Curriculum Vitae

Full Name	Dr. Ashok Kumar	
Designation	Associate Professor	
Department	Mathematics	
Campus	Birla Campus Sinagar	
Telephone		
Mobile	09917254135	
Email	ashrsdma@gmail.com kumarashokfma@hnbgu.ac.in	

Education Qualification	1. Ph.D (2011), I. I. T Roorkee 2. M.Sc (2004), I. I. T Roorkee 3. B.Sc (2002), C C S University Meerut

Teaching Experience	11.5 Years	Research Experience	15 Years
• 15-01-2011 to 02-04-2012	Assistant Professor	Government W. PG College Kandhala, Samli (UPPSC)	Regular
• 03-04-2012 to 04-09-2013	Assistant Professor	NIT Jalandhar	Regular
• 05-09-2013 to 14-05-2022 (forenoon)	Assistant Professor	H.N.B. Garhwal University Srinagar	Regular
• 14-05-2022 (Afternoon)	Associate Professor	H.N.B. Garhwal University Srinagar	Regular

Areas of Interest/ Specialization

1.Hydrodynamic Stability

2 Computational Fluid Dynamics.

3. Application of Spectral and Spectral Element Methods

4. Numerical Solution of ODE and PDE

Honors & Awards

1.   NET(National Eligibility Test)-JRF(Junior Research Fellow)-CSIR - Dec. 2004, SPM-Call(List of Top 10% Candidates of NET).

2.   NET-JRF (CSIR) Dec. 2005.

3.   NET-JRF (CSIR) Dec. 2007

4.   GATE(Graduate Aptitude Test in Engineering)-2005 AIR (All India Rank)-360.

5. GATE-2006 AIR-196.

6. GATE-2007 AIR-619.

7. GATE-2008 AIR-213.

8.   Junior Research Fellow (CSIR fellowship) 2004- 2006, IIT Roorkee.

9.   Senior Research Fellow (CSIR fellowship) 2006 -2010, IIT Roorkee.

SUMMER SCHOOL/GIAN COURSE/REFRESHER COURSE ATTENDED:

1. Instructional School on Partial Differential Equations and National Symposium on Hyperbolic PDEs, Department of Mathematics, IIT Bomby, 22-06-2008 to 17-07-2008

2. QIP Program on Interaction of Academicia-Industry on Mathematical Modelling, Department of Mathematics, IIT Roorkee, 31-03-2012.

3. Refresher Course in Mathematical Sciences, CPDHE Human Resource Development Centre, University of Delhi, 29-08-2016 to 20-09-2016.

4. A GIAN Course On Stability of Vertex and Non-isothermal Parallel Flow, Department of Mathematics, IIT Roorkee, Dec. 04 to 09, 2017.

5. Two-week refresher course in Mathematics, Department of Mathematics, Ramanujan College, University of Delhi, 16-03-2021 to 30-03-2021.

Research Projects/ MoU

1. "Instability of Poiseuille flow in a vertical pipe filled with porous medium", **SERB**, **Rs. 27.38,400**/-, (NO. SB/EMEQ-159/2014), Cpompleted
2. "Linear stability of buoyancy assisted mixed convective flow in a vertical pipefilled with porous medium". **UGC-START UP , Rs. 6,00,000** Completed

EVENT COORDINATOR:

1. TEQIP-III SPONSORED Short Term Training Programme on **Advanced Computational Techniques in Engineering Sciences & Mechanics** organized by NIT Srinagar during 24-28 February, 2020.

