

# **Faculty Details**

Title	Dr.	First Name	Vibha	Last		Photograph
				Name		
Designation		Assistant Professor				
Address		F-14, Khanna Colony,				
		Sonipat-131001				
21 N O.C.		-				
Phone No Office						
Residence*						
Mobile*		9953622730				
Email		vibhamadaan47@gmail.com				
Web-Page						
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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			2017	
		Lectureship				
M.Sc. Mathematics		Hindu College, University of Delhi			2017	
B.Sc. (H) Mathematics		Hindu College, University of Delhi			2015	

# **Career Profile**

- 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 Februrary 2021.

# Administrative Assignments

# Areas of Interest / Specialization

- Complex Analysis
- Real Analysis

## Subjects Taught

Calculus (B.A. Prog., GE-1),

Real Analysis (B.A. Prog., B.El.Ed.),

Numerical Methods (GE-4),

**Complex Analysis (M.A./M.Sc. Mathematics)** 

## Research Guidance

## Recent 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. .

#### 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.
- 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 *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.

# Research Projects (Major Grants/Research Collaboration)

#### 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 under the Innovation in Science Pursuit for Inspired Research (INSPIRE) scheme by Department of Science and Technology (DST).

#### **Association With Professional Bodies**

#### Other Activities

- 1. Taught Advanced Complex Analysis (Tutorial Classes) to M.Sc./M.A. Mathematics Semester 3 in Department of Mathematics, University of Delhi.
- 2. Taught Complex Analysis (Tutorial Classes) to M.Sc./M.A. Mathematics Semester 1 in Department of Mathematics, University of Delhi.
- 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.
- 4. Participated in National Webinar on **How we can secure our online communication** organised by Department of Mathematics, Janki Devi Memorial College, University of Delhi in November 2020.
- 5. 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.
- 6. Participated in National Webinar on **Introduction to Wolfram Mathematica** organized by Department of Mathematics and IQAC of Deshbandhu College, University of Delhi in September 2020.
- 7. Participated in the *National Research Scholars' Seminar* held at Department of Mathematics, University of Delhi in December 2018.
- 8. Volunteered in *International Conference on Topology and Geometry* held at Department of Mathematics, University of Delhi in honour of Prof. Tej Bahadur Singh on the occasion of his retirement in November 2017.