

Bio - Data

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Address: Department of Mathematics and Statistics, H.P. University,
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Designation:

Professor

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EDUCATIONAL QUALIFICATIONS

Sr. No	Name of the Examination	Board/University	Year of Passing	Division/Position
1	Matriculation	H. P. Board, Shimla	1983	First
2	Graduation (Non-Medical)	H. P. University, Shimla	1987	First
3	Post Graduation (Mathematics)	H. P. University, Shimla	1989	First
4	M. Phil (Mathematics)	H. P. University, Shimla	1990	First(Gold Medal)
5	Ph. D	H. P. University, Shimla	1993	
Title of the M. Phil-Dissertation		A modified theory of thermal instability of a liquid layer heated underside.		
Title of the Ph. D-Thesis		Some Problems in hydrodynamic and hydromagnetic stability		

FELLOWSHIPS

Sr. No.	Name of the Fellowship	Institution	Period
1.	Senior Research Fellow	CSIR, New Delhi	04/01/1992 - 28/02/1995
2.	Post Doctor Fellow	NBHM, Mumbai	01/03/1995 - 04/08/1996

TEACHING EXPERIENCES: 20years.

Sr. No.	Name of the post held	Department/Institution	Time Period/Duration
1	Lecturer in Mathematics	D.A.V. College Daultapur Chowk, Distt. Una (H.P.)	5 th August, 1996 to 4 th August 1999.
2.	Lecturer in Mathematics (College cadre)	Himachal Pradesh Govt. Deptt. of Higher Education	5 th August, 1999 to 2 nd March,2010
3	Reader (Mathematics)	H. P. University, Shimla, Department of Mathematics & Statistics	2 nd March, 2010 to 4 th Aug. 2011.
	Associate Professor (Mathematics)	H. P. University, Shimla, Department of Mathematics & Statistics	5 th Aug. 2011 till date

RESEARCH PROJECT (completed):**Major Research Project (UGC, N. Delhi)**

Title of the Project: Linear Stability Analysis of Ferrofluids in Porous and Non Porous Medium.

Time Period of the Project: 03 years.

Total Amount: Rs. 10,90000/- (Rupees Ten Lakhs and Ninety Thousand only)

RESEARCH AND GUIDANCE

Research Papers	Published	Communicated
96	94	02

Leading Journal in which papers are published:

1. J. Magnetism and Magnetic Materials, Holand (Elsevier) (I. F. 3.046) (03 papers)
2. J. Mathematical Analysis and Applications (USA) (Elsevier ,I. F. 1.138) (03 papers)
3. Zeitschrift f`ur angewandte Mathematik und Physik (ZAMP) (Journal of Applied Mathematics and Physics (Springer). (Impact Factor 1.711).
4. Thermal Science (Serbia) (Impact Factor 1.093)
5. J. Applied Fluid Mechanics, Iran, (I. F. 1.09)
6. J. Porous Media , USA (Begell House). (I. F. 1.061) (03 papers)
7. J. Theoretical and Appl. Mech. Poland (2015). (Impact Factor 0.636)
8. Proceedings of Indian Academy of Sciences, (Springer). (I. F. 0.240)
9. Indian J.Pure and Applied Maths, (Springer). (I. F. 0.224)
10. Int. J. Fluid Mechanics Research, USA (Begell House). (03 papers)
11. J. Egyptian Mathematical Society(Elsevier).

12. Proceedings of Ind. Nat. Sc. Academy, N. Delhi (**02 papers**)
13. Proc. of Nat. Acad. Sc., Physical Sciences, India, (**Springer**). (**I. F. 0.242**) (**02 papers**)
14. International J. of Applied. Mathematics and Mechanics, Hong Kong.
15. J. Association of Arabian Universities for Basic and Applied Sc. (**Elsevier**)(**Source Normalized Impact per Paper (SNIP): 0.546**)
16. Z. fur neturfor. A, Germany.
17. Studia Geotechnica et Mechanica, Germany.
18. Bull. Cal. Math. Soc.

