Curriculum Vitae

Dr. Ishfaq Ahmad Dar

Chatterhama, Hazratbal, Srinagar, Jammu and Kashmir, India Address for correspondence

Institute of Technology, Zakura Campus, University of Kashmir, Srinagar, Jammu and Kashmir, 190006, India Mobile No:+917006772961

E-mail: ishfaq619@gmail.com

Scholastic Record

• Ph.D Mathematics from University of Kashmir, Srinagar

Awarded on: 16th of march 2021.

Topic of Ph.D. Thesis "Extremal Problems for Polynomials and their zero bounds".

Advisor: **Professor N. A. Rather**.

- M.Sc. (Mathematics) from University of Kashmir, Srinagar in the year 2016 with 1st division.
- B.Sc.(Mathematics, Physics, Electronics & English) from Ghandhi Memorial College, Srinagar, J & K in the year 2014 with 1st division.

Field of Specialization/Interest

Complex Analysis, Approximation Theory, Operator Theory, Matrix Theory and Estimation of zeros.

Research Experience: 4 years research experience in the field of Approximation Theory.

Research Publications (24)

- 1. On the zeros of certain composite polynomials and an operator preserving inequalities, **The Ramanujan Journal** 54, 605-612 (2021). A referred journal of international repute, index in SCI, Scopus.
- 2. Zygmund-type integral inequalities for complex polynomials, **Mediterranean Journal of Mathematics** 20, 25 (2023). https://doi.org/10.1007/s00009-022-02229-6. A referred journal of international repute, index in SCI, Scopus.
- 3. Inequalities for rational functions with prescribed poles, **Math Notes**, 114, 593-607 (2023). https://doi.org/10.1134/S0001434623090274. A referred journal of international repute, index in SCI, Scopus.

- 4. Bounds on the zeros of quaternionic polynomial using matrix methods, **Filomat**, Vol 38, No. 9 (2024).
 - A referred journal of international repute, index in SCI, Scopus.
- 5. Computation of the zeros of a quaternionic polynomial using matrix methods, **Arab Journal of Basic and Applied Sciences**, 31:1, 65-70 (2024), DOI: 10.1080/25765299.2023.2301237
 - A referred journal of international repute, index in SCI, Scopus.
- 6. Some applications of the Boundary Schwarz lemma for Polynomials with restricted zeros, **Applied Mathematics E-Notes**, 20(2020), 422-431. A referred journal of international repute, index in ESCI, Scopus.
- 7. Some extensions of a theorem of Paul Turán concerning polynomials, **Kragujevac Journal of Mathematics**, **46**, 6 (2022), 969-979.

 A referred journal of international repute, index in ESCI, Scopus.
- 8. On the zeros of a class of generalized derivatives, **Rend. Circ. Mat. Palermo, II.** Ser 70, 1201–1211 (2021). https://doi.org/10.1007/s12215-020-00552-z. A referred journal of international repute, index in ESCI, Scopus.
- 9. Inequalities for the derivative of polynomials with restricted zeros, **Korean J. Math. 28**, (2020), No. 4, pp. 931-942. A referred journal of international repute, index in ESCI, Scopus.
- On an operator preserving polynomial inequalities, Korean J. Math. 29, (2021),
 No. 2, pp. 435-443.
 A referred journal of international repute, index in ESCI, Scopus.
- 11. On the regions containing all the zeros of polynomials and related analytic functions, Vestnik of Saint Petersburg University. Mathematics. Mechanics. Astronomy, 2021, vol. 8 (66), issue 2, pp. 331-337. https://doi.org/10.21638/spbu01.2021.212.

 A referred journal of international repute, index in ESCI, Scopus.
- 12. On the zero bounds of polynomials and related analytic functions, **Applied Mathematics E-Notes**, 21(2021), 525-532.

 A referred journal of international repute, index in ESCI, Scopus.
- Growth estimate for rational functions with prescribed poles and restricted zeros, Int.
 J. Nonlinear Anal. Appl. 13 (2022) No. 1, 247-252.
 A referred journal of international repute, index in ESCI, Scopus.
- 14. Some lower bounds for the derivative of certain Polynomials, **Ann Univ Ferrara** 66, 295-300 (2020), https://doi.org/10.1007/s11565-020-00344-4. A referred journal of international repute, index in ESCI, Scopus.
- 15. Some inequalities for Polynomials with restricted zeros, **Ann Univ Ferrara** 67, 183–189 (2021). https://doi.org/10.1007/s11565-020-00353-3. A referred journal of international repute, index in ESCI, Scopus.
- 16. Inequalities concerning the Polar derivatives of Polynomials with restricted zeros, **Nonlinear Funct. Anal. and Appl.**, **24**, (2019), 813-826. A referred journal of international repute, index in Scopus.

