


## Curriculum Vitae

<b>Full Name</b>	Dr. Ashok Kumar			
<b>Designation</b>	Assistant Professor			
<b>Department</b>	Mathematics			
<b>Campus</b>	Birla Campus Sinagar			
<b>Telephone</b>				
<b>Mobile</b>	09917254135			
<b>Email</b>	<a href="mailto:ashrsdma@gmail.com">ashrsdma@gmail.com</a>			
<b>Education Qualification</b>	<ol style="list-style-type: none"> <li>1. Ph.D (2011), I. I. T Roorkee</li> <li>2. M.Sc (2004), I. I. T Roorkee</li> <li>3. B.Sc (2002), C C S University Meerut</li> </ol>			
<b>Teaching Experience</b>	9.5 Years	<b>Research Experience</b>	15 Years	
<b>Areas of Interest/ Specialization</b>				
<ol style="list-style-type: none"> <li>1. Hydrodynamic Stability</li> <li>2. Computational Fluid Dynamics.</li> <li>3. Application of Spectral and Spectral Element Methods</li> </ol>				
<b>Honours &amp; Awards</b>				
<ol style="list-style-type: none"> <li>1. NET(National Eligibility Test)-JRF(Junior Research Fellow)-CSIR - Dec. 2004, SPM-Call (List of Top 10% Candidates of NET).</li> <li>2. NET-JRF (CSIR) Dec. 2005.</li> <li>3. NET-JRF (CSIR) Dec. 2007</li> <li>4. GATE(Graduate Aptitude Test in Engineering)-2005 AIR (All India Rank)-360.</li> <li>5. GATE-2006 AIR-196.</li> <li>6. GATE-2007 AIR-619.</li> <li>7. GATE-2008 AIR-213.</li> <li>8. Junior Research Fellow (CSIR fellowship) 2004- 2006, IIT Roorkee.</li> <li>9. Senior Research Fellow (CSIR fellowship) 2006 -2010, IIT Roorkee.</li> </ol>				
<b>Member of Academic Institutions</b>				
<ol style="list-style-type: none"> <li>1.</li> <li>2.</li> <li>3.</li> </ol>				
<b>Membership of Scientific Organization</b>				
<ol style="list-style-type: none"> <li>1. IAENG (International Association of Engineers)</li> <li>2.</li> </ol>				
<b>Research Supervision (No. of Ph.D. Degree Awarded/ Registered)</b>				
<ol style="list-style-type: none"> <li>1. Neetu Ram (<b>Awarded</b>)</li> <li>2. Vandana Dabral (<b>Submitted</b>)</li> <li>3. Deepak Dhiman (<b>Registered</b>) Renu Sundriyal (<b>Registered</b>)</li> <li>4. Anup Singh Negi (<b>Registered</b>)</li> </ol>				
<b>Research Projects/ MoU undertaken</b>				
<ol style="list-style-type: none"> <li>1. <i>"Instability of Poiseuille flow in a vertical pipe filled with porous medium"</i>, DST-</li> </ol>				

