

### **Current Position**

Dr. IstkharAli Email: <u>istkhar@iul.ac.in</u> iaansari1986@gmail.com Mob: +91- 7068575586

Position:Assistant ProfessorDepartment:Department of Mathematics and StatisticsInstitution:Integral University, Lucknow, Khursi Road, UP-226026, India

### **Academic Qualifications**

Degree	Board/University	Year	Subject	%
10th	Uttar Pradesh, Allahabad	2000	Hindi, English, Mathematics,	57.66
			Science, Social Science, Drawing	
12th	Uttar Pradesh, Allahabad	2002	General Hindi, English,	60.60
			Mathematics, Physics, Chemistry	
B.Sc.	DDU Gorakhpur University	2005	Mathematics, Physics, Chemistry	53.83
M.Sc.	DDU Gorakhpur University	2007	Mathematics	78.07
Ph.D.	Indian Institute of Technology	2017	Mathematics	7.05(CPI)
	Indore (IIT Indore)			

## Extra Qualifications

Degree	Board/University	Year	Subject
GATE	MHRD Gov. of India	2009	Mathematics
JRF-NET	Council of Scientific & Industrial Research	2010	Mathematics
GATE	MHRD Gov. of India	2010	Mathematics

Thesis Title: "Localization Theorems and Perturbation Analysis on Quaternionic Eigenvalue Problems"

# Fellowship & Awards

Scholarship	Institute/Awarded by	Year
SRF	CSIR, India	December 2011 to December 2015
JRF	GATE	December 2011 to December 2015

### Work Experience

- Assistant Professor in the Department of Mathematics and Statistics, Integral University, Lucknow, India, from November 01, 2019- present
- **Post Doctoral Fellow**: Department of Mathematics, Josip Juraj Strossmayer University of Osijek, **Croatia**, from **December 03**, 2018 June 30, 2019.
- Guest faculty in the Department of Mathematics and Statistics, Madan Mohan Malaviya University of Technology, Gorakhpur, India, from August 12, 2019 to October 31, 2019.
- Lecturer at Institute of Technology and Management, Gorakhpur, India, from August 08, 2017 to November 30, 2018.

### **Research Interests**

Numerical Linear Algebra, Matrix Perturbation Theory

### **Area of Teaching Interest**

Linear Algebra, Calculus, Geometry, Engineering Mathematics, Mechanic, Complex Analysis and all area of Pure and Applied Mathematics.

### **Research Collaborators**

• Prof. Sk. Safique Ahmad (IIT Indore, India), Prof. Ivan Slapni<sup>°</sup>car (University of Split, Croatia), Prof. Ninoslav Truhar (University of Osijek, Croatia)

### **Research Visit**

• Research visit under project funded by Croatian Science Foundation, Croatia during December 03, 2018 to June 30, 2019.

## <u>Skills</u>

Software Packages: Matlab, Mathematica, MS office, Latex.

### Ph.D. Scholars

- Mohammad Waquas Khadim, Ongoing
- Mohammad Arshad Ayyub, Ongoing
- Shama Parveen, Ongoing

#### **Research Publications**

- Sk. Safique Ahmad and Istkhar Ali, Bounds for eigenvalues of matrix polynomials over quaternion division algebra, Advances in Applied Clifford Algebras, 26:1095-1125, 201, (I.F.= 1.185, SCOPUS, SCIE, UGC-CARE list).
- Sk. Safique Ahmad and Istkhar Ali, Localization theorems for matrices and bounds for the zeros of polynomials over a quaternion division algebra, Filomat, 32(2):553-573, 2018, (I.F.= 0.988, SCOPUS, Web of Science).
- Istkhar Ali, A note on quaternion matrices and split quaternion matrix pencils, Journal of Applied Mathematics and Computing, 58:323-334, 2018, (I.F.= 2.196, SCOPUS, SCIE, UGC-CARE list).
- Istkhar Ali and Ninoslav Truhar, Location of right eigenvalues of quaternionic matrix polynomials, Advances in Applied Clifford Algebras, 29-80, 2019, (I.F. 1.185, SCOPUS, SCIE, UGC-CARE list)
- Istkhar Ali, Bounds for the right spectral radius of quaternionic matrices, Ukrainian Mathematical Journal, 72(6):723-735, 2020, (I.F.= 0.464, SCOPUS, SCIE, UGC-CARE list).
- Sk. Safique Ahmad, Istkhar Ali and Ivan Slapnic ar, Perturbation analysis of matrices over a quarternion division Algebra, Accepted for publication in Electronic Transactions on Numerical Analysis (ETNA), 54:128-149, 2021, (I.F.= 1.261, SCIE).

