

**KHALEEL AHMAD**

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Gender Male | Date of birth 14/01/1994 |

Google Scholar: <https://scholar.google.com/citations?user=mPDwu7AAAAAJ&hl=en>.Research Gate: [https://www.researchgate.net/profile/Khaleel\\_Ahmad4](https://www.researchgate.net/profile/Khaleel_Ahmad4).**BIO**

Mr. Khaleel Ahmad completed his BS (Hons) in Mathematics (16-years) from Bahauddin Zakariya University, Multan, Pakistan in 2018. He has completed his MS Mathematics (18-years) from International Islamic University Islamabad, Pakistan in 2021. He is PhD Mathematics student at University of Management and Technology, Lahore Pakistan. Currently, he is working as Mathematics Lecturer, Department of Mathematics and Statistics, University of Lahore, Pakistan. He has published **02** book chapters and **40 research papers** in well-reputed International Journals. He has collaborated in research with several researchers in his Area of Specialization who are from countries other than Pakistan, like Turkey, Saudi Arabia, Nigeria, Korea, Romania, Spain, and Serbia. He has reviewed research papers, Sigma Journal of Engineering and Natural Sciences, fractal and fractional, Axioms, Mathematics, PLOS One, IEEE, and AIMS mathematics.

**OBJECTIVES**

Looking for a challenging role in reputable institution to utilize my technical, analytical and experimental skills for the development of institution as well as to enhance my knowledge about new and emerging trend in Mathematics and seeking for challenges towards the successful development of wide industrial applications by applying mathematical way to solve problems.

**PROFFSSIONAL EXPERINCE**

- 0 **Aug. 2025- Continue** Mathematics Lecturer, Department of Mathematics and Statistic, University of Lahore, Lahore, Pakistan.
- 0 **May 2024 - March 2025** Mathematics Lecturer, Department of Computer Science, Superior University Gold Campus, Lahore, Pakistan.
- 0 **Sep, 2024- March 2025** Visiting Mathematics Lecturer, Department of Computer Science, University of Management and Technology, Lahore, Pakistan.
- 0 **Sep, 2021- March 2023** Visiting Mathematics Lecturer, Department of Mathematics, Bahauddin Zakariya University, Multan, Sub-campus Vehari, Pakistan.
- 0 **Sep, 2018- Sep, 2020** Mathematics Lecturer, FIES Group of School and College, Bhara Kahu, Islamabad, Pakistan.
- 0 **Jul. 2011- May, 2014** Mathematics lecturer, Ahad Technology College Kot Addu, Pakistan.

**EDUCATION****PhD Mathematics**

January 2023-Continue 3.55/4.0 CGPA

University of Management and Technology, Lahore, Pakistan.

**MS in Mathematics**

2019–2021 3.65/4 CGPA

International Islamic University Islamabad, Pakistan.

**BS in Mathematics**

2014–2018 3.22/4 CGPA

Bahauddin Zakariya University, Multan.

**Diploma of Associate Engineering (Electrical)**

2009–2011 2872/3550

**Matriculation in Science**

2008 492/850

BISE D. G. Khan, Pakistan

**B. Ed**

2020 1232/1800

Allama Iqbal Open University, Islamabad

RESEARCH INTEREST

- 0 General Relativity
- 0 Soliton Theory.
- 0 Functional Analysis.
- 0 Artificial intelligence.
- 0 Fractal Theory.

Title of PhD Thesis

- 0 Generation of Fractals in Generalized Fuzzy Metric Spaces.

Title of MS Thesis

- 0 Fixed Point Results for Generalized Contraction in Generalized Metric Spaces.

