




Faculty Details

Title	Dr.	First Name	Vibha	Last Name		Photograph
Designation	Assistant Professor					
Address	F-14, Khanna Colony, Sonipat-131001					
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	Residence*					
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Web-Page						
Educational Qualifications						
Degree	Institution				Year	
Ph.D. Mathematics	Department of Mathematics, University of Delhi				2021	
UGC-JRF	Joint CSIR-UGC NET Exam for JRF and Lectureship				2017	
M.Sc. Mathematics	Hindu College, University of Delhi				2017	
B.Sc. (H) Mathematics	Hindu College, University of Delhi				2015	
Career Profile						
<ul style="list-style-type: none"> ● Working as an Assistant Professor in Gargi College since December 2020. ● Worked as Guest Faculty in Department of Mathematics, University of Delhi ● Ph.D. Degree with thesis entitled “Starlikeness and Convexity of Certain Univalent and Entire Functions” has been awarded by University of Delhi in February 2021. 						
Administrative Assignments						
<ul style="list-style-type: none"> ● Convener (Science)- India Today Rankings (2021-till date) ● Treasurer of Placement Cell, Gargi College (2023-till date) ● Member of NIRF (2022-till date) ● Member of B.A. Programme Association (2022- till date) ● Member of IQAC extended unit (B.A. Prog.) (2023-till date) ● Member of IQAC Criterion-4 (2023-till date) ● Mentor for certificate course on Cybersecurity held at Gargi College in collaboration with ICT Academy (Feb- March 2024) 						
Areas of Interest / Specialization						
<ul style="list-style-type: none"> ● Complex Analysis ● Real Analysis 						
Subjects Taught						

Calculus, Real Analysis, Numerical Methods, Information to Information Theory and Coding, Complex Analysis (M.A./M.Sc. Mathematics), Vedic Mathematics-I, II, III,IV

Research Guidance

- Supervised two students B.Sc. (H) Mathematics, 2nd year for research presentation entitled **Ancient Wisdom for Modern Mathematics** in the national conference on **National Education Policy 2020: Perspective, Challenges and a Way Forward** held at Gargi College in November, 2023.

Publications

1. Vibha Madaan, Ajay Kumar and V. Ravichandran, **Starlikeness associated with lemniscate of Bernoulli**, *Filomat*, 33(2019) no. 7, pp. 1937-1955.
2. Vibha Madaan, Ajay Kumar and V. Ravichandran, **Lemniscate convexity of generalized Bessel functions**, *Studia Scientiarum Mathematicarum Hungarica*, 56(2019) no. 4, pp. 404-419.
3. Vibha Madaan, Ajay Kumar and V. Ravichandran, **Radii of starlikeness and convexity of some entire functions**, *Bulletin of Malaysian Mathematical Sciences Society*, 43(2020) no. 6, pp. 4335-4359.
4. Vibha Madaan, Ajay Kumar and V. Ravichandran, **Estimates for initial coefficients of certain bi-univalent functions**, *Filomat*, 35(2021) no. 6, pp. 1993-2009.

Conference Organization/ Presentations

1. Presented a paper entitled **Lemniscate starlike and convex radii of Bessel functions** in the *Second International Symposium on Geometric Function Theory* held at SSN College of Engineering, Kalavakkam, Tamil Nadu in December 2019.
2. Presented a paper entitled **Janowski starlike and convex radii of some entire functions** in *National Conference on Mathematical Analysis and Applications* held at National Institute of Technology, Tiruchirappalli, Tamil Nadu in December 2019.
3. Presented a paper entitled **Certain geometric properties of some special functions** in the *National Conference on Advances in Mathematical Analysis and its Applications* held at P.G.D.A.V. College, University of Delhi in November 2019.
4. Presented a paper entitled **Lemniscate convexity and lemniscate Carathéodory of some analytic functions** in the *84th Annual Conference of Indian Mathematical Society* held at School of Mathematics, Shri Mata Vaishno Devi University in November 2018.
5. Presented a paper entitled **Starlikeness associated with lemniscate of Bernoulli** in the *International Conference on Recent Advances in Pure and Applied Mathematics* held at Department of Applied Mathematics, Delhi Technological University in October 2018.
6. Presented a paper entitled **Starlikeness with respect to lemniscate of Bernoulli using admissibility conditions** in the *33rd Annual Conference of Ramanujan Mathematical Society* held at Department of Mathematics, University of Delhi in June 2018.

Awards and Distinctions

- Senior Research Fellow (UGC) (20th September 2019-11th December, 2020), Department of Mathematics, University of Delhi.
- Junior Research Fellow (UGC) (20th September 2017-19th September 2019), Department of Mathematics, University of Delhi.

- Awarded with a scholarship of INR 60,000 per annum for 5 consecutive years (July 2012- June 2017) under the Innovation in Science Pursuit for Inspired Research (INSPIRE) scheme by Department of Science and Technology (DST).

Association With Professional Bodies

- Invited as **chief guest** at **Kendriya Vidyalaya, Masjid Moth** on the occasion of **National Mathematics Day**.
- Invited as **Resource Person** for a workshop on **Vedic Mathematics** at **Kendriya Vidyalaya, Masjid Moth**.
- Invited as **Resource Person** for a session on **Solution to Indeterminate Equations** as a part of **Faculty Development Program** entitled **Ancient Indian Mathematics** under **Shikshak Parshikshan Kendram** of **IKS Division, Ministry of Education** held at **Aryabhata College, University of Delhi**.

Other Activities

1. Completed a 30 hours online **add-on certificate courses on Vedic Mathematics (Level 1 and 2)** by Institute of Advancement of Vedic Mathematics in collaboration with Hindu College, DU.
2. **Taught Advanced Complex Analysis (Tutorial Classes) to M.Sc./M.A. Mathematics** Semester 3 in the Department of Mathematics, University of Delhi.
3. **Taught Complex Analysis (Tutorial Classes) to M.Sc./M.A. Mathematics** Semester 1 in the Department of Mathematics, University of Delhi.
4. Participated in a **Two-week Faculty Development Programme on Advanced concepts for developing MOOCs** organized by *Teaching Learning Centre, Ramanujan College, University of Delhi* sponsored by Ministry of Human Resource Development under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching in July 2020.
5. Participated in the National Webinar on **How we can secure our online communication** organized by Department of Mathematics, Janki Devi Memorial College, University of Delhi in November 2020.
6. Participated in Webinar on **INFINITY: a treasury of intrigue and interest** organized by Mathema (Mathematics Association, Gargi College) supported by IQAC, University of Delhi in September 2020.
7. Participated in the National Webinar on **Introduction to Wolfram Mathematica** organized by the Department of Mathematics and IQAC of Deshbandhu College, University of Delhi in September 2020.
8. Participated in the *National Research Scholars' Seminar* held at Department of Mathematics, University of Delhi in December 2018.
9. Volunteered in the International *Conference on Topology and Geometry* held at Department of Mathematics, University of Delhi in honor of Prof. Tej Bahadur Singh on the occasion of his retirement in November 2017.