#### Submitted/Under Revision Papers

- Sk. Safique Ahmad and Istkhar Ali, A note on location and perturbation bounds of a quaternionic matrix pencil, Linear and Multilinear Algebra, Under Revision
- Mohammad Waquas Khadim, Istkhar Ali and Mohammad Arshad Ayyub Khan, Bounds for spectral radii of quaternionic matrices and their applications.

### **Under Preparation**

- Istkhar Ali and Ninoslav Truhar, Perturbation Analysis of Quadratic Right Eigenvalue Problems.
- Sk. Safique Ahmad, Istkhar Ali, Location for zeros of polynomials and eigenvalues of matrix pencils over a quaternion division algebra.
- Istkhar Ali, Mohd. Waquas Khadim, Localization theorems for eigenvalues of quaternionic matrices.

### **Invited Talk**

- Department of Mathematics, Indian Institute of Technology Indore (IIT Indore), India, February 17, 2021, Workshop under QIP at **IIT Indore** on "Matrix Computations and its application in systems, signal and control problems" from February 16-21, 2021 **Title:** Quaternion Matrices and Eigenvalues.
- Department of Mathematics, Josip Juraj Strossmayer University of Osijek, Croatia, January 16, 2019.
  Title: Localization Theorems for Quaternionic Matrices and their Applications.
- Department of Mathematics, Josip Juraj Strossmayer University of Osijek, Croatia, May 02, 2019.
  Title: A Note on Left and Right Eigenvalues of Quaternionic Matrices.
- Department of Mathematics, **University of Split**, **Croatia**, June 12, 2019. **Title:** Location for the Eigenvalues of Quaternionic Matrices and its Applications

### **Paper/posters Presented in Conference**

• Sk. Safique Ahmad and Istkhar Ali, Localization theorems for quaternionic matrices, International Congress of Mathematicians(ICM) 2014, August 13-21, Coex, Seoul, South Korea. • Istkhar Ali and Sk. Safique Ahmad, Sharper bounds for the zeros of quaternionic polynomials, International Congress of Mathematicians(ICM) 2014, August 13-21, Coex, **Seoul, South Korea**.

#### **Workshop** Attended

- International Conference on Numerical Linear Algebra and its Applications, Dept. of Mathematics, **IIT Guwahati**, 15-18 January, 2013.
- International Workshop on Linear Algebra and its Applications during Nov. 26-27, 2012 in **DAVV**, **Indore**, **MP**. India.

### Personal details

Name: Istkhar Ali

Father's Name: Ashik Ali Ansari

Date of Birth: 20 July 1986

Nationality: Indian

**Permanent Address**: Village Trilokpur, Post Zara, District Maharajganj, Pin Code: 273164, Uttar Pradesh, India

Marital Status: Married

### Language known

English, Urdu, Hindi

#### **References**

#### • Dr. Sk. Safique Ahmad

Professor Department of Mathematics India Institute of Technology Indore, India Contact Details: Email: safique@iiti.ac.in Phone: +91 7324306947 Fax: +91 731 243893

#### • Dr. Ninoslav Truhar

Full Professor Department of Mathematics Josip Juraj Strossmayer University of Osijek Trg Ljudevita Gaja 6 Osijek, HR-31000, Croatia Contact Details: Email: ntruhar@mathos.hr Phone: +385-31-224-817 Fax: +385-31-224-801

# **Declaration**

I hereby declare that the above statements made by me are true to the best of my knowledge and belief.

Date: July 07, 2024 Place: Lucknow, India