RESEARCH ARTICLES

1. **Ahmad, K.**, Ishtiaq, U., Murtaza, G., Popa, I. L., & Maiz, F. M. (2025). On Product Neutrosophic Fractal Spaces and  $\alpha$ -Density Theory with Arbitrarily Small and Controlled Error. *Fractal and Fractional*, 9(2), 59.  
DOI: <https://doi.org/10.3390/fractalfract9020059>
2. **Khaleel Ahmad**, Ghulam Murtaza, Salha Alshaikey, Umar Ishtiaq and Ioannis K. Argyros, “Common Fixed-Point Results on a Double-Controlled Metric Space for Generalized Rational-Type Contractions with Application”, *Axioms*.  
DOI: <https://doi.org/10.3390/axioms12100941>.
3. Naeem Saleem **K Ahmad**, Umar Ishtiaq, Manuel De la Sen, ‘Multivalued neutrosophic fractals and Hutchinson-Barnsley operator in neutrosophic metric space’, *Chaos, Solitons and Fractals*.  
DOI: <https://doi.org/10.1016/j.chaos.2023.113607>.
4. Umar Ishtiaq, Salha Alshaikey, Muhammad Bilal Riaz, **Khaleel Ahmad**, “Fixed point results in intuitionistic fuzzy pentagonal controlled metric spaces with applications to dynamic market equilibrium and satellite web coupling”, *PLOS ONE*.  
DOI: <https://doi.org/10.1371/journal.pone.0303141>.
5. Umar Ishtiaq, Doha A. Kattan, **K Ahmad**, Salvatore Sessa, and Farhan Ali, ‘Fixed Point Results in Controlled Fuzzy Metric Spaces with an Application to the Transformation of Solar Energy to Electric Power’, *Mathematics*.

- DOI: <https://doi.org/10.3390/math11153435>.
6. Tayyab Kamran, Umar Ishtiaq, **Khaleel Ahmad**, Ghulam Murtaza, Ioannis Argyros, "Certain Fixed-Point Results via Contraction Mappings in Neutrosophic Semi-Metric Spaces", *Journal of Advances in Applied & Computational Mathematics*.  
DOI: <https://doi.org/10.15377/2409-5761.2024.11.3>.
  7. Mohammad Akram, Umar Ishtiaq, **K Ahmad**, Tania A Lazăr, Vasile L Lazăr, Liliana Guran, 'Some Generalized Neutrosophic Metric Spaces and Fixed-Point Results with Applications', *Symmetry*,  
DOI: <https://doi.org/10.3390/sym16080965>.
  8. Mohammad Akram, Umar Ishtiaq, **Khaleel Ahmad**, Tania A. Lazăr, Vasile L. Lazăr and Liliana Guran, "Some Generalized Neutrosophic Metric Spaces and Fixed-Point Results with Applications" *Symmetry*.  
DOI: <https://doi.org/10.3390/sym16080965>.
  9. Tayyab Kamran, Umar Ishtiaq, **K Ahmad**, Ghulam Murtaza, Ioannis Argyros, 'Certain Fixed-Point Results via Contraction Mappings in Neutrosophic Semi-Metric Spaces', *Journal of Advances in Applied & Computational Mathematics*.  
DOI: <https://doi.org/10.15377/2409-5761.2024.11.3>
  10. U Ishtiaq, D. A. Kattan, **K. Ahmad**, T. A. Lazăr, V. L. Lazăr and L. Guran, "On Intuitionistic Fuzzy Nb Metric Space and Related Fixed-Point Results with Application to Nonlinear Fractional Differential Equations", *fractal and fractional*.  
DOI: <https://doi.org/10.3390/fractalfract707052>.
  11. F. Uddin, U. Ishtiaq, A. Hussain, K. Javed, H.A. Sulami, **K. Ahmad**, "Neutrosophic double controlled metric spaces and related results with application," *Fractal and Fractional*.  
DOI: <https://doi.org/10.3390/fractalfract6060318>.
  12. M. Riaz, U. Ishtiaq, C. Park, **K. Ahmad**, F. Uddin, "Some fixed-point results for  $\xi$ -chainable neutrosophic and generalized neutrosophic cone metric spaces with application," *AIMS Mathematics*.  
DOI: <https://doi.org/10.3934/math.2022811>.
  13. F. Uddin, K. Javed, U. Ishtiaq, **K. Ahmad**, A. Muhammad, C. Park, "Existence of fixed-point results in neutrosophic metric-like spaces", *AIMS Mathematics*.  
DOI: <https://doi.org/10.3934/math.2022941>
  14. Naeem Saleem, Umar Ishtiaq, **K Ahmad**, Salvatore Sessa, and Ferdinando Di Martino, 'Fixed Point Results in Neutrosophic Rectangular Extended b-Metric Spaces', *Neutrosophic Systems with Applications*.  
DOI: <https://doi.org/10.61356/j.nswa.2023.63>.
  15. **Ahmad, K.**, Murtaza, G., Ishtiaq, U., & Sessa, S. (2025). A Novel Approach to Fractal Generation through Strong Coupled Fixed Points in Intuitionistic Fuzzy Metric Spaces. *International Journal of Analysis and Applications*, 23, 202-202.  
DOI: <https://doi.org/10.28924/2291-8639-23-2025-202>
  16. **Ahmad, K.**, & Ishtiaq, U. (2026). Metrizable Topology, Precompactness and Semi Compatible Mappings in Neutrosophic Metric Spaces. *Neutrosophic Sets and Systems*, 95, 1-16.
  17. U Ishtiaq, **K Ahmad**, F Ali, M Faraz, IK Argyros, 'Common Fixed-Point Theorems for Families of Compatible Mappings in Neutrosophic Metric Spaces', *Foundations*.  
DOI: <https://doi.org/10.3390/foundations3040042>.

