




## Faculty Details

Title	DR.	First Name	DEEPIKA	Last Name	DHALL	<div style="text-align: center;">  </div>
Designation		Assistant Professor				
Address		58 Sahyog Apartment, Mayur Vihar Phase I New Delhi 110091				
Phone No Office						
Residence* Mobile*		9818132722				
Email		dhall.deepika@gmail.com				
Web-Page						
Educational Qualifications						
Degree		Institution			Year	
BSc(H) Mathematics		Sri Venkateswara College, University of Delhi			1999-2002	
MSc (Mathematics)		University of Delhi			2002-2004	
MPhil (Mathematics)		University of Delhi			2004-2006	
PhD		University of Delhi			2007-2012	
Career Profile						
<p>PhD degree on the topic 'High Accuracy Numerical Methods for the solution of nonlinear Boundary Value Problems'</p> <p>Teaching experience of 14 years as Assistant Professor.</p>						
Administrative Assignments						
<p>Member NIRF committee 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, 2022-23, 2023-24</p> <p>Faculty Advisor, Gargi Mathematics Association MATHEMA 2022-23, 2023-24</p> <p>Member Gargi Prize Committee 2022-23</p>						
Areas of Interest / Specialization						
Numerical Analysis/ Computational Methods for Differential Equations						
Subjects Taught						
Linear Algebra, Real analysis, Differential equations, Calculus, Numerical methods, LaTeX and HTML, Mathematics for business economics, Quantitative Techniques for Management, Mathematical Finance, Programming using Python, Essentials of Python, Statistics						
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, BLAGÉ 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 Indian Statistical Institute (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/ Workshops/ FDP/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.
- Delivered a talk entitled ‘BLAGÉ 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.
- Member Organizing Committee, ICSSR Sponsored Two- Day International Multidimensional Conference on "Revisiting Wellbeing: Perspectives, Challenges, and the Road Ahead", under the aegis of DU Centenary Celebration, held at Gargi College on February 1 - 2 , 2023
- 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.
- Participated in An online talk on Mathematical Modelling with Applications, organized by The Mathematics Society, Department of Mathematics, Shaheed Bhagat Singh College, University of Delhi, on November 09, 2020.
- participated in the webinar on INFINITY : a treasury of intrigue and interest organized by (Mathematics Association ,Gargi College) under the aegis of IQAC, University of Delhi held on ,25th September 2020.
- Successfully completed National Faculty Development Program (FDP) - Teacher's Enrichment Workshop on Differential Equations and Its Applications TEW-DEA 2021 organized by the Department of Mathematics, Deshbandhu College, University of Delhi, in collaboration with the National Centre for Mathematics (A Joint centre of TIFR and IIT Bombay) during March 15-28, 2021.
- Participated in Workshop On "Getting Started with ORCID" on Jan 22nd 2021 Organized by Research and Consultancy Division, Dr. B.R. Ambedkar University, Delhi
- Participated in the National Webinar on The Evolution of single step methods to solve initial value problems organized by Department of Mathematics Deshbandhu College January 29 2021.
- Attended the Workshop on the topic "Machine Learning", on 9-10<sup>th</sup> April 2021 organized by Department of Mathematics Gargi College.
- Participated in 1-Day National Level Workshop on 'Various Aspects of Research Funding, Academic Writing and Publication Ethics' organized by Research Cell, Shivaji College (University of Delhi), New Delhi, India on 30<sup>th</sup> January 2021
- Participated in the Online National Faculty Development Program (FDP) jointly organized by University of Delhi and Guru Angad Dev Teaching Learning Centre, SGTB Khalsa College, University of Delhi under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) of Ministry of Education. on "**Python: Essentials, Programming and Analytics**" held on 27th Oct to 03rd Nov 2022.
- Successfully completed 1-week Online Certificate Course on Digital Teaching Techniques organized by ICT Academy 24 January to 28 January 2022.
- Participated in 2-day hands on training Workshop On "Getting Started with R Studio" on 8-9<sup>th</sup> August 2023 Organized by Research and Development Cell, Gargi College University of Delhi

- Attended 3-Days Online Workshop on “Mathematical Computing through Python” held from 28th September to 30th September, 2023 organized by the Department of Mathematics, Janki Devi Memorial College, University of Delhi