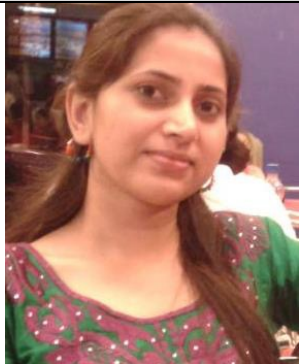




Faculty Performa

Title	Dr.	First Name	SONAM	Last Name	TANWAR	Photograph
Designation	Assistant Professor					
Address	Room no.-113, Third Floor, Rugby Sevens Building, University Stadium, Cluster Innovation Centre, University of Delhi, Delhi-110007.					
Phone No Office	011 27666702 (O)					
Email	sonaiitr@gmail.com					
Web-Page						
Educational Qualifications						
Degree	Institution				Year	
Ph.D	I.I.T. Roorkee				2014	
M.Sc.	I.I.T. Roorkee				2009	
B.Sc.	University of Delhi				2007	
Career Profile						
Working as an assistant professor at Cluster Innovation Center, University of Delhi since from Jan, 2014.						
Administrative Assignments						
<ul style="list-style-type: none"> • Member Examination Committee, CIC, University of Delhi. • Member Work-load and time-table committee, CIC, University of Delhi. • Member Student's Advisory Committee, CIC, University of Delhi. • Member Alumini Committee, CIC, University of Delhi. 						
Areas of Interest / Specialization						
Computational Fluid Dynamics, Advanced numerical techniques, Finite element methods, Meshfree Methods						

Subjects Taught

Linear Algebra, Numerical Analysis, Graph Theory, Probability & Statistics, Calculus, Finite Element Method, Partial Differential Equations, Linear Programming, Ordinary Differential equations

Research Guidance

NIL

Publications Profile

1. Bhargava R., Singh S. : 2013, Element free Galerkin Simulation of mixed convection MHD flow over a vertical power-law stretching sheet, *International Journal of Applied Mathematics and Mechanics*, 9 (8): 54-74.
2. Singh S., Bhargava R.: 2012, Element free Galerkin simulation of unsteady micropolar squeeze film flow of a biological lubricant, *Journal of Information & Operation Management*, 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, *International Journal of Applied Mathematics and Mechanics*,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, *The Scientific world Journal*,(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, *International Journal of Numerical methods for Heat and Fluid flow*, Vol. 25, Issue 3, pp. 570-592. (SCI publication)
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", *World Academy of Science, Engineering and Technology*, 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, *Proceedings of International conference on Advances on Modeling, Optimization and Computing*, 280-290.
8. Bhargava R., Singh S.: 2013, Meshfree methods: An efficient advanced computing approach for Bio-medical problems, *IEEE conference proceedings, ICACCI*, 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, *ASME Journal of Heat*

Transfer, 136(12), 10 pages, DOI: 10.1115/1.4028730. (SCI Publication)

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, *ScientiaIranica B*, vol. 22, Issue 2, pp. 504-518. (SCI Publication)

11. Singh S. : 2017, A Meshfree Based Lattice Boltzmann Approach for Simulation of Fluid Flows within Complex Geometries: Application of Meshfree methods for LBM Simulations, *Analysis and Applications of Lattice-Boltzmann Simulations*, IGI Global Publishers, (Accepted for publication)

Conference Organization/ Presentations (in the last three years)

NIL

Research Projects (Major Grants/Research Collaboration)

Major research project:

Granted with early career research award through DST-SERB for the project entitled “Development of an optimal planning framework for cryosurgical treatment of tumor tissues via mathematical modeling and numerical simulations”.

Project Duration: 3 years

Grant Sanctioned: 20,26,885/-

Date of start of the project: 30/03/2017.

Innovation Project:

1. Worked as a CO-PI in innovation project “Weaving dreams for destitute- Night shelter project” Funded by university of Delhi.

2. 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.)152 (AIR) in 2007
- CSIR-NET 144 (AIR) in 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

- Ramanujun Society (*Membership approval number – 1137*)
- Universal Association of Computers and Electronics Engineers (*Membership number:*

SM1004935)

- Reviewer for “Alexandria Engineering Journal”, Elsevier Editorial system.
- Reviewer for International Journal of “Frontiers in Heat and Mass Transfer ”.
- Reviewer for International Journal of “Computer Methods in Biomechanics and Biomedical Engineering

Signature of Faculty Member