18. Umar ISHTIAQ, Necip ŞİMŞEK2, Khalil JAVED, **K AHMAD**, Fahim UDDIN, Murat KIRIŞCI, 'Fixed point theorem for neutrosophic extended metric-like spaces and their application', *Sigma Journal of Engineering and Natural Sciences*.  
DOI: [10.14744/sigma.2023.00085](https://doi.org/10.14744/sigma.2023.00085).
19. Muhammad Saeed, Umar Ishtiaq, Doha A. Kattan, **K Ahmad**, Salvatore Sessa, 'New Fixed-Point Results in Neutrosophic b-Metric Spaces with Application', *International Journal of Analysis and Applications*.  
DOI: <https://doi.org/10.28924/2291-8639-21-2023-73>.
20. Umar Ishtiaq, Muhammad Saeed, **K Ahmad**, Ilsa Shokat, Manuel De la Sen, 'Certain Fixed-Point Results via DS-Weak Commutativity Condition in Neutrosophic Metric Spaces with Application to Non-linear Fractional Differential Equations', *International Journal of Analysis and Applications*.  
DOI: <https://doi.org/10.28924/2291-8639-21-2023-74>.
21. Umar Ishtiaq, Fahim Ud Din, **K Ahmad**, Doha A. Kattan and Ioannis K.Argyros, 'Fixed Point Results for Generalized  $\theta$ -Contraction' *Foundations*.  
DOI: <https://doi.org/10.3390/foundations3030028>.
22. **K Ahmad**, Umar Ishtiaq, Farhan Ali and Usman Ali, 'Fixed Point Results for Generalized Contraction with Application of Biomedical Sciences', *Biomedical and Clinical Research*.  
DOI: <https://doi.org/10.54938/ijemdbmcr.2023.01.1.157>.
23. U. Ishtiaq, K. Javed, F. Uddin, M. de la Sen, **K.Ahmad** and M.U. Ali, "Fixed Point Results in Orthogonal Neutrosophic Metric Spaces," *Complexity*.  
DOI: <https://doi.org/10.1155/2021/2809657>.
24. A. Hussain, U. Ishtiaq, **K. Ahmad**, HA. Sulami, On pentagonal fuzzy metric spaces with application to dynamic market equilibrium, *Journal of function spaces*.  
DOI: <https://doi.org/10.1155/2022/5301293>.
25. Misbah Farheen, **K Ahmad**, Khalil Javed, Vahid Parvanech, Umar Ishtiaq, Fahim Ud Din, Intuitionistic Fuzzy Double Controlled Metric Spaces and related results, *Security and Communication Networks*.  
DOI: <https://doi.org/10.1155/2022/6254055>.
26. Usman Ali, Haifa A Alyousef, Umar Ishtiaq, **K Ahmad**, Shajib Ali, Solving Nonlinear Fractional Differential Equations for Contractive and Weakly Compatible Mappings in Neutrosophic Metric Spaces, *Journal of Function Spaces*.  
DOI: <https://doi.org/10.1155/2022/1491683>.
27. Naeem Saleem, Khalil Javed, Fahim Uddin, Umar Ishtiaq, **K Ahmad**, Thabet Abdeljawad, Manar Al Qudah, Unique solution of Integral equation via Intuitionistic extended fuzzy b-metric-like spaces, *CMES*.  
DOI: <https://doi.org/10.32604/cmes.2022.021031>.
28. U. Ali, U. Ishtiaq, **K. Ahmad**, Jahanazaib,' Statistically Convergent in Neutrosophic Metric Spaces', *Scientific Inquiry and Review*.  
DOI: <https://doi.org/10.32350/sir.61.03>.
29. **K. Ahmad**, K. javed, F. Uddin, U. Ishtiaq, 'Fixed point theorems in intuitionistic fuzzy b- metric like spaces.' *Journal of non-linear analysis and applications*.  
DOI: <http://dx.doi.org/10.22075/ijnaa.2022.27294.3551>
30. **K. Ahmad**., Ishtiaq, U. and Afzal, J., 2022. An Application to Computer Science via New Fixed-Point Technique. *International Journal of Emerging Multidisciplinaries: Computer Science & Artificial Intelligence*.  
DOI: <https://doi.org/10.54938/ijemdcas.2022.01.2.138>.
31. Ishtiaq, U., Saleem, N., Uddin, F., Sessa, S., **K. Ahmad**, and di Martino, F.,