<p><b>SERB, Rs. 27, 38,400/-</b>, (NO. SB/EMEQ-159/2014), Ongoing</p> <p>2. <b>“Linear stability of buoyancy assisted mixed convective flow in a vertical pipe filled with porous medium”</b>. UGC-START UP , Rs. 6.00 Lakhs Completed</p>
<p><b>Administrative Experience</b></p> <ol style="list-style-type: none"> <li>1. Assistant Proctor</li> <li>2. Co- Coordinator DST-INSPIRE Program</li> <li>3. Co-coordinator SC/ST/OBC Remedial Coaching</li> <li>4. Member of Anti-discrimination Cell</li> <li>5. Assistant Warden</li> </ol>
<p><b>Scientific Visits Abroad/International Collaboration</b></p> <ol style="list-style-type: none"> <li>1. Imperial College London (UK)</li> </ol>
<p><b>Conference/Symposium/Workshop Attended during last five years (2014-2019).</b></p> <p><b>International</b></p> <ol style="list-style-type: none"> <li>1. Presented Paper: World congress on Engineering 2014, Imperial College London (UK)</li> </ol> <p><b>National</b></p> <ol style="list-style-type: none"> <li>1. Invited Talk: DST-INSPIRE Camps (2014-15, 2016-17, 2017-18).</li> <li>2. Invited Talk: National conference on role of mathematics in sustainable development, Government Degree College Karanprayag (Chamoli) Uttarakhand on 17-10-2014.</li> <li>3. Invited Talk: 19<sup>th</sup> Annual Conference of VIJANA PARISAD of India on Recent Advances in Mathematics and Mathematical Sciences and Their Application (RAMMSA-2016), BGR Campus Pauri, H N B Garhwal University Srinagar, Nov., 10-12, 2016.</li> <li>4. Invited Talk: Induction Programme, Jawahar Navodaya Vidyalaya Pokhal, Tehri (Garhwal) Uttarakhand on 16-05-2016.</li> <li>5. Resource Person: Capacity Building Programme for the KRPs of the Higher Secondary Level in Mathematics of Jharkhand State, Regional Institute of Education (NCERT) Bhubaneswar , 29/09/2018 to 01/11/2018 (04 Days)</li> </ol> <p><b>Conference/Symposium/Workshop Organized during last five years (2012-2017)</b></p> <ol style="list-style-type: none"> <li>1. Chairman/Convener/Organizing Secretary, Title of event, place, date, year</li> </ol>
<p><b>Publications during last five years (2014-2019)</b></p> <p><b>Journals:</b></p> <ol style="list-style-type: none"> <li>1. "Numerical Investigation of Mixed Convective Flow in Parallel Channel Filled With Porous Medium", <b>Kumar Ashok</b> , Alam P. and Kapoor S., Nonlinear Engineering Modelling and Application, Vol.4, pp. 203-208, 2014, (IF: )</li> <li>2. "MHD flow through Darcy-Brinkman-Forchheimer extended porous media over a non-linear stretching sheet", Kala B. S, Rawat M. S., and <b>Kumar Ashok</b>, International Journal of Mathematical Archive, Vol. 5(10), pp. 159-166 (2014).</li> <li>3. "Thermo-solutal natural convection in an anisotropic porous enclosure due to sinusoidal variation of temperature and concentration at bottom wall", <b>Kumar Ashok</b>, Alam P. and</li> </ol>

- Fartyal P., Advances in Applied Mathematics and Mechanics, Vol.7, no. 4, pp. 1-19, (2015).
4. "Study MHD convective ow and heat transfer over a non-linear stretching sheet embedded in an extended-Darcy-Forchheimer porous media with viscous dissipation", Kala B. S., Rawat M. S., and [Kumar Ashok](#), Journal of Global Research in Mathematical Archives, Vol 2 (4), pp. 1-15, (2014).
  5. "Onset Instability of Thermo-solutal Convective Flow of Viscoelastic Maxwell Fluid Thorough Porous Medium with Linear Heat Source Effect", Ram Neetu, [Kumar Ashok](#), Kapoor S., Bansal R., and Alam P., International Journal for Research in Applied Science & Engineering Technology, Vol. 3 (III) pp. 493-499, (2015).
  6. "Stability of Chemically reacting Double diffusive free Convective Flow of Maxwell Fluid Thorough Porous Medium with Internal Heating under Magnetic Effect ", American International Journal of Research in Science, Technology, Engineering & Mathematics, Ram Neetu, [Kumar Ashok](#), Kapoor S., and Alam P., 10(2) pp. 151-157 (2015).
  7. "Oscillatory Instability of Chemical Reacting Thermo-solutal Convective Flow of Viscoelastic Maxwell Fluid Thorough Porous Medium With Linear Heat Source Effect", Ram Neetu, [Kumar Ashok](#), Kapoor S., Bansal R., Dabral V., and Alam P., International Journal of Mathematics Trends and Technology, Vol. (20), (2015).
  8. Dhiman Deepak, [Kumar Ashok](#) and Gautam G. R., "EXISTENCE OF SOLUTION TO FRACTIONAL ORDER DELAY DIFFERENTIAL EQUATIONS WITH IMPULSES", Advanced Math. Models & Applications Vol.2 (2), 2017.

#### **Proceedings**

1. "Linear Stability of Poiseuille Flow in a Vertical Pipe Filled with Porous Medium" [Kumar Ashok](#) , proceeding of World congress on Engineering 2014, (Imperial College, London), 2-4 July, 2014.
2. "Analytical and Numerical approach on convective flow in partially heated channel filled by porous media" AIP Conference Proceedings 1975, 030014 (2018) DOI: 10.1063/1.5042184

#### **Books**

1. Kumar Mukesh, Singh A. P. and [Kumar Ashok](#) , Differential Calculus, MEDTECH A division of Scientific International Publication ISBN : 978-93-887025-54-7
2. Kumar Mukesh, Singh A. P. and [Kumar Ashok](#) , Integral Calculus, MEDTECH A division of Scientific International Publication ISBN : 978-93-86800-08-4
3. Kumar Mukesh, Singh A. P. and [Kumar Ashok](#) , and Chauhan A, Probability and Statistics, MEDTECH A division of Scientific International Publication ISBN : 978-93-887025-52-3

**Total Number of Research Publications: 13**