


Faculty Performa

| Title | Dr. | First Name | Sonam | Last Name | Singh | Photograph |
|---|-----|---|-------|-----------|-------|--|
| Designation | | Assistant Professor | | | |  |
| Address | | Room no.-113, First Floor, Rugby Sevens Building, University Stadium, Cluster Innovation Centre, University of Delhi, Delhi-110007. | | | | |
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| Web-Page | | | | | | |
| Educational Qualifications | | | | | | |
| Degree | | Institution | | | Year | |
| Ph.D (Mathematics) | | I.I.T. Roorkee | | | 2014 | |
| M.Sc. (Applied Mathematics) | | I.I.T. Roorkee | | | 2009 | |
| B.Sc. Mathematics (H)) | | Miranada House, University of Delhi | | | 2007 | |
| Career Profile | | | | | | |
| <ul style="list-style-type: none"> Working as assistant professor at Cluster Innovation Centre (CIC), University of Delhi since January 2014. | | | | | | |
| Administrative Assignments | | | | | | |
| <ul style="list-style-type: none"> Worked in examination committee at Cluster Innovation Centre for compilation of results, examination scheduling etc. | | | | | | |
| Areas of Interest / Specialization | | | | | | |
| <ul style="list-style-type: none"> Computational Fluid Dynamics Bio heat transfer problems Numerical techniques, Finite element and Meshfree methods | | | | | | |

| Subjects Taught |
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| <ul style="list-style-type: none"> • Linear Algebra • Discrete Mathematics • Calculus • Probability and Statistics • Fluid Dynamics • Numerical Methods • Partial Differential Equations • Linear Programming Problems |
| Publications Profile |
| <ol style="list-style-type: none"> 1. Bhargava R., Singh S. : 2013, Element free Galerkin Simulation of mixed convection MHD flow over a vertical power-law stretching sheet, <i>International Journal of Applied Mathematics and Mechanics</i>, 9 (8): 54-74. 2. Singh S., Bhargava R.: 2012, Element free Galerkin simulation of unsteady micropolar squeeze film flow of a biological lubricant', <i>Journal of Information & Operation Management</i>, ISSN: 0976-7754 & E-ISSN: 0976-7762 3 (1) 149-152. 3. Beg Anwar O., Bhargava R., Singh S., and Maregere H.:2013, Element-free galerkin method (EFGM) computation of transient micropolar magnetic squeeze biofilm, <i>International Journal of Applied Mathematics and Mechanics</i>, 9, 1-21. 4. Singh S., Bhargava R.: 2014, Numerical study of natural convection within a wavy enclosure using Meshfree approach: Effect of corner heating, <i>The Scientific world Journal</i>, (Hindawi Publications), 2014, Article ID 842401, 18 pages, dx.doi.org/10.1155/2014/842401. 5. Singh S., Bhargava R.: 2015, Numerical simulation of a phase transition problem with natural convection using hybrid FEM / EFGM technique, <i>International Journal of Numerical methods for Heat and Fluid flow</i>, Vol. 25, Issue 3, pp. 570-592. 6. Bhargava R., Singh S.: 2012, Numerical study of unsteady flow and heat transfer of a second grade fluid with viscous dissipation and joule heating using Meshfree approach', <i>World Academy of Science, Engineering and Technology</i>, International Science index 66, Vol. 6, Issue 6, pp. 1215-1221 (Proceeding of ICAMNA-2012 held at Paris during 27th June-28th June, 2012). 7. Bhargava R., Singh S.: 2011, Numerical study of mixed convection flow over a vertical power-law stretching sheet using EFGM, <i>Proceedings of International conference on Advances on Modeling, Optimization and Computing</i>, 280-290. 8. Bhargava R., Singh S.: 2013, Meshfree methods: An efficient advanced computing approach for Bio-medical problems, <i>IEEE conference proceedings, ICACCI</i>, 1397-1402, Digital Object Identifier: 10.1109/ICACCI.2013.6637383. 9. Singh S., Bhargava R.: 2014, Simulation of phase transition during cryosurgical treatment of a tumor tissue loaded with nano-particles using meshfree approach, <i>ASME Journal of Heat Transfer</i>, 136(12), 10 pages, DOI: 10.1115/1.4028730. 10. Singh S., Bhargava R.: 2015, Element free Galerkin simulation of flow and heat transfer of a viscoelastic fluid over a stretching sheet embedded in a porous medium with variable fluid properties and Newtonian heating, <i>Scientia Iranica B</i>, vol. 22, Issue 2, pp. 504-518. |
| Workshops and conferences attended |
| <ol style="list-style-type: none"> 1. 'Simulation and Design using Extended Finite Element Method', organized by Department of Mechanical and Industrial Engineering, I.I.T. Roorkee. 2. UGC sponsored DRS-I under SAP- National workshop on 'Challenges before Applied Mathematicians: Fluid Dynamics and Optimization Techniques', Organized by Department of Mathematics, University Of Rajasthan, during March 11-13, 2011. 3. 'ICAMNA 2012: International Conference on Applied Mathematics and Numerical Analysis', |

organized by WASET (World academy of Science, Engineering and Technology), Paris, France, June 27-28, 2012.

4. National workshop on ‘Scientific/Research paper writing’ organized by ‘The National Academy of Science’ held from April 5-7th, 2013 at Udaipur.

Research Projects (Major Grants/Research Collaboration)

- Working as a CO-PI in innovation project “Weaving dreams for destitute-Night shelter project” funded by University of Delhi.
- Worked as a CO-PI in innovation project “Impact of FDI in multi-brand retail on local kirana shops” funded by University of Delhi.

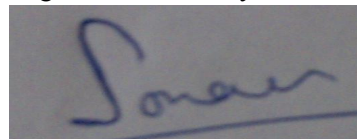
Awards and Distinctions

JAM (Joint admission test to M.Sc.) **2007**
CSIR-NET **2009**
Junior research fellowship (CSIR-JRF) **Jan 2010-Dec. 2012**
Senior research fellowship (CSIR-SRF) **Jan 2013-Dec 2013**
Teaching Excellence award for Innovation by University of Delhi, May, 2015.

Association With Professional Bodies

- Universal Association of Computers and Electronics Engineers (*Membership number: SM1004935*)
- Ramanujan Mathematical Society

Signature of Faculty Member



(Updated in January 2016)