(a) LIST OF THE PAPER PUBLISHED

1. M.B. Banerjee, J.R. Gupta, R.G. Shandil and **Jyoti Prakash**, Breakdown of the Classical Equations and Existence of Hydrodynamic Instability in Single Diffusive Bottom Heavy Systems, J. Math. Anal. and Appl. (USA), **175**, (1993) 458-475, (**Elsevier**). (**Impact Factor 1.014**)
2. M.B. Banerjee, J.R. Gupta, R.G. Shandil and **Jyoti Prakash**, Upper Limits to the Complex Growth Rates in Thermohaline Instability, J. Math. Anal. and Appl.(USA), **167**, (1992) 66-73, (**Elsevier**). (**Impact Factor 1.014**)
3. M.B. Banerjee, J.R. Gupta, R.G. Shandil and **Jyoti Prakash**, Upper Limits to the Complex Growth Rates in Thermohaline Instability, Ganita (India) **41**, (1990) 123.
4. M.B. Banerjee, J.R. Gupta, R.G. Shandil and **Jyoti Prakash**, On Thermohaline Convection of Veronis Type, J. Math. Anal. and Appl. (USA) **179**, (1993) 327-334, (**Elsevier**). (**Impact Factor 1.014**)
5. M.B. Banerjee, J.R. Gupta, K.C. Sharma and **Jyoti Prakash**, On Thermohaline Convection of Veronis Type, Ganita (India) **42**, (1991) 81.
6. M.B. Banerjee, J.R. Gupta, R.G. Shandil, S.P. Katyal, Ajaib Singh and **Jyoti Prakash**, On the Hydrodynamic Instability of Superposed Fluids, Ganita (India), **45**, (1994) 101.
7. **Jyoti Prakash**, Ajaib Singh and Savita Sharma, Banerjee et al's Characterization Theorem in Thermohaline Convection and its Magnetorotatory Extension, Proceedings of Indian Academy of Sciences, **103**, (1993) 197-207, (**Springer**). (**Impact Factor 0.240**)
8. Ajaib Singh, **Jyoti Prakash** and Savita Sharma, Banerjee et al's Characterization Theorem in Thermohaline Convection and its Rotatory Extension, Ganita (India), **45**, (1994) 21-29.
9. **Jyoti Prakash**, A Mathematical Theorem for Thermohaline Convection of the Veronis Type with Viscosity Variations, Indian J.Pure and Applied Maths, **26 (8)**, (1995) 813- (**Springer**). (**Impact Factor 0.224**)
10. **Jyoti Prakash** and Vinod Kumar, A Mathematical Theorem for Magnetohydrodynamic Thermohaline Convection of the Veronis Type with Viscosity Variations. Published in National Conference on Advances in Mathematics and its Applications in NIT, Hamirpur (India) (2008) 112.

11. M.B. Banerjee, R.G. Shandil. **Jyoti Prakash**, Balraj Singh Bandral, Prem Lal and Vinay Kanwar, On Howard's Conjecture in Heterogeneous Shear Flows Instability of Modified S – Waves, Indian J. Pure and Applied Maths, **28 (6)**, (1997) 925, (**Springer**). (**Impact Factor 0.224**)
12. **Jyoti Prakash** and Vinod Kumar, A Characterization Theorem in Thermohaline convection in Porous Medium, Recent Advances in Continuum Mechanics and Algebra, Regal Publication(2010).
13. **Jyoti Prakash** and Vinod Kumar, On the nonexistence of oscillatory motions in Thermohaline convection of Veronis type in porous medium, J. Raj. Acad. Phy. Sc., **10(4)**, (2011) 331-338.
14. **Jyoti Prakash**, On stationary convection and oscillatory motions in ferromagnetic convection in a ferrofluid layer, J. Magnetism and Magnetic Materials, (**Elsevier**) **324**, (2012) 1523-1527. (**Impact Factor 2.357**)
15. **Jyoti Prakash** and Sanjay Kumar Gupta, A mathematical theorem in magnetorotatory thermohaline convection in porous medium, Int. J. Math. Arch., **3(12)**, (2012) 4997-5005.
16. **Jyoti Prakash**, Sanjay Kumar Gupta and Vinod Kumar, A mathematical theorem in magnetothermohaline convection in porous medium, Adv. Appl. Sc. Res., **3(4)**,(2012) 2346-2354.
17. **Jyoti Prakash** and Sanjay Kumar Gupta, Characterization of Thermohaline Convection in Porous Medium: Brinkman Model, Int. J. Eng. Res. and Appl. (IJERA), **2(6)**, (2012) 1082-1087.
18. **Jyoti Prakash** and Sanjay Kumar Gupta, A Characterization Theorem in Rotatory Thermohaline Convection of Veronis Type in Porous Medium, Res. J. Eng. Tech., **3(2)**, (2012) 133-139.
19. **Jyoti Prakash** and Sanjay Kumar Gupta, On arresting the complex growth rates in ferromagnetic convection with magnetic field dependent viscosity in a rotating ferrofluid layer, J. Magnetism and Magnetic Materials, **345**, (2013) 201–207, (**Elsevier**). (**Impact Factor 2.357**)
20. **Jyoti Prakash**, On arresting the complex growth rates in ferromagnetic convection in a ferrofluid saturated porous layer, J. Porous Media, **16(3)**,(2013)217-226, (**Begell House**). (**Impact Factor 0.807**)
21. **Jyoti Prakash** and Sanjay Kumar Gupta, On Non existence of Oscillatory Motions in Rotating Thermohaline Convection in Porous Medium: Darcy-Brinkman Model, Int. J. Phy. and Math. Sc., **4(1)**, (2013) 318-331.
22. **Jyoti Prakash** and Renu Bala, On the Characterization of Nonoscillatory Motions in Maxwell Fluid in a Porous Medium Heated from Below, Res. J. Sc. Tech., **1(1)**, (2013) 51-54.
23. **Jyoti Prakash** and Kanu Vaid, On linear growth rates in thermohaline convection with viscosity variations, Res. J. Sc. Tech., **1(1)**, (2013) 140-143.

