Prakash, Renu Bala and **Kultaran Kumari**, Upper Limits to the Linear Growth Rate in Triply Diffusive Convection, Res. J. Eng. Tech., **6(1)**, (2015), 47-49.
- Jyoti Prakash, Rajeev Kumar and **Kultaran Kumari**, Linear Triply Diffusive Convection with viscosity variations, Int. J. Phys. Math. Sci. **5(1)** (2015), 186-196.
- Jyoti Prakash, Virender Singh, Rajeev Kumar and **Kultaran Kumari**, The onset of convection in a rotating multicomponent fluid layer, J. Theoretical and Appl. Mech., (Warsaw) **54(2)**, (2016), 477-488.
- Jyoti Prakash, **Kultaran Kumari**, Kanu Vaid and Renu Bala, On Exchange Principle in Rotatory Hydrodynamic Triply diffusive Convection Analogous to Stern Type in Porous Medium, H. P. U. Journal, 3(2), (2015), 180-187.
- Jyoti Prakash, **Kultaran Kumari** and Vinod Kumar, On the onset of stationary convection in double-diffusive binary viscoelastic fluid saturated

- anisotropic porous layer, *International Journal of technology* 6(2), (2016), 223-226.
- Jyoti Prakash, **Kultaran Kumari** and Rajeev Kumar, On triply diffusive convection in a Maxwell fluid layer, *Bull. Cal. Math. Soc.*, 108(5), (2016), 353-366.
  - Jyoti Prakash, **Kultaran Kumari** and Rajeev Kumar, Triple diffusive convection in a Maxwell fluid saturated porous layer: Darcy Brinkman-Maxwell model, *J. Porous Media*, 108(5), 19(10), (2016), 871–883.
  - Jyoti Prakash and **Kultaran Kumari**, On double-diffusive convection in a binary viscoelastic fluid saturated anisotropic porous layer, *Research Journal of science and technology*, 9(1), (2017), 123-126.
  - Jyoti Prakash, Renu Bala and **Kultaran Kumari**, Upper bounds for the complex growth rates in ferromagnetic convection in a rotating porous medium: Darcy-Brinkman Model, *Bull. Cal. Math. Soc.*, 109(2), (2017), 153-170.
  - Jyoti Prakash, Rajeev Kumar and **Kultaran Kumari**, Thermal convection in a ferromagnetic fluid layer with magnetic field dependent viscosity: a correction applied, *Studia Geotechnica et Mechanica (Poland)* 39( 3), (2017),39-46.
  - Jyoti Prakash, Pankaj Kumar, **Kultaran Kumari** and Shweta Manan, Ferromagnetic convection in a densely packed porous medium with magnetic field dependent viscosity revisited, *Z. Naturforsch. A, (De Gruyter, Germany)*, 73 (3), 181-190 (2018). ISSN-1865-7109.
  - Jyoti Prakash, **Kultaran Kumari**, Vinod Kumar and Vipin Sharma, On the Limitations of Complex Growth Rate in Triply Diffusive Convection in Porous Medium: Darcy-Brinkman model, *Int. J. Math. And Appl.*, 6(2–B)(2018), 369–375.ISSN: 2347-1557.
  - Jyoti Prakash, **Kultaran Kumari**, Pankaj Kumar, Rajeev Kumar and Khem Raj Sharma, Ferromagnetic Convection in a Rotating Medium with Magnetic Field Dependent Viscosity. A Correction Applied, *Technische Mechanik (Germany)* 39 (2), (2019), 190 – 201. (ISSN-0232-3869,)
  - kaka Ram , Jyoti Prakash , **Kultaran Kumari** , Pankaj Kumar , Upper Bounds for the Complex Growth Rate of a Disturbance in Ferrothermohaline convection *Studia Geotechnica et Mechanica* , 2022 ; 114-122.

#### 10. Book Published-01

- *Computation and Applied Mathematics* printed and published by Prashas Research Consulting Pvt. Ltd. Hyderabad. The ISBN no. of book is 978-93- 95699-91-4 on dated 28<sup>th</sup> October 2023.

#### 11. Paper Presentations-15

- “On Exchange Principle in Triply Diffusive Convection Analogous to Stern Type in porous medium” in NSNDMAF-2015 organized by Department of Mathematics and Statistics , Shimla organized under UGC Special Assistance Programme , DRS-II on dated 27-28 November, 2015.
- “ Upper limits to the Linear Growth Rate in Triply Diffusive Convection”, in NSAAMM-2015 sponsored by UGC, New Delhi and organized by Department of Mathematics, Sidhart Government College , Nadaun, Himachal Pradesh, India on 12<sup>th</sup> & 13<sup>th</sup> March, 2015.
- “On Double Diffusive convection in a binary viscoelastic fluid saturated anisotropic porous layer”, in NCAMS-2016 organized by Department of

Mathematics NSCBMGC Hamirpur, H.P.,India, Sponsored by UGC, New Delhi on December 21-22, 2016.

