

## **Faculty Details**

Title Dr.	First Name	Deepika	Last Name	Dhall	Photograph
Designation	Assistant Professor				
Address	58, SF, Sahyog Appartments, Mayur Vihar, Phase I New Delhi 110091			iase I	
Phone No Office					
Residence*					- Real P
Mobile <sup>*</sup>	9818132722				
Email	dhall.deepika@gmail.com				
Web-Page					
Educational Qualifications					
Degree	Institution				Year
BSc(H) Mathematics	Sri Venkateswara College, University of Delhi			i	2002
MSc (Mathematics)	University of Delhi				2004
MPhil (Mathematics)	University of Delhi				2006
PhD	University of Delhi				2012
Career Profile					
PhD degree on the topic 'High Accuracy Numerical Methods for the solution of nonlinear Boundary Value Problems'					
Teaching experience of 9 years as Assistant Professor.					
Administrative Assignments					
Member NIRF committee 2017, 2018					
Areas of Interest / Specialization					
Computational partial differential equations					
Subjects Taught					
Linear Algebra, Real analysis, Differential equations, Partial Differential equations, Calculus, Numerical methods, LaTeX,					
Quantitative techniques in management, Mathematics for business economics					

## Recent Publications

- R.K. Mohanty and Deepika Dhall, Third order accurate variable mesh discretization and application of TAGE iterative method for the nonlinear two point boundary value problems with homogeneous functions in integral form, Applied Mathematics and Computation, 215, 2024–2034 (2009)
- R.K. Mohanty and Deepika Dhall, A cubic spline approximation and application of TAGE iterative method for the solution of two point boundary value problems with forcing function in integral form, Applied Mathematical Modelling, 35, 3036-3047, (2011)
- R.K. Mohanty and Deepika Dhall, High accuracy arithmetic average discretization for nonlinear two point boundary value problems with a source function in integral form, Applied Mathematics, 2, 1243-1251 (2011)
- Deepika Dhall and R.K. Mohanty, BLAGE Iterative Method for the Numerical Solution of Poisson's Equation in cylindrical polar coordinates with Source Function in Integral Form, Published in Conference proceedings of

International Congress on Productivity Quality Reliability Optimization and Modeling, held at ISI Delhi, 2011

• R.K. Mohanty and Deepika Dhall, High accuracy cubic spline approximation for two dimensional quasilinear elliptic boundary value problems, Applied Mathematical Modelling, 37, 155-171 (2013)

## **Conference Organization/ Presentations**

- Delivered a talk entitled 'Third order accurate variable mesh discretization and application of TAGE iterative method for nonlinear differential equations with homogeneous functions in integral form', in Research Scholar's Seminar (funded by UGC (SAP)-Programme), January 22 -23, 2009, Dept. of Mathematics, University of Delhi.
- Delivered a talk entitled 'A cubic spline approximation and application of TAGE iterative method for the solution of two point boundary value problems with forcing functions in integral form', in Research Scholar's Seminar (funded by UGC (SAP)-Programme), March 18-19, 2010, Dept. of Mathematics, University of Delhi.
- Presented research paper entitled 'BLAGE Iterative Method for the Numerical Solution of Poisson's Equation in cylindrical polar coordinates with Source Function in Integral Form', in International Congress on Productivity, Quality, Reliability, Optimization and Modelling' (Organized jointly by Indian Statistical Institute, Quality Council of India and DRDO), February 7-8, 2011.
- Member organizing committee, International Conference on Mathematics and Applications, April 26-28, 2017, Ramjas College, University of Delhi.

Research Projects (Major Grants/Research Collaboration)

Awards and Distinctions

Association With Professional Bodies

## **Other Activities**

- Attended National Workshop on Analysis (Sponsored by UGC (SAP)–Programme), Sep 27-28, 2007, Dept. of Mathematics, University of Delhi.
- Participated in Research Scholars' Seminar (Organized under UGC(SAP)–Programme), March 31-April 2, 2008, University of Delhi.
- Participated as a volunteer in Pre-ICM International Convention on Mathematical Sciences, Dec 18-20, 2008, University of Delhi.
- Attended National Workshop On Differential Equations, Computing and Modeling, Dec 20-24, 2010, University of Delhi.
- Attended the International Conference To Celebrate The 125th Birth Anniversary Of Ramanujan The Legacy Of Srinivasa Ramanujan, December 17-22, 2012, University of Delhi.
- Attended one day Workshop on "Computational Optimization", Sri Venkateswara college held on February 05, 2016
- Participated in Workshop On LaTeX and HTML, Acharya Narendra Dev College, Aug 27, 2016, University of Delhi.