24. **Jyoti Prakash**, On exchange of stabilities in ferromagnetic convection in a rotating porous medium, *Int. J. Fluid Mechanics Research*, **40(5)**, (2013) 391-404, (**Begell House**).
25. **Jyoti Prakash** and Sanjay Kumar Gupta, A Mathematical Theorem in Magnetorotatory Thermohaline Convection in Porous Medium: Brinkman Model, *Int. J. App. Sc. Eng. Res.*, **2(4)**, (2013) 404-415.
26. **Jyoti Prakash** and Sanjay Kumar Gupta, On Non-Existence of Oscillatory Motions in Thermohaline Convection in Porous Medium: Darcy-Brinkman Model, *Acta Ciencia Indica*, **XXXIX M(4)**, (2013) 385-396.
27. **Jyoti Prakash**, Renu Bala, Kanu Vaid, On stationary convection and oscillatory motions in Maxwell Fluid in a porous medium heated from below (The case of hydrodynamic boundary and constant flux conditions), *Proceedings of National Conference on Advances in Mathematics and its Applications.*, June 2013, NIT Hamirpur, Himachal Pradesh, India. 91-95.
28. **Jyoti Prakash**, Kanu Vaid, Renu Bala, On hydrodynamic thermohaline instability in porous medium: Darcy Model, *Proceedings of National Conference on Advances in Mathematics and its Applications.*, June 2013, NIT Hamirpur, Himachal Pradesh, India. 84-90.
29. **Jyoti Prakash** and Kanu Vaid, Characterization of magnetorotatory thermohaline instability in porous medium: Darcy Brinkman model, *Int. J. Innov. Res. Sc. Eng. Tech.*, **2(12)**, (December 2013)7266-7272.
30. **Jyoti Prakash**, Kanu Vaid, Renu Bala and Vinod Kumar, Characterization of rotatory thermohaline instability in porous medium: Darcy model, *Proceedings of the Fortieth National Conference on Fluid Mechanics and Fluid Power* December, 12-14, 2013, NIT Hamirpur, Himachal Pradesh, India. FMFP 2013-311,1161-1168.
31. **Jyoti Prakash**, Renu Bala, Kanu Vaid and Vinod Kumar, On arresting the linear growth rate of a Maxwell fluid in a porous Medium heated from below, *Proceedings of the Fortieth National Conference on Fluid Mechanics and Fluid Power* December, 12-14, 2013, NIT Hamirpur, Himachal Pradesh, India. FMFP 2013-312, 1169-1176.
32. **Jyoti Prakash**, On the characterization of non-oscillatory motions in ferromagnetic convection with magnetic field dependent viscosity in a rotating porous medium, *J. Egyptian Mathematical Society*, **22**, (2014) 286–291, (**Elsevier**).
33. **Jyoti Prakash**, On exchange of stabilities in ferromagnetic convection in a rotating ferrofluid saturated porous layer, *J. Appl. Fluid Mech.*, Iran, **7(1)** (2014) 147-154. (**Impact Factor 0.888**)
34. **Jyoti Prakash**, Kanu Vaid and Renu Bala, Upper Limits to the Complex Growth Rates in Triply Diffusive Convection, *Proc. Ind. Nat. Sc. Acad.*, **80(1)** (2014)115-122.
35. **Jyoti Prakash** and Renu Bala, On arresting the complex growth rates in ferromagnetic convection in a rotating porous medium, *Int. J. Innov. Res. Sc. Eng. Tech.*, **3(1)**, (January 2014) 8330-8339.