2. **DST-INSPIRE Program** Organized by HNB Garhwal University Srinagar in **2015-16, 2016-17, 2017-18, 2018-19, and 2019-2020.**

Administrative Experience

1. Assistant Proctor
2. Co- Coordinator DST-INSPIRE Program
3. Co-coordinator SC/ST/OBC Remedial Coaching
4. Member of Anti-discrimination Cell
5. Assistant Warden

Scientific Visits Abroad/International Collaboration
1. Imperial College London (UK)

Research Papers: National/International Journals
Total Number : 26
Best Research Papers:

S.No.	Author(s)	Title	Name of Journal	Volume	Page	Year
1.	Km. Renu, **Ashok Kumar**, Abhishek K. Sharma	Influence of Prandtl number on mixed convective flow in a vertical pipe filled with porous medium: A linear stability analysis	Physics of Fluid **IF: 3.521**	33 (5)	054112	2021
2.	AS Negi, B Kumar, Ashok Kumar, C Kumari, K Prachi, AJ Chamkha	Transportation of TiO2/GO–H2O hybrid nanofluid between two discs	Indian Journal of Physics (Springer) **IF: 1.947**	12	https://doi.org/10.1007/s12648-021-02212-z	2021
3.	A Prakash, A Kumar, HM Baskonus, Ashok Kumar	Numerical analysis of nonlinear fractional Klein–Fock–Gordon equation arising in quantum field theory via Caputo–Fabrizio fractional operator	Mathematical Sciences (Springer) **IF: 1.986**	15 (3),	269-281	2021
4.	H. M. Baskonus, A. Kumar, Ashok Kumar, W. Gao	Deeper investigations of the (4+1)-dimensional Fokas and (2+1)-dimensional Breaking soliton equations	Int. J. of Modern Physics B **IF: 1.219**	34(17)	2050152	2020

5.	Km. Renu, Ashok Kumar,	Effect of radiation on hydro magnetic mixed convective flow in a vertical channel filled with porous media: a thermal no equilibrium approach	Journal of Heat Transfer (ASME) **IF: 2.021**	142 (4),	042701:1-16	2020
6.	Ashok Kumar, P. Alam and P. Fartyal	Thermo-solutal natural convection in an anisotropic porous enclosure due to non-uniform temperature and concentration at bottom wall	Advances in Applied Mathematics and Mechanics **IF: 1.727**	7 (5),	644-662	2015
7.	Pravez Alam, Ashok Kumar, S Kapoor, SR Ansari	Numerical investigation of natural convection in a rectangular enclosure due to partial heating and cooling at vertical walls	Communications in Nonlinear Science and Numerical Simulation **IF: 4.260**	17(6)	2403-2414	2012
8	Ashok Kumar P.Bera and J. Kumar	Non-Darcy mixed convection in a vertical pipe filled with porous medium	Int. J. of Thermal Sciences (Elsevier) **IF: 3.744**	50 (5),	725-735	2011
9	Ashok Kumar and P.Bera	Natural convection in an anisotropic porous enclosure due to non-uniform heating from the bottom wall	ASME-Journal of Heat Transfer **IF: 2.021**	131 (7)	072601:1-13	2009
10	K Renu, Ashok Kumar, AS Negi	Chebyshev Spectral Collocation Method for Magneto Micro-Polar Convective Flow Through Vertical Porous PipeUsing Local ThermalNon-equilibrium Approach	International Journal of Applied and Computational Mathematics, **(Springer)**	7(3),	117:1-21	2021
11	Km.Renu, AshokKumar, A Kumar, J Kumar	Effect of Transverse Hydromagnetic and Media Permeability on Mixed Convective Flow in a ChannelFilledbyPorous Medium	Special Topics & Reviews in Porous Media: An International Journal **(Begell House Publication USA)**	12 (2),	1-23	2021
12	AK Prasad, J Kumar, Ashok Kumar	Isotropic uncharged model withcompactness and Stable configurations	Arabian Journal of Mathematics **(Springer)**	10(3),	669-683	2021

Books: 05

1. **Linear Algebra,** Book (ISBN: 978-93- 87025-53-0) **(MEDTECH A division of Scientific International Publication)**
2. **Differential Calculus** Book (ISBN: 978-93-887025-54-7) **(MEDTECH A division of Scientific International Publication)**
3. **Integral Calculus** Book (ISBN: 978-93- 86800-08-4) **(MEDTECH A division of Scientific International Publication)**
4. **Real Analysis** Book (ISBN: 978-93-87025-51-6) **(MEDTECH A division of Scientific International Publication)**