- “Graphical Views of Intuitionistic Fuzzy Double-Controlled Metric-Like Spaces and Certain Fixed-Point Results with Application”, *Symmetry*. DOI: <https://doi.org/10.3390/sym14112364>.
32. U. Ishtiaq, **K. Ahmad**, M.I Asjad, F. Ali and F. Jarad, “Common fixed point, Baires’s and Cantor theorems in neutrosophic 2-metric spaces” *AIMS Mathematics*. DOI: <https://doi.org/10.3934/math.2023131>.
  33. U. Ali, U. Ishtiaq, Z.E Shams, **K. Ahmad**, M. I. Haider, M. Z. Shafi “Extension of some fixed-point theorems in neutrosophic metric spaces via control function”, *Scientific Inquiry and Review*. DOI: <https://doi.org/10.32350/sir.63.02>
  34. U. Ishtiaq, M. Asif, A. Hussain, **K. Ahmad**, I.Saleem, H. Al Sulami “Extension of a Unique Solution in Generalized Neutrosophic Cone Metric Spaces” *Symmetry*. DOI: <https://doi.org/10.3390/sym15010094>.
  35. A. Asghar, A. Hussain, **K. Ahmad**, U. Ishtiaq, H. A. Sulami, N. Hussain, ‘On Neutrosophic 2-Metric Spaces with Application’ *Journal of Function Spaces*. DOI: <https://doi.org/10.1155/2023/9057107>.
  36. Ud Din, F., Saeed, M., **Ahmad, K.**, Ishtiaq, U., & Sessa, S. (2024). Fixed point theorems in orthogonal intuitionistic fuzzy b-metric spaces with an application to Fredholm Integral Equation. *Transactions on Fuzzy Sets and Systems*. DOI: <http://doi.org/%2010.xxxxx/tfss.2022.yyyyy.zzzz>.
  37. Umar Ishtiaq, Khalil Javed, Fahim Uddin, Manuel de la Sen, Khalil Ahmed, and Muhammad Usman Ali, “Fixed Point Results in Orthogonal Neutrosophic Metric Spaces” *Complexity*. DOI: <https://doi.org/10.1155/2021/2809657>.
  38. Fahim Uddin, Umar Ishtiaq, Naeem Saleem, Khaleel Ahmad and Fahd Jarad, “Fixed point theorems for controlled neutrosophic metric-like spaces”, *AIMS Mathematics*. DOI: [10.3934/math.20221135](https://doi.org/10.3934/math.20221135).
  39. **Ahmad, K.**, Ali, F., Shahid, H. A., & Yar, S. (2024). Common Fixed-Point Theorems for Weakly Compatible Mapping in Neutrosophic Metric Space of Integral Type Using Common EA Property. *Journal of Innovative Research in Mathematical and Computational Sciences*, 3(2), 1-16. DOI: <https://doi.org/10.62270/jirmcs.v3i2.33>
  40. Lifang Guo, **Khaleel Ahmad**, Ghulam Murtaza, Umar Ishtiaq, Mubariz Garayev and Ioan-Lucian Popa, “Generation of Attractors and Intuitionistic Iterated Function Systems”, *International journal of Analysis*. (Accepted)
  41. **K. Ahmad**, F. Ali, U. Ishtiaq, "Fixed point results in orthogonal partial b-metric space and an application to Cantilever beam problem" *International Journal of Emerging Multidisciplinaries Engineering* (Accepted).