36. **Jyoti Prakash**, Kanu Vaid and Renu Bala, Characterization of Magnetorotatory Thermohaline instability in porous Medium: Darcy Model, *Int.J. Tech.*, **4(1)** (2014) 32-36.
37. **Jyoti Prakash**, Virender Singh, Shweta Manan and Vinod Kumar, Upper Limits to the complex growth rates in triply Diffusive Convection in porous medium, *Int. J. Tech.*, **4(1)** (2014) 106-108.
38. **Jyoti Prakash** and Rajeev Kumar, Upper Bounds for the complex growth rate thermohaline convection of Veronis and Stern type with viscosity variations, *Int. J. Tech.*, **4(1)** (2014) 117-120.
39. **Jyoti Prakash**, Shweta Manan and Virender Singh, On the Characterization of Nonoscillatory Motions in triply Diffusive Convection in porous medium, *Int. J. Tech.*, **4(1)** (2014) 168-170.
40. **Jyoti Prakash**, Sanjay Kumar Gupta, Renu Bala and Kanu Vaid, A Semicircle theorem in triply Diffusive Convection, *Int. J. Tech.*, **4(1)** (2014) 210-213.
41. **Jyoti Prakash**, Renu Bala and Kanu Vaid, On the Principle of the Exchange of Stabilities in Rotatory Triply Diffusive Convection, *Proc. Nat. Acad. Sc., Physical Sciences, India, (Springer)*. **84(3)** (2014) 433–439. (**Impact Factor 0.242**)
42. **Jyoti Prakash**, Renu Bala and Kanu Vaid, On the Characterization of nonoscillatory motions in Magnetorotatory Triply Diffusive convection, *Proc. Ind. Nat. Sc. Acad.*, **80(2)** (2014) 197-209.
43. **Jyoti Prakash** and Sanjay Kumar Gupta, Upper Bounds for the Complex Growth Rate of Thermohaline Convection in a Porous Medium heated from below, *Int. J. Appl. Maths. Mach, Hong Kong* **10** (7) (2014) 1-15.
44. **Jyoti Prakash** and Kanu Vaid, On hydromagnetic thermohaline instability of Veronis type in porous medium, *Int. J. Math. Arch.* 5(8), (2014) 129-134
45. **Jyoti Prakash**, Renu Bala and Kanu Vaid, On the characterization of magnetohydrodynamic triply diffusive convection, *J. Magn. Magn. Mater.*, 377(2015)378–385(**Elsevier**). (**Impact Factor 2.357**)
46. **Jyoti Prakash**, Kanu Vaid and Renu Bala, On the Characterization of Nonoscillatory Motions in Triply Diffusive Convection, *Int. J. Fluid Mech. Res.*, 41(5), (2014),409-416(**Begell House**) .
47. **Jyoti Prakash**, Kanu Vaid and Renu Bala, Upper Limits to the Complex Growth Rates in Magnetorotatory Triply Diffusive Convection, *Proc. Nat. Acad. Sc., Physical Sciences, India (Springer)*, (2014) 85(1):87–97. (**Impact Factor 0.242**)
48. **Jyoti Prakash**, Kanu Vaid and Renu Bala, On Hydromagnetic Thermohaline Instability in Porous Medium, *Recent Trends in Algebra and Mechanics, Indo American Books*, (2014), 121-130 (Delhi).