- “ On the Limitations of Complex growth rate in triply diffusive convection in porous medium: Darcy-Brinkman model”, in National Seminar on Algebra and Allied Fields, organized by Department of Mathematics and Statistics , Shimla under UGC Special Assistance Programme , DRS-II on 24<sup>th</sup> & 25<sup>th</sup> March, 2017.
- “ Triple Diffusive Convection in a Maxwell fluid Saturated Porous Layer: Darcy-Brinkman -Maxwell model”, in ICMSAS-2019 organized by Department of Mathematics NSCBMGC Hamirpur, H.P.,India, Sponsored by NBHM, Mumbai, India and DRDO, New Delhi, India on November 29-30, 2019.
- “Significance of Mathematics in Physics” State level Seminar on Importance of mathematics in other Disciplines(SLSIMOD-2021) Department of Mathematics and Internal Quality Assurance Cell(IQAC) on December 22, 2021.
- “Importance of Mathematics in the evolution of science”, in SLMDSIM-2022 Organized by Deptt. of Mathematics and IQAC NSCBMGC, Hamirpur(H.P.) December 22, 2022.
- “Contributions made by Dr. B.R.Ambedkar” in State Seminar on Life and Contributions of Dr.B.R.Ambedkar and Contemporary Issues in the Society Department of Zoology (NSCBM Govt. College , Hamirpur (H.P.)) on December 6, 2022.
- “Significance of Mathematics in Environment”, in Two days International Conference on Environmental concerns, climate change and resource management in the western himalayyas by IQAC RNTGCS, Distt. Mandi(H.P.) 5<sup>th</sup>-6<sup>th</sup> June 2023.
- “ An overview of Education in Tribal areas of Himachal Pradesh”, in International Conference on Tribal in India: Issues, Challenges and the Road Ahead by Govt. College Pangi in collaboration with Himalayan Council for Scientific Research (HCSR) 1st -2nd and 4 th October 2023
- “Role of Education in the Development of Tribal Areas”, in Himachal Pradesh University, University Regional Centre Dharamshala(H.P.), International Hybrid Conference on History and Culture of Himalayan Tribes: Statues and Continuity in coloboration with GFSRD October 27- 28, 2023
- “A Review on the Applicability of Mathematical Modeling for the Wastewater Treatment Process”, in National Conference on BIODIVERSITY LOSS AND CLIMATE CHANGE: TWO FACES OF THE SAME COIN Organized by Department of Bio-Sciences, Rabindranath Tagore Govt. College Sarkaghat, Distt. Mandi(H.P.) 3rd December, 2023
- “Culture and Civilization of Himachal Pradesh: An Overview” in 2nd International Conference on English Language Literature and Culture by The Achievers Foundation of English Studies (TAFFES), Bhadohi, Uttar Pradesh, India in collaboration with Madan Mohan Malaviya University of Technology, Gorakhpur, UP and LJNH Govt. Girls College, Kotla Khurd, Una,(H.P.) on 02-03 December 2023.
- “Healthcare in India: Recent Trends” in National Seminar on Environmental Issues and Public Health Department of Botany and Zoology (Government College Bhoranj(Tarkwari),Hamirpur (H.P.)) on 27<sup>th</sup> & 28<sup>th</sup> · 2023.
- “Ferromagnetic Convection in a rotating medium with Magnetic Field Dependent Viscosity:A Correction applied” in 2<sup>nd</sup> International Conference on Mathematics in Space and Applied Sciences (ICMSAS-2023) Department of Mathematics

(NSCBM Govt. College , Hamirpur(H.P.)), Sponsored by DRDO, New Delhi on March 03-04, 2023.

- **Poster presentation** on “Energy Conservation”, in National Seminar on Electricity Conservation, Safety Measures and Consumer Rights Awareness in Context to Domestic Users of Himachal Pradesh, H.P.State Electricity Board (LTD.) organized by RNTGC Sarkaghat , Distt. Mandi(H.P.) on December 11, 2021

**13. Technical Session Chaired : 02**

- National Seminar on Environmental Issues and Public Health Department of Botany and Zoology (Government College Bhoranj(Tarkwari),Hamirpur (H.P.)) on 27<sup>th</sup> & 28<sup>th</sup> , 2023.
- National Seminar on Electricity Conservation, Safety Measures and Consumer Rights Awareness in Context to Domestic Users of Himachal Pradesh, H.P.State Electricity Board (LTD.) organized by RNTGC Sarkaghat , Distt. Mandi(H.P.) on December 11, 2021.

**14.** Reviewer of InSc International Publishing Platforms and also for Technical Events under the stream : Basic and Medical Sciences.