## BOOK CHAPTER.

1. Khalil javed, Umar Ishtiaq, Fahim Uddin and **Khaleel Ahmad**, On Neutrosophic Double Control Metric-like Type Spaces,’ *Neutrosophic Science International Association*. University of New Mexico, Gallup, United States Universidad Regional Autonoma de los Asdes. DOI: <http://dx.doi.org/10.3390/foundations3040042>
2. **Khaleel Ahmad**, Iqra Saleem and Farhan Ali, Fixed Point Theorem for Compatible Mappings of Type (I) and (II) in Neutrosophic Metric Spaces,

Global Knowledge Publishing House, United States of America.

Link: <https://fs.unm.edu/SuperHyperAlgebraNewTopologies.pdf>.

## STRENGTHS, SKILLS

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- 0 Friendly, enthusiastic, and credible in challenging positions.
- 0 Experience and decision-making under pressure.
- 0 Complex problem-solving skills.
- 0 Fluent in spoken and written English to better facilitate International Research Collaborations.

## SCIENTIFIC SKILLS

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- 0 MATLAB, C++,
- 0 MS Office
- 0 MS word,
- 0 Python
- 0 LaTeX, Overleaf


## CONFERENCES & SEMINARS

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- Participated in 1<sup>st</sup> Intra Departmental Quiz on mathematics 2022 as a **Chief Organizer** at Department of Mathematics Bahauddin Zakariya University Multan, Sub Campus Vehari, Pakistan.
- Participated in UMT International Conference on Pure and Applied Mathematics 2023 (UICPAM) as a **Speaker** at University of Management and Technology, Lahore, Pakistan.
- Participated in Two days international Conference on Pure and Applied Mathematics as a **Speaker** at Riphah International University Lahore, Pakistan.
- Participated in 2<sup>nd</sup> CASPAM Regional Student Olympiad of Mathematics 2015 as an **Attendee** at Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), B.Z.U. Multan, Pakistan.
- Participated in 3<sup>rd</sup>, 4<sup>th</sup> & 5<sup>th</sup> CASPAM Regional Student Olympiad of Mathematics 2016-2018 as a **Participant** at Centre for Advanced Studies in Pure and Applied Mathematics (CASPAM), B.Z.U. Multan, Pakistan.
- Participated in International Conference on Pure and Applied Mathematics 2023 (ICRTAM) as a **Participant** at University of Engineering and Technology, Lahore, Pakistan.
- Participated in Two days International Conference on Recent Trends in Mathematics as a **Participant** at Abdus Salam School of Mathematical Sciences, Lahore, Pakistan.
- Participated in Seminar on Solving Complex Dynamics: Semi Analytical Methods for Fractional Differential Equation at University of Management and Technology, Lahore, Pakistan.


REFERENCES

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**1. Dr. Fahim Uddin** +923470004112[fahim@sms.edu.pk](mailto:fahim@sms.edu.pk)

Assistant Professor,

Abdus Salam School of Mathematical Sciences, Lahore, Pakistan

**2. Dr. Ghulam Murtaza** +923007830051[ghulammurtaza@umt.edu.pk](mailto:ghulammurtaza@umt.edu.pk)

Assistant Professor,

University of Management and Technology, Lahore Pakistan