49. **Jyoti Prakash** and Rajeev Kumar, Upper Limits for the Complex Growth Rate in Double Diffusive Convection with Viscosity Variations, Recent Trends in Algebra and Mechanics, Indo American Books, (2014), 257-264 (Delhi).
50. **Jyoti Prakash**, Virender Singh and Shweta Manan, Upper Bounds for the Linear Growth Rates in Triply Diffusive Convection in Porous Medium, Recent Trends in Algebra and Mechanics, Indo American Books, (2014), 283-290 (Delhi).
51. **Jyoti Prakash**, Renu Bala and Kanu Vaid, On Arresting the Complex Growth Rates in Triply Diffusive Convection, Recent Trends in Algebra and Mechanics, Indo American Books, (2014), 291-298 (Delhi).
52. **Jyoti Prakash**, Rajeev Kumar and Vinod Kumar, On Exchange Principle in Magnetohydrodynamic Triply Diffusive Convection with Viscosity Variations, Res. J. Eng. Tech., 6(1), (2015), 1-5.
53. **Jyoti Prakash**, Shweta Manan, Virender Singh and Kanu Vaid, On Rotatory Hydrodynamic Triply Diffusive Convection in Porous Medium: Darcy Model, Res. J. Eng. Tech., 6(1), (2015), 19-22.
54. **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.
55. **Jyoti Prakash**, Kanu Vaid, Renu Bala and Vinod Kumar, Characterization of rotatoryhydrodynamic Triply Diffusive convection, Z. Angew. Math. Phys (ZAMP), (Springer), 66 (2015), 2665–2675. **(Impact Factor 1.560)**
56. **Jyoti Prakash**, Rajeev Kumar and Kultaran Kumari , Linear Triply Diffusive Convection with viscosity variations, Int. J. Phys. Math. Sci. 5(1) (2015), 186-196.
57. **Jyoti Prakash**, Kanu Vaid, Shweta Manan and Rajeev Kumar, On Characterization Of Triply Diffusive Convection, Int. J. Ext. Res. 3, (2015) 87-92.
58. **Jyoti Prakash**, Renu Bala and Virender Singh, An Energy Relationship in Magnetohydrodynamic Triply Diffusive Convection Problem, International Journal for Research in Applied Science & Engineering Technology (IJRASET),3, (2015),89-92.
59. **Jyoti Prakash** and Kanu Vaid, Characterization of rotatory thermohaline instability in porous medium: Darcy Brinkman Model, Advances in Applied Science Research, 6(6) (2015), 153-158.
60. **Jyoti Prakash**, Shweta Manan and Virender Singh, On the principle of the exchange of stabilities for the triply diffusive convection problem in completely confined fluids, Int. J. Math. Arch. 6(10), (2015), 177-181.
61. **Jyoti Prakash**, Kanu Vaid and Renu Bala, On arresting the complex growth rates in Magnetohydrodynamic Triply Diffusive convection, Int. J. Fluid Mech. Res., 42(5), (2015), 391-403(**Begell House**).
62. **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. **(Impact Factor 0.636)**.