- 17. Inequalities for an operator on the space of polynomial, Int. J. Nonlinear Anal. Appl. 13 (2022) No. 1, 431-439.

 A referred journal of international repute, index in ESCI, Scopus.
- 18. Growth estimate for rational functions with prescribed poles and restricted zeros, **Kragujevac Journal of Mathematics**, **49**, 2 (2025), 305-311. A referred journal of international repute, index in ESCI, Scopus.
- 19. On the Eneström-Kakeya Theorem, **Applied Mathematics E-Notes**, 27(2022), 522-232. A referred journal of international repute, index in ESCI, Scopus.
- 20. Inequalities for the generalized polar derivative of a polynomial, **Palestine Journal** of Mathematics, 11 (3), (2022), 549-557.

 A referred journal of international repute, index in ESCI, Scopus.
- 21. Inequalities pertaining to rational functions with prescribed poles, **Ural Mathematical Journal**, Vol. 8, No. 2 (2022), pp. 1-4.

 A referred journal of international repute, index in ESCI, Scopus.
- 22. Generalizations of Eneström-Kakeya theorem and its extensions to analytic functions, **J. Class. Anal.** 16, 1 (2020), 37-44. A referred journal of international repute.
- 23. On a refinement of Turán's inequality, **Complex Anal Synerg.**, 6, 21 (2020). https://doi.org/10.1007/s40627-020-00058-5. A referred journal of international repute.
- 24. Some Lower Bound Estimates for the Polar Derivatives of Polynomials with Restricted Zeros, **Journal of Analysis & Number Theory**, **9**, 17-21 (2021) A referred journal of international repute.

Books (1)

1. Fourier Analysis, Kashmir University Press, 2022.

Conferences (4)

- 1. April 4, 2018, Presented a Paper titled "A remark on B_n operator" in 13th session of Jammu and Kashmir science congress at Department of Mathematics organized by University of Kashmir in collaboration with the Jammu and Kashmir State Science, Technology and Innovation Council.
- 2. June 21, 2019, Presented a Paper titled "Inequalities for polynomials with restricted zeros" in one-day seminar on "Mathematics and its applications" at department of mathematics, Central University of Kashmir.
- 3. June 23, 2019, Presented a Paper titled "Inequalities for the derivative of polynomials with restricted zeros" in two day international conference held at NIT, Srinagar, Jammu and Kashmir, India.
- 4. December 19, 2017, Presented a Paper titled "On some Lower bounds for certain polynomials" in a National Conference on "Recent Trends in Pure and Applied Mathematics" at Department of Mathematics organized by Kashmir Mathematical Society.

Workshops (4)

- 1. May 18-20, 2015, Research Promotion workshop on Introduction To Graph And Geometric Algorithms, sponsored by NBHM GoI at Department of Mathematics, University of Kashmir.
- 2. September 13-19, 2017, One week workshop on Research Methodology for research scholars of science organised by UGC-Human Resource Development centre, University of Kashmir, Srinagar.
- 3. June 18-20,2019, Three day National level Workshop on Algebra and Analysis, organized by department of mathematics, Central University of Kashmir.
- 4. August 28-29, 2018, Participated in a 2-Day National Level Workshop on Geometrical Interpretation of Mathematical Concepts organised by Department of Mathematics, University of Kashmir.

Teaching Experience

- Working as Assistant Professor at "Institute of Technology, Zakura Campus, University of Kashmir, Srinagar", since July-2022.
- Worked as Lecturer at "Srinagar Women's College, Srinagar" for 3 months.
- Worked as Assistant Professor at "Jammu and Kashmir Institute of Mathematical Science, Srinagar" for 6 months.
- Worked as resource person on lecture basis for "Department of Distance Education, University of Kashmir, Srinagar" for three years.
- Worked as resource person on lecture basis for "Department of Pharmaceutical Science, University of Kashmir, Srinagar" for three years.
- Worked as resource person on lecture basis for "Deen Dayal Upadhyay Kausal Kendra (DDU), University of Kashmir, Srinagar" for one year.

Topics Taught

Mathematical Analysis, Complex Analysis, Differential Equations, Theory of Matrices, Operational Research, Numerical Analysis, Laplace transformation, Fourier Series, Mathematical Statistics and Probability Theory, Differential and Integral Calculus, Mathematical Biology.

Miscellaneous Qualification:

Computer Literacy: Symbolic Programming (Mathematica, Matlab), Typesetting Programming (MikTex,Latex), Presentation Program(MS Power Point, Corel Presentation, Latex Presentation), MS Word, Adobe Photoshop.

Languages known

• English and Urdu: Read, write & speak fluently.

Personal Details

Father's Name Mr. Mohammad Ramzan Dar Date and place of birth April 10, 1993, Srinagar (J&K)

Nationality Indian Religion Islam

Marital Status/Sex Unmarried/Male

(Ishfaq Ahmad Dar)