63. **Jyoti Prakash**, Shweta Manan and Kaka Ram, On Exchange Principle in Rotatory Hydrodynamic Triply Diffusive Convection in Porous Medium: Darcy Model, H. P. U. Journal, 3(2), (2015), 53-60.
64. **Jyoti Prakash**, Rajeev Kumarn and Vinod Kumar, Upper Bounds for the Complex Growth Rate in Magnetohydrodynamic Triply Diffusive Convection with viscosity Variations, H. P. U. Journal, 3(2), (2015), 83-90.
65. **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.
66. **Jyoti Prakash**, Virender Singh and Shweta Manan, A Sufficient Condition for the Validity of the Exchange Principle in Triply Diffusive Convection in Porous Medium, H. P. U. Journal, 3(2), (2015), 215-222.
67. **Jyoti Prakash**, Rajeev Kumar and Kultaran Kumari, A characterization theorem in Triply Diffusive Convection with viscosity variations, J. Raj. Acad. of Phys. Sc.14(3,4)(2015)249-258.
68. **Jyoti Prakash**, Pankaj Kumar and Shweta Manan, An Energy Relationship in Multicomponent Convection Problem, International Journal of technology, 6(2), (2016), 99-102.
69. **Jyoti Prakash**, Virender Singh and Shweta Manan, On Rotatory Hydrodynamic Triply Diffusive Convection in Porous Medium, International Journal of technology, 6(2), (2016), 113-117.
70. **Jyoti Prakash**, Shweta Manan and Virender Singh, Linear Stability Analysis in Multicomponent Convection, International Journal of technology, 6(2), (2016), 118-122.
71. **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.
72. **Jyoti Prakash** and Renu Bala, On arresting the complex growth rates in ferromagnetic convection with magnetic field dependent viscosity in a rotating sparsely distributed porous medium, J. Applied Mechanics and Technical Physics, (**Springer**), **57**(4)(2016) 623–636.
73. **Jyoti Prakash**, Rajeev Kumar and Pankaj Kumar, A characterization theorem in rotatory hydrodynamic triply diffusive convection with viscosity variations, J. Raj. Acad. Phys. Sci. **15**(3), (2016), 139-148.
74. **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.
75. **Jyoti Prakash** and Sanjay Kumar Gupta, On non-existence of oscillatory motions in magnetothermohaline convection in porous medium, J. Porous Media, **19**(7), (2016), 567–581.
76. **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.

77. **Jyoti Prakash**, Rajeev Kumar and Prakash Chopra, On triply diffusive convection analogous to Stern type with variable viscosity, *Research Journal of science and technology*, 9(1), (2017), 111-114.
78. **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.
79. **Jyoti Prakash**, Shweta Manan and Vinod Kumar, On triply diffusive convection in porous medium: Darcy Brinkman model, *Research Journal of science and technology*, 9(1), (2017), 127-130.
80. **Jyoti Prakash**, Pankaj Kumar and Shweta Manan, On the occurrence of stationary convection in triply diffusive convection in porous medium: Darcy model, *Research Journal of science and technology*, 9(1), (2017), 131-134.
81. **Jyoti Prakash**, Virender Singh and Shweta Manan, On the limitations of linear growth rates in triply diffusive convection in porous medium, *J. Assoc. Arab Univ. Basic and Appl. Sc*, 22, (2017), 91-97 (**Taylor & Francis**).
82. **Jyoti Prakash** and Shweta Manan, On Rotatoryhydromagnetic multicomponent convection, *Int. J. Appl. Sci. Eng. Res.*, 5(6), (2016), 405-420.
83. **Jyoti Prakash**, Rajeev Kumar and Kusum Lata, The onset of convection in a multicomponent fluid layer in the presence of uniform magnetic field, *J. Appl. Mech. Tech. Phys. (Moscow)*, (**Springer**), **58(1)**, (2017), 36-46. (**Impact Factor 0.351**).
84. **Jyoti Prakash**, Renu Bala, Kanu Vaid and Vinod Kumar, On Arresting the Complex Growth Rates in Rotatory Triply Diffusive Convection, *Applications and Applied Mathematics- An International Journal (AAM) (USA)*, **11(2)**, (2016), 722-734.
85. **Jyoti Prakash**, Shweta Manan, and Virender Singh, On Triply Diffusive Convection In Completely Confined Fluids, *Thermal Science* DOI :10.2298 (**2016**).
86. **Jyoti Prakash** and Shweta Manan, A Sufficient Condition for the Exchange Principle in Multicomponent Convection Problem in Completely Confined Fluids, *J. Raj.Acad. Phys. Sc.* 15(4),(2016), 245-253.
87. **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.
88. **Jyoti Prakash** and Rajeev Kumar , On Linear Stability Analysis of Magnetorotatory Triply Diffusive Convection with Viscosity Variations, *International Journal of Mathematics and Statistics*,**18(1)**, (2017), 36-46.
89. **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* **39(3)**, (2017),39-46.
90. **Jyoti Prakash**, Pankaj Kumar, Kultaran Kumari and Shweta Manan, Ferromagnetic convection in a densely packed porous medium with magnetic field dependent viscosity revisited, *Z. fur neturfor. A* doi.org/10.1515/zna-2017-0215 (2018), 1-7.
91. **Jyoti Prakash**, Pankaj Kumar, Shweta Manan and Vipin Sharma, An Energy Relationship in Magnetohydrodynamic multicomponent Convection Problem Analogous to Stern Type, *Int. J. Math. Archive*, **9(3)**, (2018), 82-85. *Int. J. Math. And Appl.*, 6(2–B)(2018), 369–375

92. Jyoti Prakash, Shweta Manan and Kaka Ram, On stationary convection in rotatory hydrodynamic triply diffusive convection in a densely packed porous medium, I. J. Math. Arch. 9(4), (2018), 146-150.
93. **Jyoti Prakash**, Shweta Manan and Pankaj Kumar, Ferromagnetic Convection In A Sparsely Distributed Porous Medium With Magnetic Field Dependent Viscosity Revisited, J. Porous Med. 21(8):749–762 (2018) (**Begell House**) USA.
94. **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.

(c). M. Phil Guidance (completed: 09, In Progress: 02)

Sr. No.	Name of the Student	Year	Topic of the Dissertation
1.	Rajeev Kumar	2011	On non-existence of oscillatory motions in thermohaline convection with viscosity variations.
2.	Kaka Ram	2011	Breakdown of the classical equations and existence of hydrodynamic instability in single diffusive bottom heavy systems.
3.	Virender Singh	2012	Characterization of thermohaline convection in porous medium.
4.	Kultaran Kumari	2013	Linear stability analysis of Maxwell fluid in porous medium heated from below.
5.	Neha Kumari	2013	Characterization of thermohaline convection of Veronis and Stern types in porous medium.
7.	Shalu Sehgal	2014	Characterization of magnetorotatory thermohaline convection in porous medium
8.	Dinesh Thakur	2015	A sufficient condition for the exchange principle in a ferrofluid layer heated from below
9.	Vandana Devi	2015	On exchange of stabilities in ferromagnetic convection in a rotating ferrofluid saturated porous layer

10	Priti Devi	2016	completed
11	Mamta Kumari	2016	completed
12	Chitresh Kumari	2017	Ferromagnetic convection in a sparsely distributed porous medium with magnetic field dependent viscosity revisited
13	Kanika	2017	Thermal convection in a ferromagnetic fluid layer with magnetic field dependent viscosity: a correction applied

(e). Ph. D. – Supervision(completed: 03, In Progress: 06)

Sr. No.	Name of the Student	Year	Topic
1	Sanjay Kumar Gupta	Awarded in June 2014	On some instability problems in ferromagnetic configurations in porous and non-porous medium and thermohaline configurations in porous medium.
2	Renu Bala	Awarded in Aug.2015	Stability Problems in Triply Diffusive Convection, Ferromagnetic Convection and Maxwell Fluids
3	Kanu Vaid	Awarded in May, 2016	Diffusive convection interactions on some hydrodynamic instability problems
4	Shweta Manan	Awarded in 2017	
5	Rajeev Kumar	Awarded in 2018	
5.	Kaka Ram	In progress (Regd. in Sept.2012)	
6.	Virender Singh	In progress (Regd. in July-2013)	
8.	Kultaran Kumari	In progress (Regd. in June-2014)	
9	Pankaj Kumar	In progress (Regd. in 2016)	

(f). Papers Presented in Seminar/Conferences (Total 05)

1. “On the characterization of nonoscillatory motions in Maxwell fluid in a porous medium heated from below” in International Conference in Mathematical Sciences (ICMS-2013)
Organized by: Department of Mathematics, Govt. College, Haripur (Manali) on 8th and 9th March, 2013.
2. “On hydromagnetic thermohaline instability in porous medium: Darcy model” in National conference on Advances in Mathematics & its Application (AMA-2013)
Organized by: Department of Mathematics, National Institute of Technology, Hamirpur, (H. P.) on (June 25-27, 2013).
3. “On stationary convection and oscillatory motions in Maxwell fluid in a porous medium heated from below (the case of hydrodynamic boundary and constant flux conditions)” in National conference on Advances in Mathematics & its Application (AMA-2013)
Organized by: Department of Mathematics, National Institute of Technology, Hamirpur, (H. P.) on (June 25-27, 2013).
4. “A mathematical theorem in magnetorotatory thermohaline convection in porous medium” in International Conference on Advances in Pure and Applied Mathematics (ICAPAM-2014)
Organized by: Department of Mathematics, Govt. College, Haripur (Manali) on 7th to 9th March, 2014.
5. “On exchange principle in magnetohydrodynamic triply diffusive convection with viscosity variations” in National conference on Advances in Applied Mathematics & Mechanics (NSAAMM-2015)
Organized by: Department of Mathematics, Sidharth Govt. College Nadaun , Hamirpur, (HP) on March, 12-13, 2015.

(g). Session Chaired (Total 05)

1. Chaired a session in National Seminar on Recent Trends in the Mechanics of Fluids and Solids. **Organized by:** Department of Mathematics, Govt. College, Haripur (Manali) on 10th and 11th March 2012.
2. Chaired a session in International Conference in Mathematical Sciences (ICMS-2013)
Organized by: Department of Mathematics, Govt. College, Haripur (Manali) on 8th and 9th March-2013.
3. Chaired a session in National Conference on Advances in Mathematics and its Applications. **Organized by:** Department of Mathematics, NIT, Hamirpur (H.P.) on 25th – 27th June -2013.
4. Chaired a session in International Conference on Advances in Pure and Applied Mathematics (ICAPAM-2014) **Organized by:** Department of Mathematics, Govt. College, Haripur (Manali) on 7th – 9th March-2014.
5. Chaired a session in National conference on Advances in Applied Mathematics & Mechanics (NSAAMM-2015) **Organized by:** Department of Mathematics, Sidharth Govt. College Nadaun , Hamirpur, (HP) on March, 12-13, 2015.

(h). Workshop and Seminar/ Conferences attended (Total 09)

1. National Seminar on Recent Trends in the Mechanics of Fluids and Solids. **Organized by:** Department of Mathematics, Govt. College, Haripur (Manali) on 10th and 11th March 2012.
2. National Conference in Algebra on 27th & 28th March, 2012. **Organized by:** Dept. of Mathematics and Statistics H. P. University-Shimla-5 under (UGC-SAP)-DRS phase-1.
3. International Conference in Mathematical Sciences (ICMS-2013), **Organized by:** Department of Mathematics, Govt. College, Haripur (Manali) on 8th and 9th March-2013.
4. National Conference on Recent Advances in Continuum Mechanics. **Organized by:** Dept. of Mathematics and Statistics H. P. University-Shimla-5 under (UGC-SAP)-DRS phase-1 on 29th and 30th March 2013 .
5. National conference on Advances in Mathematics & its Application (AMA-2013) **Organized by:** Department of Mathematics, National Institute of Technology, Hamirpur, (HP) on (June 25-27, 2013).
6. International Conference on Advances in Pure and Applied Mathematics (ICAPAM-2014) **Organized by:** Department of Mathematics, Govt. College, Haripur (Manali) on 7th – 9th March-2014
7. International Conference in Algebra and Allied Fields. **Organized by:** Deptt. of Mathematics and Statistics H. P. University-Shimla-5 under (UGC-SAP)-DRS phase-1 on 26th and 27th March 2014.
8. National conference on Advances in Applied Mathematics & Mechanics (NSAAMM-2015) **Organized by:** Department of Mathematics, Sidharth Govt. College Nadaun , Hamirpur, (HP) on March, 12-13, 2015.
9. National Seminar on New Dimensions in Mechanics and Allied Fields (NSNDMAF-2015) **Organized by:** Department of Mathematics & Statistics, Himachal Pradesh University, Shimla-171005 on November, 27-28 , 2015.

EXTRA CURRICULAR ACTIVITIES:

1. Lecture delivered in Refresher Course in Academic Staff College, H. P. U., Shimla on the topic “ **Vipassana Sadhana: Jeene ki Kala**” in Refresher Course on Human Values and Indian Ethos(RC-283, w.e.f. 17/11/2014 -06/12/2014).
2. Lecture delivered in Department of Yoga, H. P. U., Shimla on the topic “ **Bhagwan Buddha ki Mool Shiksha: Vipassana Sadhana**” on December,15, 2015.

3. Participated in International Yoga-Day, organized by H. P. University, Shimla on June, 21, 2015(in Yoga Race and Yoga Exercises).
4. Additional Charge in the University: Dean of Colleges cum Director (CDC)